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TRENDS REGARDING THE EVOLUTION OF THE ROMANIAN PENSION SYSTEM

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Abstract: The pension system, together with the social assistance services form the social security system is recognized worldwide throughout the adoption of the Universal Declaration of Human Rights for the purpose of insured person compensation for damages regarding some inherent risks as: permanent or temporary inability of work, old age or unemployment. The main objectives of a pension system are decreasing poverty regarding the lower income persons throughout the conditions of limitation of the working capacity which are financially vulnerable. In this article we provide a qualitative and quantitative overview regarding the Romanian pension system structure and mechanism. The conclusions of this article highlight the need for a more comprehensive reform of this system in order to strengthen it for the new challenges still to come in the near future.

Key words: Pension system, pension pillars, Romania, fiscal sustainability, social protection.

J.E.L. CODES: H53, H55, J11, J18, N34.

1. Introduction

Article no.25 of the Universal Declaration of Human Rights stipulates the right of each person to social protection through social security system and pension system.

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Pension system achieves financial protection of beneficiaries against the threat of reduction or even loss of the capability to obtain incomes in the future as a result of old age, accidents, pathologies or disabilities.

Historical sources confirm the existence of some social protection rules since Antiquity, but the relevant regulations appears only after the end of 19th Century once Chancellor Otto von Bismark applied in Germany a protection system of the persons financially vulnerable. This system supposed collecting contributions from the participants of the system, and further, at the moment of working capability reduction due to disability, pathology or old age, these have received an allowance. At first, the system was applied only to industrial workers, but then it was extended to others professional activities and at international level, being known nowadays as pay-as-you-go system (PAYG), based at the principal of solidarity and redistribution between generations.

Through pension system the objective of reducing poverty was accomplished, but according with the study made by Fenge and Scheubel (2017) the development of Bismarkian pension system in Germany is related with the first demographical transition. Ensuring the participation of a large number of persons at the system leaded to reduction of fertility rate.

At the middle of the 20th Century, William Beveridge promotes the idea of pension system with national coverage. In addition of contributory system, from the General State Budget were distributed resources to all citizens which accomplished the eligibility conditions related to residency, age, income and possessions, regardless of their contributory history. The main scope of this system was protection of persons "who do not participate in the labor markets covered by the social security system, who do not participate sufficiently regularly to qualify for benefits, or whose low lifetime earnings leave them with even lower pension benefits" (Anita M. Schwarz, 2006, p.8).

Another model of pension system was developed by economist Milton Friedman and was applied successfully by José Piñera in Chile. The system is a contributive one, but pension funds are invested at capital market with the aim to multiply the resources held.

At the end of the 20th Century, World Bank proposes diversification of pension system on a multipillar structure consisting in a public component and a private one, in order to ensure a decent lifestyle to financially vulnerable population. Thereby, pension system should be set up from three components: first, a mandatory component which constitutes First Pillar (1st Pillar) public managed, supplemented by Second Pillar (2nd Pillar), a mandatory one but managed by private insurance companies, and the last component – Third Pillar (3rd Pillar), voluntary, also managed by private insurance companies.

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The first regulations of pensions systems began at the end of 19th Century, but these continue nowadays due to the challenges brings by socio-economic context, that are: migration, reducing birth rate and fertility, increased life expectancy, decreased natural growth, increased expenses with pensions and threats on systems' solvability.

In this paper we have proposed an analysis of pension system of Romania, both through evolution of macroeconomic indicators, but also through the modifications of national legislative framework. We consider that the first step towards pension system reform is to know and understand the events and experiences from past, and identify the actual stage of problem.

The article is structured in multiple sections, these are: a section which presents a literature review on pension systems, followed by the analysis of legislative modifications of Romanian pension system and then the evolution of main indicators of the system, finally being presented the conclusions of the article.

2. Literature review

In Central and Eastern European countries, national pension systems have a strong public component characterized by the principle of redistribution between generations. The success of these is given by the existence of "balance between the expenditure on pensions and the income from contributions made by the active workers over time, that is known as intergenerational solidarity, and long-term sustainability" (Godinez-Olivares et. al., 2015, p.2).

The main "objective of the first pillar provide retirees with a secure minimum income stream avoiding old-age poverty" (European Parliament, 2014, p.31), and in the conditions in which "on average in the European Union (EU), the poverty rate before social transfers (including pensions) is estimated at 44 per cent" (Arza, 2015, p. 8), and in case of population over 65 years old the percentage achieves 88%, it is clearly the dependency of older people of pensions system, as main source of income. Also, public transfers lead to increased financial satisfaction, "reduce uncertainty of income, an important feature in a country where the average income remains quite low" (Mitrut, Wolff, 2011, p.13-14).

In conditions of a negative natural growth, increased life expectancy and a negative migration rate, public pension systems financed through PAYG principle are confronting with the problem of financial sustainability. "As long as the percentage of the working-age population covered by the pension system kept growing, the system maintained its pyramid shape. But once the majority of the working-age population became contributors, the pension system became bound by the population age structure" (Schwarz et. al, 2014, p.6). The reduction of number of active persons at labor market will determinate the decrease of contributions and

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"will lead to a misalignment between current contributions and value of benefit payments. These drivers will translate into large increases in public pension expenditures that will strain public finances" (OECD, 2014, p.22).

As a result of demographic modifications, European Parliament recommended member states to implement some politics to ensure pension systems sustainability, as: "increasing statutory pension ages to reflect changes in life expectancy and align with this for the future; equalizing state pension ages for men and women; limiting early retirement and integrating special pension schemes into the mainstream; increasing the employability and participation of older workers, including lifelong learning and active ageing; promoting active labour markets including for older groups and encouraging private saving" (Eatock, 2015, p.4).

To reduce the effects of demographic transition and strengthen public pension system, states of Central and Eastern Europe adopted the multipillar structure proposed by World Bank, increased standard age of retirement and the minimum contribution period, tried to inhibit the anticipate retirement through applying a penalization to the amount of pension and promoted the extension of professional activity through giving extra-benefits. Even these solutions seem to be ideally, it must be considered also the fact that life expectancy is influenced by welfare state, profession or education. So, "those with low incomes, in lower socio-economic classes, in more dangerous or arduous occupations or living in some geographic regions, may experience significantly lower life expectancy and may feel discriminated against if retirement age is raised uniformly for all" (European Actuarial Consultative Group, 2012, p.6).

These measures does not succeed to reach the expected results and, even if momentary ensure pension systems stability, these does not solve all existing problems. Besides the reduction of systems' expenses, stimulation of attracting incomes represents a solution. In a study made by Pânzaru (2015) it is showed that pension system sustainability can be strengthen through creating favorable conditions to labor market to controllable attract immigrants, which may balance the demographic decline.

3. Pension system in Romania

First forms of social insurances in Romania dates back to the years of 1800 and are known as "the boxes of mercy" or "brotherly chest" to mutual support existing between craftsmen. Industrial revolution leaded to the formation of mutual assistance associations of different categories of workers, but without the existence of a clearly regulated.

At the beginning of 20th Century appears the Law for organization of occupations, loans and working insurances (1912) through which is regulated the obligation to



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constitute insurance funds for accidents, pathologies and disabilities, old ages, maternity. The system is a contributive one by equal participation of employees, employers and state. Pension distribution is made in the conditions of a minimum contribution period of 23 years and a minimum old age of 65 years. In Transylvania and Bucovina were found the regulations of Austro-Hungarian Empire regarding social insurance system.

Even if the Unification of Romanian Principalities was made in the year of 1918, only in the year of 1933 was made the unification of social insurance system, based on the solidarity and contributory principles. The contributions were supported in equal share by employees and employers, each in a percentage of 3% of gross wage, the state having the obligation to guaranty and subsidize the system in need. The establishment of communist system had influenced the social insurance system through adopting the Law no. 10/1946 for the organization of state social insurances, which stipulated the abolishment of all autonomous pension funds and houses, and taking pension funds as a component of State Budget. Minimum age to retire was 50 years old, and the amount of pension rated 33% to 100% of the wage value, depending on pension category.

In the year of 1966 was established the supplementary pensions, based on mutuality principle. Employees paid a contribution of 2% of the wage value, and at the end of professional activity, it was offered a benefit through which it wanted to be kept a comparable level of pension with the level of wage.

The increased percentage of expenses with pensions leaded to new regulations. By the laws adopted in the year of 1977 had been raised the contribution period at 25 years in the case of females, respectively 30 years in the case of males, has been diminished the value of disability pensions and was been regulated the status and the right of social insurance of members of production agricultural cooperatives and the farmers.

The system applied by Romania in the communism period has been of the PAYG type, having success due to increased rate of employment and contributions collected. For this reason the benefits provided were also comparable with the level of wage. Among the shortcomings of the system were counted: lack of transparency, excessive centralism and provided benefits in disproportion with real needs.

Passing at the market economy imposed the necessity to regulate de social protection system. In a first stage, efforts were focused on the system adaptability at new socio-economic conditions and had been concretized on provided new services, increased contributory level and distinction depending on work group, indexing and increasing the level of pensions to compensate the inflationary effects.

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The effective regulation began once with the enforcement of the Law no.19/2000 regarding the public pension system and other social insurances rights. The main changes have targeted the increase of retirement age and complete contributory period, the possibility of anticipated retirement with some penalization conditions, the computation of pension based on a points system which takes into account all incomes obtained in the activity period. Contributions to social insurance system reached to approximate 37% of gross wage, being divided between employee and employer.

Between the years of 2005 and 2010 were enacted the Law no. 411/2004 regarding the pension funds administrated privately and the Law no.204/2006 regarding the voluntary pensions, through which was regulated the multipillar structure and transition from redistributive component to private savings. In the year of 2010 was legislated the Law no. 263/2010 regarding the unitary public pension system, which stipulated the inclusion of all professional categories into the 1st Pillar of public pensions and re-computed the pensions, established more restrictive measures to anticipated retirement and obtaining disability pension.

According to legislation in force, categories of pensions provided and the conditions to entitle for the benefits are presented in the Table 1. Categories of public pensions in Romania. As it can be noticed, "the public pension system has stringent conditions which impose a very long stage of contribution, at which are added the condition of the retirement age limit" (Beju, 2007, p.23).

Being a pension system based on PAYG principle, the financing is made from the contributions paid for incomes obtained from wages, independent professional activities carried out, unemployment allowances or benefits from social health insurances (Law no. 227/2015 regarding the Fiscal Code with further updates). The redistribution of pension funds formed has three directions, respectively: pensions, decease allowances and treatment tickets.

The amount of pension is determined in the base of an average score obtained by the beneficiary, which is computed as a ratio between annual scores and complete contribution period. Annual score is actually the average of monthly scores, calculated as a ratio between incomes considered to be the computation base for social contributions paid and the medium gross wage of that month, published by National Institute of Statistics.

The 2nd Pillar, established in the year of 2007, is formed from mandatory pension funds privately managed. At the date of the implementation of this pillar, the obligation of participation was for all employees under the age of 35 years, the obligation being voluntary for those after this age. The system is a contributory one, firstly a percentage of 2%, then 6% from the contributions paid to 1st Pillar were transferred through the pension funds of this pillar. Therefore, it can be



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considered that "Pillar II, will have negative effects on the sustainability of pillar I, from the point of view that, diminishes funding for current retirees, but in the long run, will be able to provide decent pensions" (Croitoru, 2015, p.145) due to resources increased on capital market.

Table 1. Categories of public pensions in Romania

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Category of pension	Criteria to entitle the benefit
Old age	- Standard retirement age – in case of females 60 years and 9 months
_	old; in case of males 65 years old (in March 2018).
F	- Minimum contribution period – 15 years.
Anticipated	- With maximum 5 years before accomplish standard retirement age.
	- With at least 8 years over the complete contribution period.
_	- With at least 8 years over the complete contribution period.
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	- With maximum 5 years before accomplish standard retirement age.
pension	- To be accomplished the complete contribution period or at most 8
	years over the complete contribution period.
Disability	- Medical expertise of working capacity which certificates the reduction
pension	of work capacity at least half of normal value, as a result of professional
	activity or work accidents.
	- A minimum contribution period established by legislation in force, in
	case of accidents and pathologies occurred by other reasons than
	professionals.
	- Participation to periodical medical reviews.
Survivors	- The deceased sustainer was pensioner or a future beneficiary of
pension	pension system.
	- In case of children: until 16 years old or if they continue the studying,
	for all this period, but maximum to the accomplishment of 26 years old;
	or for all disability period.
	- In case of survivor life partner: after the retirement age, for all lifetime
	if the marriage lasted minimum 15 years, and for at least 10 years of
	marriage, with a reduction of 0.5% per month until reaching the period
	of 15 years; or for all lifetime if the marriage lasts minimum one year
	and the survivor has a disability of first or second degree.
	pension Old age pension Anticipated old age pension Partial pension Disability pension

Source: Law no.263/2010 regarding unitary public pension system, published in Official Monitor no 852/20 December 2010, with further updates.

The 3th Pillar is constituted from the voluntary private pension system, based also on the contributory principle and managed by private insurance companies. This pillar comes to complete the mandatory system and promote private savings to obtain supplementary incomes at retirement.

It has to be mentioned that beginning with 1st January 2018 the contributions to public pension system represents 25% of the amount of incomes from wages or another incomes assimilated to wages, and the incomes from pensions are taxed

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with a percentage of 10% (Law no.227/2015 regarding the Fiscal Code with further updates).

4. Study regarding the evolution of the main indicators of Romanian pension system

The regulations adopted to strengthen the pension system have lead, as expected, to a decreased number of pensioners (Fig.1 Evolution of the number of pensioners). The greatest share is own by old age pensioners (65% to 75%). This share is also due to the fact that once what the standard retirement age is achieved, the beneficiaries of anticipated old age or disability pension will be transferred at the category of the old age pensioners.

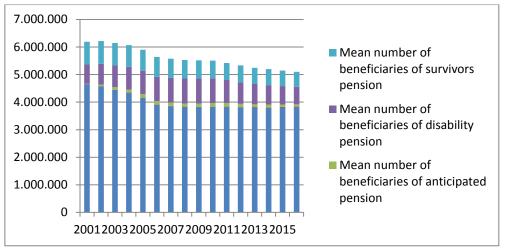


Fig. 1 Evolution of the number of pensioners

Source: Own processing based on the data available at the National House of Public Pensions Database.

From the dates published by National House of Public Pensions can be noticed that the share of anticipated old age pensions and the partial pensions had increased in the total number of pensioners. Therefore, it can be remarked that the penalization measures promoted did not have the wanted effect.

Regarding the disability pension, the maximum share is recorded in the year of 2009 (17%), following that, the percentage and also the absolute value, are diminishing as a result of the changes of the eligibility criteria to obtain the pension. Through the obligation of participate at periodical medical reviews, the abusive cases identified were excluded from the system.

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The mean number of survivors pension has decreased in absolute value, but reported at the total mean number of pensioners it can be noticed a modification with just 2 percentage points. The reason of this evolution is the clear regulation of the criteria to entitle for a survivors pension.

Reported to the mean population of Romania, the beneficiaries of public pension system own a share of 28% in the year of 2001, which are diminishing at 24% in the year of 2016. The explanation is given by reduction of the number of pensioners in a more accelerate rhythm (approximate 25%) than the reduction of the number of population (approximate 3%). Worrying is also the fact that the share of pensioners in total occupied population in the year of 2016 is 57%, which implies a high pressure for labor market.

If we refer to the rate of contribution paid to social insurance system (Fig. 2 Contributions to social insurance system), can be observed the decrease of these in the expectation of stimulating the carrying on professional activities in a legal form. Also about this subject, beginning with the year of 2018, the contributions return in the charge of employee, in this way being facilitated the verification of the accomplishment of liabilities to social insurance budget.

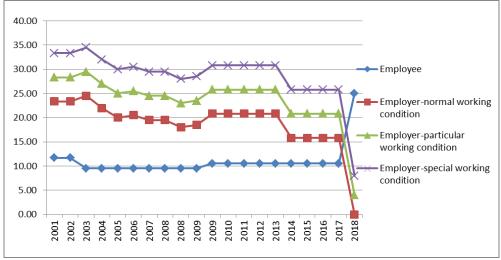


Fig.2. Contribution to social insurance system

Source: Own processing based on regulation established by Law no. 191/2001, Law no. 744/2001, Law no.632/2002, Law no.519/2003, Law no.512/2004, Law no.380/2005, Law no.487/2006, Law no.387/2007, Law no.19/2009, Law no.12/2010, Law no.287/2010, Law no.571/2003 and Law no.227/2015.

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An important aspect in reducing the number of pensioners is the modification of contribution period and standard retirement age (Fig.3 Evolution of contribution period and retirement age), which through extension of professional activity period postponed the entitlement to pension system benefits.

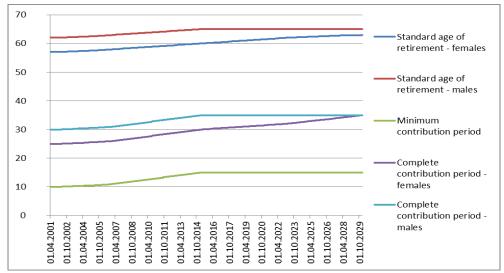


Fig.3 Evolution of contribution period and retirement age

Source: Own processing based on the data available at the National House of Public Pensions Database.

Regarding to State Social Insurance Budget, the incomes obtained from contributions in the year of 2000 were representing 92% from total incomes of the budget, percentage that in the year of 2015 reach the value of 66%. If at the beginning of the analyzed period, from these incomes were covered 85% of total expenses, in the year of 2015 only 66% of these are covered from contributions. A percentage of 85% of budget expenses in the year of 2000 are represented by social assistance expenses, percentage that reaches 99% in the year of 2015 (Fig. 4 Evolution of contributions incomes and social assistance expenses). An important element in maintaining the budget balance is represented by subsidies from State Budget, which had significant increases.

The amount of all categories of pensions had increased (Fig. 5 Evolution of mean value of pensions), partially due to indexing, updates and re-computations made, but especially due to the value of a pension point, that has an increase of 626% until now.

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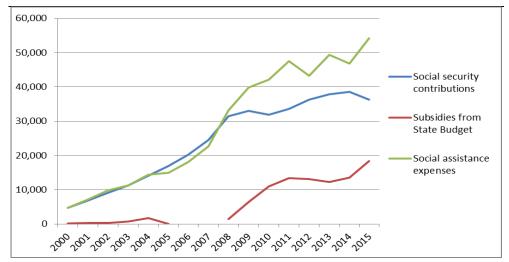


Fig. 4 Evolution of contributions incomes and social assistance expensesSource: Own processing based on data available at the National Institute of Statistics database.

It can be noticed that the mean value of anticipated old age pension has values over the mean value of old age pension. This situation is a result of the computation using the same method for both categories of pensions, the deference being given by the number of pensioners and the share of this in each level of pension. If in the case of anticipated old age pension, in December 2016 a percentage of 95% of total beneficiaries of anticipated old age pension were found between 700 RON and 2,000 RON, in case of old age pension, in the specified interval, were found only 65% of beneficiaries.

From the implementation of 2nd Pillar, the degree of participation at mandatory pension system privately administrated increased with approximate 50%. Reported to occupied population of Romania in the year of 2016, the share hold was 35%.

Also, the participation of the 3th Pillar increased (Fig. 6 Evolution of participants at 2nd Pillar and 3th Pillar), the ratio between the number of females and the number of males being almost equal. At the end of the year of 2007, the largest share of participants at voluntary private pension funds was recorded at those with an age between 30 years old and 44 years old (49 %) and over 45 years old (31%), the share of those under 30 years old being 20%. At the end of the year of 2016 this structure is changed and the degree of participation is mainly detained by persons over 45 years old (51%), respectively by persons between 30 years old and 44 years old (42%), just 7% of participants having under 30 years old. These changes



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are due to the different increasing rhythm, and suggest the need of a better promotion among the young people. If it is reported to the total occupied persons of Romania, the number of participants at 3th Pillar is only 4%, showing the underdevelopment of this sector.

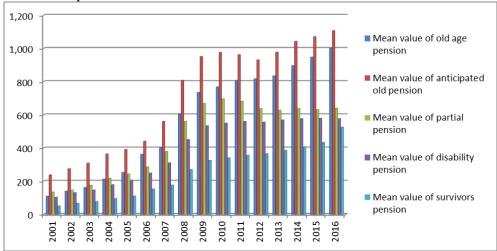


Fig. 5 Evolution of mean value of pension

Source: Own processing based on date available on National House of Public Pension Database.

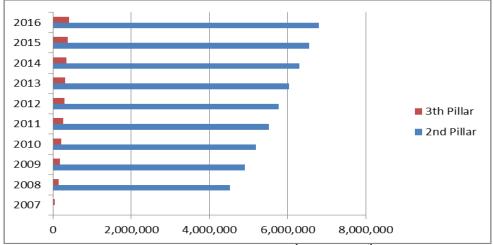


Fig. 6 Evolution of participants at 2nd Pillar and 3th Pillar

Source: Own processing based on date available on Financial Supervisory Authority Database.



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The funds formed are invested into diversified portfolios, in principal into financial instruments with low risks - government securities, bank deposits, but also into instruments as corporates bonds and shares (Fig. 7 Investment structure).

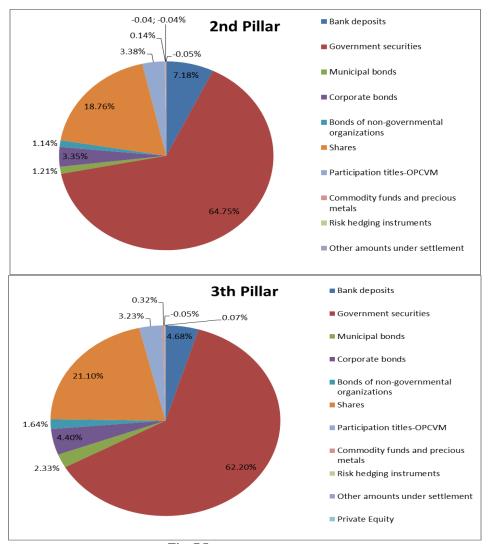


Fig. 7 Investment structure

Source: Own processing based on date available on Financial Supervisory Authority Database.



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On the analyzed period, it can be noticed that the investment strategy applied by pension funds lead to an exponential growth of the value of assets owned (Fig. 8 Evolution of the value of assets).

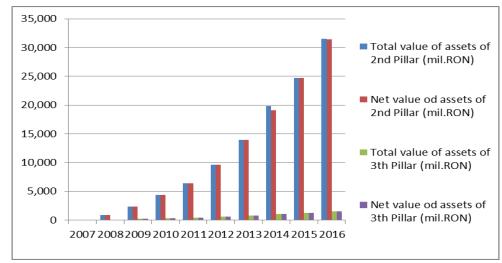


Fig. 8 Evolution of the value of assets

Source: Own processing based on date available on Financial Supervisory Authority Database.

5. Conclusions

The pension system remains the main form of financial protection of older persons, but the demographic changes from the last years represents a true challenge to the public pension system based on the principle of redistribution between generations. The regulations regarding the increase of retirement age and contribution period, but also the higher rate of contributions to social insurances represent an important part to ensure the pension system sustainability, but these do not solve all problems. From practice, it can be observed that also the stimulating measures, but also the constraining ones do not achieved the expected results, in the case of Romania, the incomes obtained from contributions cover only 66% of the expenses of State Social Insurances Budget.

The mean value of pension increased, but the inequities between different categories of pensioners continue to exist, in the conditions in which 55.55% of the mean number of pensioners at the end of the year of 2016 recorded a level of pension under 1,000 RON.

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Establishing the mandatory pension systems privately managed wanted to reduce the pressure from public system and exclude the redistributive element, just only the recent implementation does not allow reaching benefits, currently pensioners being totally dependent from the public pension system.

Regarding the voluntary pension fund privately managed, the degree of participation is extremely low, as a result of a new developing market.

The pension system of Romania had a long process of regulating, but to ensure the sustainability and provide an adequate income replacement level, it is necessary a multisectorial approach, which besides the insurance system, has to imply also the taxing system, educational system and labor market sector.

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