

A SUSTAINABILITY CHECK OVER ROMANIA'S PENSION SYSTEM

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Abstract: The worldwide ageing phenomenon is more visible than ever and its effects are becoming troublesome for some economies. This paper proposes to evaluate what are the long term predictions for the demographic component in Romania and if these changes are financially sustainable. In order to conduct the analysis, data was compiled from "The ageing report 2018". At this point in time, the ageing costs are predicted to increase until 2070, while the working aged population is expected to decrease. From a financial perspective, this article emphasizes the need for a strategic planning in which policies account for ageing.

JEL classification: H55, J26

Key words: population ageing, pension system, sustainability, demographic changes, pension reforms

1. INTRODUCTION

Population ageing is currently a worldwide issue which poses severe threats towards the sustainability of the public pension schemes. In particular, the European societies seem to be the most affected by a quite worrying ageing phenomenon, which led to a considerable demographic pressure. According to Dincă *et al.* (2017), the ageing process and the demographic pressure are basically the main factors which brought about the introduction of the social security system Pay As You Go. In these circumstances, a strategic approach aimed at destressing the future working generation of excessive social contributions is a necessity that policy makers have to account for. Even if demographic changes are usually slow and do not represent an immediate threat on public finances, on the long term their impact may lead to severe budgetary imbalances.

Unlike the private sector, where expenditures rarely exceed revenues and expenses are minimized every year, even if there is an inappropriate management practice, in the public sector, the level of these expenses increases steadily. Although this topic is being attacked from all directions, the results are about the same. Expenses maintain top position in the state budget, regardless the size of the revenues. As presented by Andronic (2016), most public authorities across Europe wanted firstly to find ways to increase revenues, reduce arrears, provide financial resources to the budget through identifying the optimal construction of tax systems and only secondly to reduce budget expenses. This is somehow justified as it is known that expenses are the engine of the economy: people spend, the industry produces goods and services and the circle continues amplifying.

The necessity for research in this domain is more obvious than never in countries such as Romania, where the implemented laws and emergency ordinances not always served the interests and well being of the nation. The economic consequences of regulations that had the soul purpose of satisfying short term demands of the electorate are observed to be detrimental in the long term.

The legacy of the Ceausescu regime left a social security system that was not only inefficient, but also inequitable. Even if a series of reforms upgraded and reshaped the structure of the pension system, its financing is still facing a risk of not being sustainable and becoming much more expensive. In regards to existing literature on the topic of public pension system, reforms and sustainability for Romania, the first noticeable wave of articles appears closely after the Swedish reform of 1994. The change of system in Sweden from a Pay As You Go structure to Notional Defined Contribution triggered a worldwide appetite for research in the field of pensions and Romania was no exception to it.

The earliest report concerning Romania consists in a work of Puwak (1994). The author reports that the elderly population, aged 65 or higher, representing 11.2% of the total population in 1992, was never a priority under the Communist regime. The social protection system always emphasized on the benefits of the working population, which were considered the only ones to have an input towards economic development. According to the writer, half of the retired population benefiting from state pensions was exposed to poverty and could not afford a minimal standard of living.

The predictions of Puwak (1994) could be considered as an early warning signal concerning the health and sustainability of the Romanian pension system. Nevertheless, researchers continued to underline systemic risks the following years. This is the case for Gomulka (1999) which conducted a comparative analysis on the pension developments in Poland, Czech Republic, Hungary and Romania. The findings at that time, for Romania, suggest that in order to maintain an adequate wage to pension ratio, social contributions were expected to increase. In addition, the author puts forward a series of key indicators necessary in the study of the pension system such as: effective retirement age or the dependency ratio between pensioners and contributors.

Zaman and Vasile (2001) are the first to describe a first pension crisis in Romania, criticizing the PAYG system together with the reliability of the investment funds that went bankrupt at that time (FNI, CARITAS, SOVINVEST). Population ageing and demographic structural changes were highlighted as serious issues regarding the sustainability of the system. Also, the high inequities determined by the calculation methods of pensions were used as main arguments supporting a need for reform.

The criticism of the pension system continued even by a team of foreign experts contracted by the Romanian government to perform an analysis and to contribute with suggestions. Georges de Menil and Sheshinski (2002) accused a lack of consolidation and tightening of the existing system in the post-revolution period. In their view, the implemented legislation created a number of unnecessary special retirement provisions and reduced the contributor base, a considerable amount of people engaging in informal market activities. The beforementioned authors highlight a first positive sign of reform, namely the passage of an emergency ordinance which enforced the creation of a second pension pillar, private funded pensions. Nevertheless, the ordinance was abolished one month later, when the new government proposed to change the strategy regarding pension reform.

The perpetual chaos surrounding the Romanian pension reform was put to a halt when the second and third pillars were enacted by Law no.263/2010. These new changes can be considered to have improved the system by shifting some of the state responsibilities to the private sector. The question that arises now is: Was the implementation of the three-pillar system sufficient in order to counteract the aging phenomenon in Romania such that the pension system remains sustainable?

The current paper notices the post reform research arising from Dragota and Miricescu (2009), which suggest that weaknesses in the system still exist through means of early retirement, increased old age dependency ratios and increasing net public pensions relative to net average income. Also, Croitoru (2015) indicates that demographical changes, meaning an ageing population, still represent a threat to the first state managed pillar, and encourages the expansion of the privately managed pillars.

2. OBJECTIVES

The analysis intends to evaluate the status quo in Romania, which are the risks that the pension system is currently facing and propose policy solutions where intervention is needed.

3. METHODOLOGY

In the European context, the European Commission recognizes the issue of population ageing and, in collaboration with member states, constructs an annual study named “The Ageing Report”. This report will serve as a data source for the current paper due to the fact that it contains up to date information on a set of key indicators. In addition, the most valuable characteristic of the database consists in the predictions it has to offer for the next 50 years, constructed on a rigorous methodology.

The possible threats on the sustainability the pension system are decomposed into a demographic component and a financial component using the data provided in “The Ageing Report”.

4. QUANTITATIVE ANALYSIS

So far, the research community constantly called attention to the sustainability of the pension system in Romania. Whether the aging phenomenon or the poor living conditions of the pensioners acted as main catalysts for reform, new legislation was late and rarely addressed the full range of issues at stake.

In an attempt to continue the previous line of scientific literature and to establish an accurate standpoint, we resort to data and predictions originating from “The ageing report” 2018.

Table 1. Demographic structure in Romania

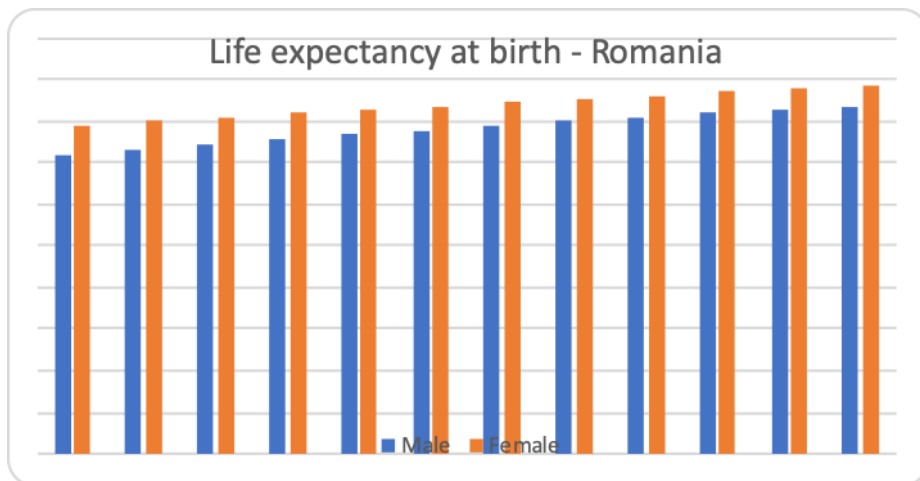
Indicator\Year	Ch 16-70	2016	2020	2030	2040	2050	2060	2070
Population, million	-4.7	19.7	19.2	18.0	17.0	16.3	15.7	15.0
Children population (0-14), % of total	0.1	15.3	15.25	14.95	14.6	14.8	15.2	15.5
Prime age population (25-54), % of total	-9.4	42.7	42.7	37.6	33.8	32.5	32.9	33.3

Working age population (15-64), % of total	-11.8	67.1	65.4	63.2	58.6	55.2	54.1	55.3
Elderly population (64 and over), % of total	11.6	17.6	19.4	21.9	26.8	29.9	30.7	29.2
Very elderly population (80 and over), % of total	9.2	4.3	4.8	5.9	8.4	9.9	12.6	13.5

Source: European Commission

Before analysing sustainability issues for the Romanian pension system, we must proceed by understanding which are the demographic segments that are facing the most severe changes. First of all, the total population in Romania is expected to decrease with 4.7 million, from 19.7 million in 2016 to 15 million in 2070. Secondly, children population (aged 0-14) is predicted to slightly increase with only 0.1% of total population. The most significant demographic restructuring appears in the segment of population aged 15-64, meaning the working age population. As percentage of total population, this segment is expected to decrease from 67.1% in 2016 to 55.3% in 2070. Over the predicted period, the shift in working age population is almost entirely assimilated by the elderly population, aged 64 and over. The latter is facing an increase of 11.6% relative to total population.

Modern societies are facing constant increases in regards to life expectancy at birth and Romania is no exception. This consequence of medical and socio-economic improvements as desirable as it is, is a clear sign that more people will surpass the mandatory retirement age, thus becoming a heavier burden on the sustainability of the pension system.



Source: European Commission

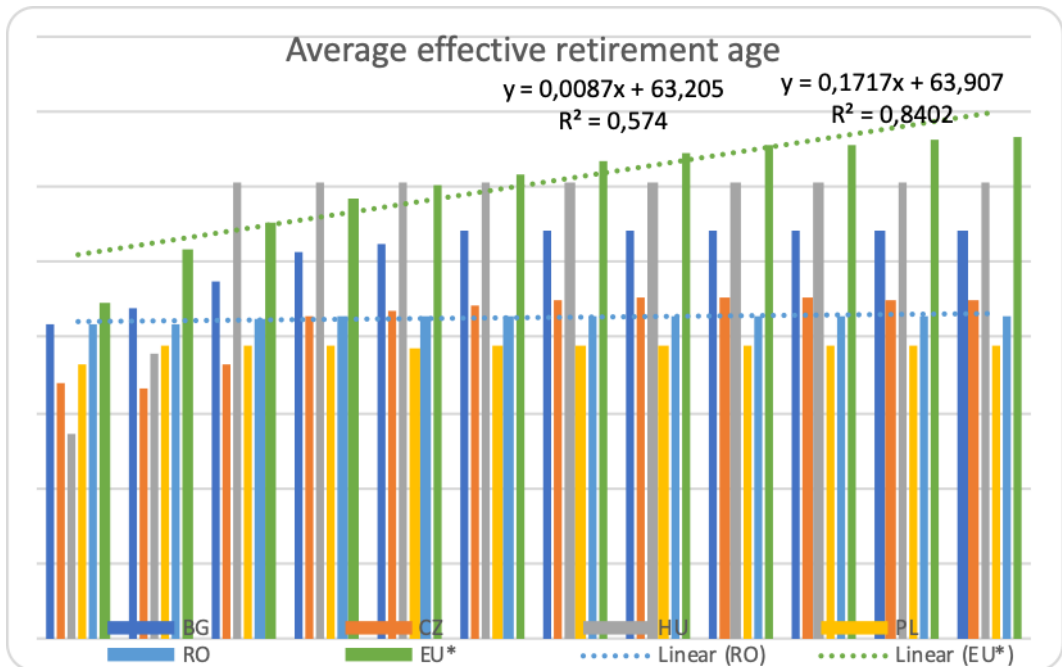
Figure no. 1 Life expectancy at birth – predictions

According to Figure 1, starting with a life expectancy of 71.8 years for men and 78.9 years for women in 2016 these two are expected to reach 83.6 for men, respectively 88.3 for woman in 2070. The age discrepancy clearly suggests that a woman will be obliged to bear all household expenses on her own for a significant period of time. This is a clear sign that a pension equalization is needed starting with

the first year of retirement. One equitable solution towards this income inequality consists in prolonging the effective retirement age and increasing inclusion of women in labour markets.

In regards to the European Commission’s predictions, it is important that one should refer to the effective retirement age, and not to the law-imposed retirement age. Currently the existence of retirement paths such as disability pension, survivor pension and similar others encourage voluntary early retirement, thus reducing the effective retirement age (Dorn & Sousa-Poza, 2011).

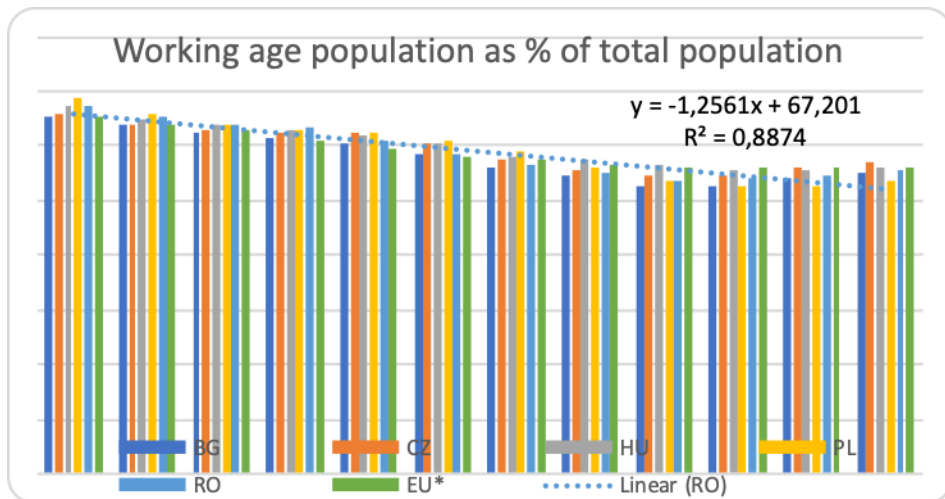
When comparing the pensionable age, the European perspective is different from the Romanian one, as it can be observed in Figure 2. At an EU level, the projected average effective retirement age is expected to reach the age of 66 by 2070, whilst the trend for Romania is constant, with no significant increases. This leads us to believe that changes are planned in other Member States and that Romania is righteous to follow the European trend and increase the actual age at which people retire.



Source: European Commission

Figure no. 2 Average effective retirement age – predictions

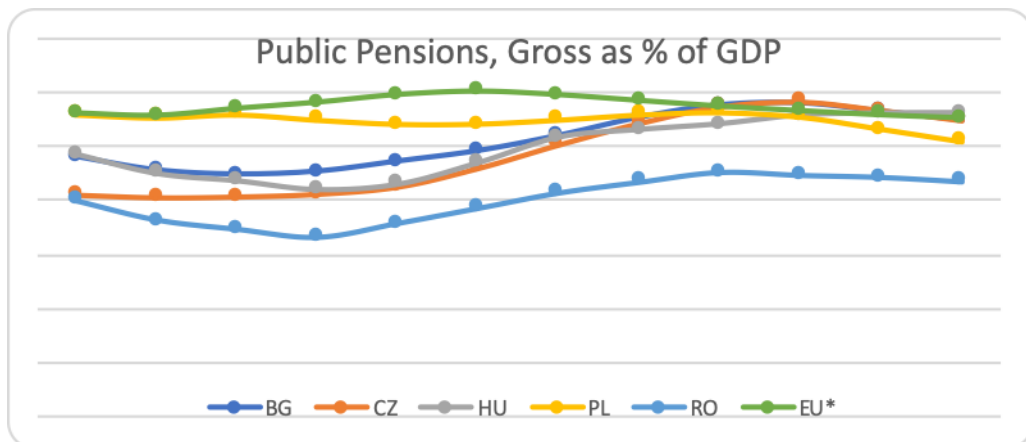
The sustainability of a pension system is also dependent on the demographic structure of its contributors relative to total population. This is measured by the European Commission through a dependency ratio which can be found in Figure 3. Even if the position for Romania is very similar to that of other Member States, from approximately 65% of working population, aged 15-64, in 2016, the projections for 2070 show a decrease of about 10%.



Source: European Commission

Figure no. 3 Dependency ratio predictions

At the moment, having low levels of fertility rates and an increasingly number of emigrants, there are no other demographic indicators showing a sufficiently strong effect needed to counter the ageing phenomenon. Undoubtedly, the evolution of the phenomenon translates into financial costs measurable through the pension expenditures as percentage of the gross domestic product.



Source: European Commission

Figure no 5. Public pensions, gross as % of GDP - projections

To some degree, the projected public pension expenditures decrease in Romania is a consequence of the abusive, counter humanitarian Decree no. 770 from 1966 of the Ceausescu regime. The law which banned abortions brought upon itself a massive inflow of population, which is expected to retire by 2030. From that point forward, the Commission's predictions show an increase in public pension expenditures up to 8.7% of GDP in 2070 for Romania, as it can be observed in Figure 5. Compared to

the EU average, the trend for Romania follows a similar evolution after 2050, but with 2 pp lower.

Moreover, in order to have a complete financial framework of the ageing phenomenon, we also need to consider what are the long-term predictions for total factor productivity and real GDP. According to Benkovskis, Fadejeva and Worz (2013), total factor productivity (TFP) plays a crucial role in explaining GDP growth in Central and Eastern European countries, including Romania. Consequently, the effect of the decrease in the size of the working population is weakened by an average increase in TFP of 1.7. Although the productivity increase directly leads to an average growth rate of 1.8 for Potential Real GDP, total cost of ageing as % of GDP, is forecasted to increase by 2.2%, reaching 17.3% of GDP in 2070. This scenario is constructed under no policy changes, holding all other factors constant.

Table no. 2 Financial predictions for Romania

Indicator\Year	Avg 16-70	2016	2020	2030	2040	2050	2060	2070
Potential Real GDP (growth rate)	1.8	3.5	3.4	2.1	1.3	1.3	1.3	1.3
Total Factor Productivity (growth rate)	1.7	2.8	2.6	2.2	1.6	1.3	1.2	1.0
Total cost of ageing, % of GDP	2.2	15.1	14.4	14.2	15.8	17.2	17.6	17.3

Source: European Commission

5. CONCLUSIONS

As previously observed in the literature, researchers constantly underlined a need for reform in the structure of the Romanian pension system. Whether the highlighted issues concerned a risk of poverty for pensioners, inequities in pension calculation or purely a lack of efficiency in the system, amendatory legislative acts were generally enforced with severe delays. This fact only leads to the impression that the pension system itself is rigid and has no power to adapt to current socio-economic changes.

Due to the availability of data originating from the European Commission, namely “The Aging Report 2018”, the population aging phenomenon is confirmed and continues to put pressure on the sustainability of the pension system in Romania, and not only. An increased life expectancy at birth combined with a declining fertility rate determine major imbalances in the dependency ratio. Until 2070, *ceteris paribus*, public pension expenditures as percentage of GDP are expected to increase with almost 1%. One can consider that in a case of economic downturn the pool of resources originating from the first pillar is going to diminish and the predicted 1% might increase even more.

Nevertheless, governments have the capability to control the aging phenomenon through either direct measures or slower indirect ones. For example, a possible direct solution towards a long-term sustainable system, as seen in other European countries, would be to extend the average effective retirement age. In this regard, more severe regulations can be implemented where unjustifiable use of early retirement paths exists, or an extension in the mandatory exit age, with the provision that it should be equalized for both women and men. In an indirect manner, governments could implement fiscal policies to further support maternity leaves such that in natality rate increase, which in order should counter the aging phenomenon.

In order to conclude on a positive note, a transparent and predictable management of public finances can guarantee ageing costs to remain at a threshold of 17.3% of GDP and possibly even lower. This goal is attainable only through planned, sustainable, labour and pension reforms, consolidated by continuous research.

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