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25 November 2008

Online at <https://mpra.ub.uni-muenchen.de/12720/>

MPRA Paper No. 12720, posted 14 Jan 2009 10:03 UTC

# THE ADJUSTMENT OF THE ROMANIAN PUBLIC PENSION PLAN IN THE CONTEXT OF EUROPEAN INTEGRATION

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## SUMMARY

The EU expansion process is a dynamic one which requires the candidate country to acknowledge the latest developments in communitarian social policy. The dominant economic aspects are currently reinforced by the social ones. Likewise, a consensus must exist regarding the implementation in Romania of the communitarian legislation in this vast domain, but also of the process of re-establishing the differences towards the SM as far as the Romanian social security system is concerned in retrieving them.

The EU membership status (MS) Romania has obtained since January 1<sup>st</sup> 2007 is an unprecedented event in the country's age old history, therefore implying special efforts in order to adjust the communitarian law to the national social insurance legislation. Since Romania became a member state, the country is obligated to apply the requirements of the communitarian regulations on coordination to the field of social security for migrant workers. The regulations entail that the social security services provided by the Romanian law can be exported and that the creation and coordination of said services must abide the principles of communitarian coordination.

In order to align the Romanian pension legislation to the communitarian one, Law no. 19/2000 has been adopted, concerning the public pension system and other social insurance rights [4]. The law was put into effect on April 1<sup>st</sup> 2001 and it introduces for the first time the possibility that other citizens of other states or stateless persons can become insured members of the public pension system during their residence in Romania, whilst having the obligation to contribute to the state social insurance budget in exchange for the social insurance services the law entails.

The state social insurance pensions are defined as monetary rights given to employees and their descendants at the expiration of a determined period of activity and at the law determined age or in the case of total or partial loss of working ability [2, p.14]. This definition also describes the most important categories of pensions regulated by the state social insurance system: pension for work quantity and age limit; pension for invalidity; pension for descendants.

The reformation of the public social insurance system has introduced the following principles [3, pp. 42-43]: pension singularity – a person can receive a sole full social insurance pension; pension indexation and compensation – a mechanism legislated after 1990 through government decisions that modified pensions through contractual augmentations or gradual/uniform percentages; tax-free pensions – like any other social insurance rights, pensions are tax free according to current regulations; imprescriptible rights to pension – which derives from the category of imprescriptible rights; surrender-free pensions – the right to pension cannot be surrendered.

As “regulators” in the pension system – a regulated system, act the following: the government authorities that set the value  $V^{(t)}$  of a pension point; the insured with the A and E vectors. The coefficients “Access” (A) and “Elasticity” (E) can and must be used by the authorities as “stimulant regulators”.

The value-oriented pension can be calculated using the following formula:

$$P_{ij}^{(t)} = \frac{\gamma_{ij}^{(t)} \cdot V^{(t)}}{T} \cdot \text{tg} Q_t \quad (1)$$

where the angle Q can function as the incline of the function  $x_t = f(\bar{x}_t)$ .

$$\frac{x_t}{\bar{x}_t} = P_t - \text{the points made by the insurer in the year } t \quad (2)$$

$$x_t = P_t \cdot \bar{x}_t \quad (3)$$

The increase or decrease of the  $Q_t$  angle depends on the efforts of the insured to win more through work ( $\Delta x_t$ ), on the government authorities that can, if the level of economic growth allows it, augment the value of the pension point, on the effort of the insured to benefit from the A coefficient in order to increase the  $Q_t$  angle by  $\Delta Q_t^{(A)}$ , on the E coefficient to increase  $\Delta Q_t^{(E)}$ , on the level of national economic development through

which the average  $\bar{x}_t$  can increase by  $\Delta\bar{x}_t$ . The increase of the value of the pension point is a consequence of the increase of the GDP, and also of the increase of the  $\bar{x}_t$  average.

The public social expenses are directed to the moral and material social aid: for children with outstanding intellectual abilities, but who come from low-income families ( $n_1$ ); for children with mental or physical deficiencies, who require special medical care and treatments etc ( $n_2$ ); for pensioners according to current legislation ( $n_3$ ); for the population still fit for work age-wise that have mental or physical deficiencies ( $n_4$ ); for the population still fit for work age-wise, that wants to work, but are unemployed ( $n_5$ ). In total, the number of the human population that requires social aid through social insurance is:

$$n = \sum_{i=1}^5 n_i \quad (4)$$

The demographic indicators can be interpreted schematically. In the economical analysis per capital [1, p. 128], and also in the problems with public social insurance, the necessity to examine said indicators arises. The multitude of the indicators is represented in a matrix. Line 1 is for the contribution of each of the demographic segments considered for the totality of the human population; line 6 – the number of the country's population to one worker....; the number of unemployed individuals to one active worker in the national economy.

The level of the public social insurance is determined by the level of the economic development and the total GDP. If the GDP is  $Y$ , the total GDP destined to social insurance is  $\bar{Y}$ , then the contribution of the public social expenses will be:

$$\frac{\bar{Y}}{Y} = \eta \quad (5)$$

The value of  $\bar{Y}$  is determined by the government authorities, depending on: the politicians' social policy, the level of the GDP; the structure of the expenses for public social insurance; the number of the population that benefits from public social insurance; the demographic policy; the economic policy; the economic-social policies of the EU member states

The average specific public social insurance for one beneficiary represent:

$$\frac{\bar{Y}}{\sum_{i=1}^5 n_i} = \bar{y} \quad (6)$$

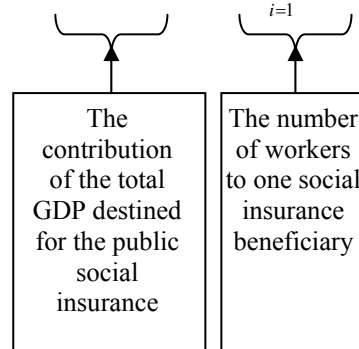
$$\text{work efficiency} - \frac{Y}{N_5} = y; \quad (7)$$

$$\text{one worker requires: } \frac{\sum_{i=1}^5 n_i}{N_5} = \gamma \quad (8)$$

public social insurance beneficiaries.

From every work unit, one part is destined to the public social insurance beneficiaries:

$$\frac{\bar{y}}{y} = \frac{\bar{Y}}{\sum_{i=1}^5 n_i} : \frac{Y}{N_5} = \frac{\bar{Y}}{Y} \cdot \frac{N_5}{\sum_{i=1}^5 n_i} \quad (9)$$



Or, from  $\gamma = \frac{\sum_{i=1}^5 n_i}{N_5}$  we deduce  $N_5 = \frac{\sum_{i=1}^5 n_i}{\gamma}$  and obtain:

$$\frac{\bar{y}}{y} = \frac{\bar{Y}}{Y} \cdot \frac{\sum_{i=1}^5 n_i}{\gamma} : \left( \sum_{i=1}^5 n_i \right) = \frac{1}{\gamma} \cdot \frac{\bar{Y}}{Y} \quad (10)$$

$$\frac{\sum_{i=1}^5 n_i}{N_5} = \gamma \text{ is transcribed as } \frac{N_5}{\sum_{i=1}^5 n_i} = \frac{1}{\gamma} - \text{the number of workers to one public social insurance}$$

beneficiary  $\left( \frac{1}{\gamma} = m \right)$ .

$$\text{Therefore, } \frac{\bar{y}}{y} = m \frac{\bar{Y}}{Y} \text{ which leads to } \bar{y} = my \frac{\bar{Y}}{Y}. \quad (11)$$

The totality of public social insurance  $\left( \bar{y} \right)$  is directly dependant on the number of workers for one public social insurance beneficiary, on work efficiency and on the contribution  $\left( \frac{\bar{Y}}{Y} \right)$  of the GDP destined to the beneficiaries of the totality of the GDP.

Taking into consideration its economic and social problems, Romania must elaborate pension schemes. As a model for such an endeavor Swedish, English, Belgian or Austrian schemes can be of use. The current retirement system in our country is not adequate to the economic and social problems. According to calculations, 27% of the active workforce has emigrated. The means to determine pension in Romania does not always reflect the contribution of the solicitant in his/hers active period. The pension is determined with the formula:

$$P_{ij} = \frac{\gamma_{ij} V}{T} \left( \sum_{t=1}^T \frac{X_t}{X_t} \right) \quad (12)$$

In the national economy the wages for a category of specialists grow under the impact of outside factors (e.g. workers from the banking system and service providers etc.). In this case, the totality of the proportion:  $\frac{X_t}{X_t}$  is reduced: some specialist in the economy will be unjustly disfavored when they will apply for pension (due to the increase in value of the  $\bar{X}$  average).

Another aspect concerns the fact that a specialist is formed during 2/3 of his active life and only 1/3 of it is used for creative purposes. This would require a reformation of the active period of work, as it is this author's opinion that the age limit should be flexible. To my mind, every person should benefit from pension at any age, the pension being calculated in dependence with the active period and with his/hers paid contribution. This method of retirement is shown in the graphic (fig 1).

## CONCLUZION

In conclusion, the pension system in Romania can be adapted to that of the other EU member states following these principles: the complete process of contribution for solicitants to pension in Romania =  $\max_{1 \leq S \leq 27} \{T_{S2}\}$ ; the contribution from the minimum necessary stage of contribution that upholds the pension calculation for the solicitants to pension in Romania =  $\min_{1 \leq S \leq 27} \{T_{S3}\}$ ; the age limits for solicitants to pension in Romania =  $\max_{1 \leq S \leq 27} \{T_{S4}\}$ ; the minimum periods of employment in Romania for the citizens of other states =  $\max_{1 \leq S \leq 27} \{T_{S5}\}$ ; the minimum periods of residence in Romania =  $\max_{1 \leq S \leq 27} \{T_{S6}\}$ ; the minimum periods of undertaking

economic activities in Romania =  $\max_{1 \leq S \leq 27} \{T_{S7}\}$ ; the maximum periods of migration for other citizens with economic activities in Romania =  $\min_{1 \leq S \leq 27} \{T_{S8}\}$ .

In this manner, Romania does not create retirement situations which are incompatible with other EU systems, but lessens the “burden” for immigrant pensions services. Moreover, regulations can be enforced so that acquiring or calculating services can be conditioned by accumulating periods of insurance, employment and residence that are within the regulations of the country’s legislation. Therefore, the migrant worker may not be entitled to services or may receive a lesser service than that in his country of origin.

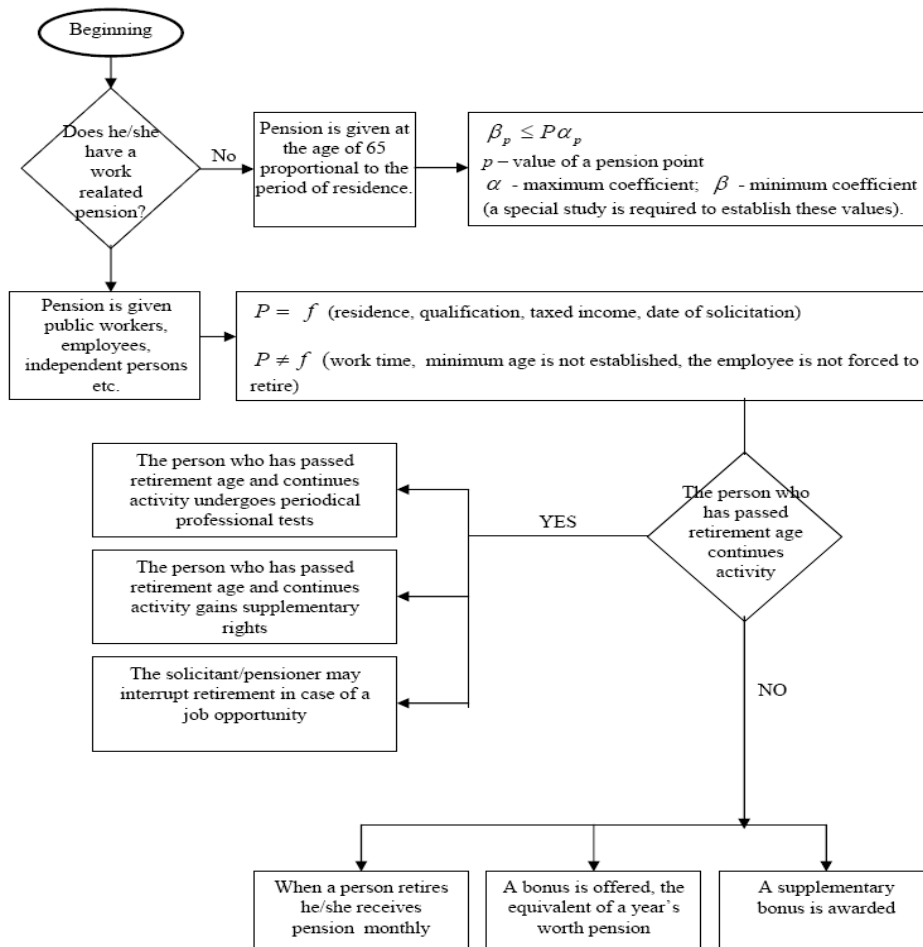


Fig 1. Block scheme „The Romanian pension system”

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