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# STATISTICAL ANALYSIS OF THE PENSIONERS CONDITION

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## Abstract

*In this paper, the authors focus on the statistical analysis of the pensioners in Romania, and also on the pension systems. The analysis focuses on indicators such as number of pensioners, per total and by categories, early retirements, the report between the number of retirees and the number of employees, the average pension, evolution of the pensions, the structure of pensioners' category. Data and information that substantiate the research are presented in tables and charts. The evolutions of the indicators are placed within the economic context of Romania, emphasizing the measures and events that occurred during the respective periods.*

**Key words:** pension, retirement, funds, public system, social insurance

**JEL Classification:** J26, J32.

## 1. Introduction. Literature review

Since 1990, amid economic and social measures relating to the restructuring of the Romanian economy, there have been significant changes in the social and economic structure of the population of our country. In the same direction acted the demographic change in recent years, the birth rate has fallen worryingly and mortality are on an upward curve. Under an obvious regression of the natural growth of the population and, given a stressed demographic aging, coupled with the steady reduction in the number of jobs, persons classified as pensioners and welfare recipients hold an increasing share in total population and, especially, in total inactive population, their number falling also on an upward path. Thus, at the end of the second quarter of 2015 stands a constant number of retired. In absolute figures, 31 July 2015 over 5.307 million people were in the category of pensioners, and in July 2016 the number of pensioners was 5.26 million.

Anghelache (2008), Anghelache and Anghel (2016) present the instruments and methods of economic statistics. Anghelache and Diaconu (2016) have analyzed the evolution of pensions and pensioners in Romania. Mitrut, Anghelache et.al. (2012) developed on the benefits of the public pensions system. Anghelache, Voineagu and Anton-Carp (2011) have presented the pensions' computation algorithm. Bohn (2011) develops on the funds related to public retirement plans. Cremer et.al. (2008) are preoccupied with a linear pension scheme with particular characteristics. Florea-Ianc (2014) approaches the necessity for private pension schemes. Frunzaru (2007) analyzes the Romanian pensions system. Goda and Manchester (2013) evaluate the impact of employee heterogeneity on the retirement plan selection. Hastings et.al. (2013) cover some topics on economics and finance. Hernæs et.al. (2011) developed

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on occupational pensions. Hilgert et.al.(2003) discuss on the financial management of households, Lusardi and Mitchell (2007) focus on the role of planning and education in retirement. Novy-Marx and Rauh (2011) analyze the promises of the public pensions. Roeder (2014) develops on the optimal taxes and pensions.

#### **Evolution of the retirees class**

It is worth noting that in 2000 the number of pensioners decreases consistently from period to period. Thus, in 2000 there were registered 6.154 million pensioners, which in July 2015 fell to 5.307 million retirees. This reduction of about one million people is based on two reasons. The first is related to the fact that the pyramid has eroded at the base. The second refers to the fact that population aging will have two effects. First it will reduce the number of pensioners. The second will be to move the older population groups, due to lower birth rates. Of course, it is difficult to consider increasing or modify the state social insurance pensioners in agriculture, where the growth is insignificant.

Exits from the pension payment system were reasonable, caused in a large percentage by deaths. At this point we must note that in recent years has increased the number of deaths and the life expectancy of the population has shortened. It would be important to be assessed how they have evolved the structure and distribution of pensioners and beneficiaries of social aid, according to the system in which they were enrolled. Thus, in July 2015 the number of social insurance pensioners was 5.303 million, of which 4.679 million are pensioners of state social insurance, and 468,000 are employees' social security retirees coming from agriculture. In 2016, the number of social insurance pensioners was 5.256 million people, while the state social insurance pensioners was of 4.678 million people. The other retirees are welfare recipients and pensioners IOVR. Stress that now that industry and other branches of national economy are undergoing a process of restructuring, thus the persons who meet seniority and uninterrupted working age will come to early retirement. In this situation, it is clear that the number of pensioners will increase. The annual report of the number of retirees and the employees was approx. 1.3 retirees for an employee. The following table presents the current situation of the average number of pensioners and average monthly pension in mid-2016.

### Average number of pensioners and average monthly pension on 06/30/2016

Anii		Număr mediu pensionari - mii -				Pensia medie % /				Trim. II 2016 în % față de trim. I 2016
						- lei lunar -				
		trim.I 1 <sup>st</sup> Q	trim.II 2 <sup>nd</sup> Q	trim.III 3 <sup>rd</sup> Q	trim.IV 4 <sup>th</sup> Q	trim.I 1 <sup>st</sup> Q	trim.II 2 <sup>nd</sup> Q	trim.III 3 <sup>rd</sup> Q	trim.IV 4 <sup>th</sup> Q	
Pensionari –total (I+II+III) *)	2015	5332	5307	5297	5289	890	892	893	894	
	2016	5273	5260			940 <sup>a</sup>	943			100,3
I. Pensionari de asigurări sociale - total	2015	5327	5303	5293	5285	891	893	893	894	
	2016	5270	5256			940 <sup>a</sup>	944			100,4
din care:										
- pensionari de asigurări sociale de stat	2015	4688	4679	4680	4683	886	886	886	886	
	2016	4679	4678			930	931			100,1
- pensionari de asigurări sociale proveniți din fostul sistem pentru agricultori	2015	483	468	457	447	361	361	362	362	
	2016	435	423			381 <sup>a</sup>	381			100,0
- pensionari de asigurări sociale din evidența Secretariatului de Stat pentru Culte	2015	2	2	3	3	647	641	580	666	
	2016	3	3			657	705			107,3
- pensionari de asigurări sociale din evidența Casei de Asigurări a Avocaților	2015	2	2	2	2	2009	1997	1995	1996	
	2016	2	2			1987	1983			99,8
II. Beneficiari de ajutor social – tip pensie **)	2015	1	1	1	1	221	222	222	220	
	2016	1	1			233	234			100,4
III. Pensionari I.O.V.R.	2015	4	3	3	3	232	232	232	231	
	2016	2	3			230	230			100,0

<sup>1)</sup> Inclusive impozitul și contribuțiile sociale de sănătate aferente veniturilor din pensii (O.U.G. nr. 87/2000 și OUG nr. 107/2010).

<sup>2)</sup> Date rectificate.

<sup>\*)</sup> Inclusive pensionarii din Ministerul Apărării Naționale, Ministerul Afacerilor Interne, Serviciul Român de Informații.

<sup>\*\*) Plătit din fondul de asigurări sociale.</sup>

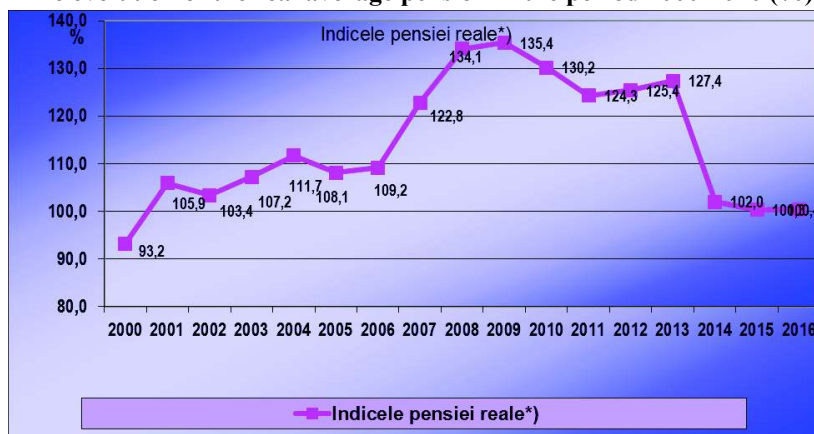
**Data source:** National Institute of Statistics, Statistical Bulletin no. 7/2016.

Social security number of pensioners increased and this, especially due to retirement and work full age limit.

#### Evolution of the pensions level

Given that the number of pensioners increases, it is necessary to find sources for the amounts to be paid as pensions and social benefits. Also, the question as well as increasing consumer price index, find the possibilities to increase pensions by compensation, indexing or allowances granted under the legislation. Say that in 2011, pensions have decreased or increased by recalculation after having stagnated in 2009, did not cover the effects of inflation and the financial crisis. After 2015, pensions were increasing and have reached a relatively higher level.

**The evolution of the real average pension in the period 2000-2016 (%)**



Data source: National Institute of Statistics, Statistical Bulletin no. 7/2016.

Apparently, these relative figures would reveal a significant increase in amounts paid to pensioners.

Those figures, however, are not fully revealing because, in many cases, the increases were carried out starting from basic to extremely small amounts.

Average social insurance pension was 808 lei / month, negatively influenced by the level of pensions for farmers. Although, compared to the period 1999-2009 (in 2010-2012 practically we had stagnated pensions) average pension of farmers increased ratio compared to the level which they were recorded due to pensions of state social insurance system is maintained still too high. A sharp distinction is still remaining between the categories of pension. An analysis in this regard shows that, for work and old age, a pensioner from the ranks of farmers receive on average 415 lei / month. This situation highlights a gap in the level of pension expense of employees in the agricultural system comparing to the state social insurance system. The situation is difficult also because the amount received as pension is insufficient for a person to pay their rent or tax obligations (if an apartment owner), gas, electricity, telephone, heating etc. However, especially in the context of prices and tariffs of the core products and services for the population are adjusted pace galloping or depending on the pace devaluation of the national currency, or to the needs of revenues to the state budget is nothing in meaning that the entire amount, if not more importantly, consumed for these obligations. No one can question the fact that this category of retired, is the category most affected by illness, care for which necessarily have to reserve the amount of which to buy necessary medicines, compensated or uncompensated, where these drugs are not included in the category of compensated as cannot enter the issue of ensuring adequate nutrition.

Under these conditions, possible needs for rest, recreation, spa treatments or spiritual needs are science fiction for the pensioners in Romania. That is why pensioners, people of the third age, become, after a lifetime of work, one of disadvantaged groups in Romania and compared to the possibilities of similar categories in other countries, exemplifies one of the sad, frustrating and devoid of joy ways of life in old age years.

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We are making this overall assessment although during 2001-2009, especially in 2008-2009, the government made a series of concessions (read facilities) to pensioners and others in acute need of means of subsistence, because the coating needs. They are still far from a normal survival. Efforts to increase pensions, especially those of farmers, were based on electoral interests, without concrete possibilities budget analysis and coverage of income.

#### **Pensioners state social insurance system**

As I mentioned, the largest share in the pensioners category is held by pensioners of state social insurance system. Therefore, it is necessary to make also a short presentation of the evolution of the pension received by this category of pensioners. Thus, the total average pension was in 2011, for 775 lei / month in 2012 to 767 lei-month 2013 808 lei / month in 2014 to 847 lei / month, 893 lei / month on 31 July 2015 and 944 lei / month from 06.30.2016, representing an increase compared to September 1999. in 2011, no other increases being granted, and in 2012, 2013, 2014 and 2015 having been adjusted for inflation. In 2016 pensions stalled. The slight increase is based on changing the structure of pensioners based on pension level size and not on government decision. The ratio between the average pension of state social insurance for work and full age limit in employment and average net wage in 2016 was 41.9%. Therefore it appears a certain gap maintaining between the average pension of state social insurance and the average wage receivable at the national economy level and a higher absolute value scale.

This change is based, primarily, on a more accelerated growth rate of some pensions and the reduction of the pensioners number with modest pension. By 2011, the average increase of pension of state social insurance for work and full age limit in employment was close to average earning growth. In the next four years, pensions increased by the inflation rate. Consequently, we can say that despite the efforts made, with results largely symbolic results, because of the limitations of the social insurance budget, the increase in pensions was low, being far from covering an imbalance in relation to the alarming increase in prices for those products / services vital for retired life and activity. I mean the gas consumption, heating, maintenance fees for phone, email, radio, etc., which are not designed according to pensioners income levels but also relative to effective consumption.

#### **Evolution of supplementary pension**

An important element in the analysis of the average number of social insurance pensioners is the situation of this group of people in terms of how they benefited from supplementary pension.

Thus, in 2016, over 3.09 million people received supplementary pension. The amounts paid as supplementary pension have increased each year since 1999.

#### **Pensions in territorial profile**

Analyzing the situation of pensioners in our country, significant variation occurs in territory. From this point of view, it is found that there is a great variation at the level of pensions of state social insurance from one county to another. Thus, the lowest level is recorded in the counties of Giurgiu, Ialomita, Calarasi, Botosani, Bistrita.

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Somewhat higher pension records in Bucharest and in the counties of Hunedoara, Brasov, Cluj, Prahova. These data show that, even in counties estimated to have a high level of pensions, the amount is small compared with the normal requirements of life. The picture above outlined highlights in fact a worsening of the situation of this category of persons or pensioners, both in terms of maintaining a low level of pensions and other types of facilities that are given, and in the light of evidence that, year by year, the number of pensioners increases with fewer employees.

Unfortunately, under the current circumstances, where, in addition to successive increases of the prices of electricity and heat, telephone, transport, medicines, etc., the problem of increase prices for fuel (oil and derivatives) such as to engage a spiral of rising prices also for other goods and services, it is unlikely that they will find those resources that increase social security budget for the next period.

### Conclusions

There are still people who have pensions of tens or hundreds of thousands of dollars for that, given the depth of the crisis and the lack of financial resources, even increases of 100% does not mean practically anything. The amount of monthly allowance increased compared to all previous years.

Regarding the average monthly pension of pensioners, in comparable terms, the analysis is showing an increase of resources enjoyed by pensioners, but this was not fully sufficient, taking into account the consumer price index of the population which was superior level to increase pensions, and it also represented, in absolute figures, an increase almost insignificant when taking into account the levels that applied this increase.

According to the analysis of levels of growth, the increase of pensions appears insignificant, particularly for pensioners with the current very low, which no recent ruling indexing and resetting monthly pension cannot bring a relaxation of minimum financial situation with facing. Amid the occupied active population will decrease by passing unemployed or layoff of a significant number of employees is expected that the values or amounts recorded as a contribution to social insurance contribution for supplementary pension to be, in absolute numbers relatively stable or slightly increasing. The economic crisis will probably be difficult to find alternative resources by which to increase revenues for social security, so this category of pensioners, the most deprived or among the most deprived in Romania, to be able to improve the situation by some increases, even symbolic.

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