# SOME COMMENTS ABOUT THE IMPACT OF POPULATION AGEING ON FISCAL INDICATORS

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**Abstract**: This article aims to determine the impact that demographic changes have had during the 1995-2013 fiscal indicators such as the level of public expenditure, the total/social budget deficit or public debt in Romania. Population aging affects a number of categories of expenditures (social protection expenditure, the health care expenditure or long-term care), and government revenue, through many mechanisms.

**Keywords**: population ageing, public spending, fiscal indicators.

**JEL**: *H*2, *H*4, *H*5, *H*6, *H*7.

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## **INTRODUCTION**

In recent years, more and more articles develop the subject of the demographic crisis that distorts the progress of developed or developing economies, or will affect long-term national budgetary balance and the sustainability of the fiscal policy of nations.

Are also known theories according to which public expenditure growth is normal, correlated with the level of economic development and economic growth (Chirila V., Chirila, C., 2011) of a country. The upward trend of public spending is a result of accepting the status of welfare state, but at the same time can be influenced by the voting system and the possibility for individuals to decide by vote (Buchanan, JM, Tullock, G) on the level of public spending at a time or another.

In addition, public expenditure found their role of macroeconomic instrument with the potential to influence the degree of development and economic growth in the Keynesian approaches (Harrod, RF, 1948 Domar, E., 1957, Petrisor, B.M., 2014).

Also, many factors (Bilan, I., Roman, A., 2014, Nuta, F., 2011) can influence the evolution of public spending, such as the involvement of the state in the provision of public services, the increase of the individuals income, demographic factor (presented as the population growth or change in population structure) price or unemployment, political orientation of the government party/coalition or perspectives on the role of the state.

## THE EVOLUTION OF THE FISCAL AND AGEING INDICATORS IN ROMANIA

The fiscal cost imposed by the demographic developments is a current challenge in public finance. Expectations of dramatic demographic changes (EU, 2012) due to very low fertility rates, continuous increase in life expectancy lead to serious pressure on public spending and thus lead to serious concerns about the sustainability of public finances in the medium and long term (context in which was signed commitments between EU Member States on the long-term deficit and debt levels in "the fiscal compact".

In our analysis, we identified (based on existing economic literature) a number of agerelated expenditure, which capture best the cost that ageing can bring. We analyze spending on pensions, health and long-term care. Before presenting these types of public expenditure, we will make a presentation of the main characteristics of the pension, health and long term care systems in Romania.

The pension system in Romania (Zaman, C., 2013) currently operates under Law 263/2010, which unified pension system, starting from the first pillar, public and mandatory for all (which includes old-age pension, early retirement or partial early retirement, disability or survivor's pension). The second pillar of the pension system in Romania is mandatory for all individuals 35 years and optional aged 36-45 years. The third pillar refers to voluntary private pension. In addition, there is a special pension category which includes judges, prosecutors, military, etc.

Mandatory public pension pillar covers all employees and military personnel or freelancers (self-employed person), setting a 10.5% contribution for employees, regardless of working conditions and for employers the contribution rate is (since October 2014) from 15.8% to 25.8%, depending on the working conditions.

Mandatory private pension pillar is funded at a rate of 6% (2016) applied to the taxable income of the employee, taken from the current rate of 10.5%, before including this pillar which were transferred in full to Pillar I. Thus, based on this percentage the income of employees and investment decisions of those who manage pension funds will calculate the benefits of future retirees.

In terms of retirement age, it is differentiated by sex, so men will retire from January 2015 to 65 years, while the retirement age for women will increase gradually until January 2030 to 63 years.

Pensions are calculated based on the pension point, which in January 2014 was 790.7 RON, which will be indexed with the annual inflation rate and will be increased by 50% of the real growth of gross average wage in the previous year (Zaman, 2013).

Viewed from the perspective of sustainability, the pension system can be presented in the table below:

| Table 1 Romanian indicator for | r pension system | (2003-2013) |
|--------------------------------|------------------|-------------|
|--------------------------------|------------------|-------------|

| Indicators        | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| No. of pensioners | 6141 | 6069 | 5902 | 5781 | 5716 | 5691 | 5682 | 5646 | 5549 | 5321 | 5246 |
|                   | .5   | .8   | .3   | .6   | .0   | .3   | .9   | .8   | .4   | .3   | .3   |
| No. employees     | 4333 | 4398 | 4501 | 4575 | 4717 | 4738 | 4367 | 4101 | 4172 | 4311 | 4328 |
|                   | .8   | .3   | .2   |      | .2   | .6   | .7   | .6   | .1   | .6   |      |

| SDR                     | 1.42 | 1.38 | 1.31 | 1.26 | 1.21 | 1.20 | 1.30 | 1.38 | 1.33 | 1.23 | 1.21 |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Pension spending (%GDP) | 5.2  | 5.4  | 5.3  | 5.2  | 5.5  | 6.5  | 8    | 8.1  | 7.9  | 7.6  | 7.9  |
| Deficit of BASS         | 0.2  | 0.1  | 0.1  | 1.1  | 1    | -0.1 | -1.2 | -0.7 | -0.2 | -0.1 | 0.5  |

Source: http://www.mmuncii.ro/j33/index.php/ro/transparenta/statistici/date-statistice http://ec.europa.eu/eurostat/data/database

Thus, due to unbalanced system dependency ratios in which one employee in terms of financial support (at this moment) sustains 1.2 pensioners, the pension system in Romania is already under pressure of the structural weaknesses of the economy. In addition, demographic developments on the ratio of people aged 65 and older in the total population or the total active population generates new pressures that further distort the system and policy makers need to find quick solutions, at least to integrate active people work.

The medical system in Romania is based on a reformed legal framework that includes elements such as social health insurance, private health insurance, and organization of hospitals, community health care, emergency services, primary care, and public health programs, organized at central and local level, which ensures implementation of health policy options. Contributions pay monthly by employees and employers (5.5% - 5.2% employees and employers) is collected in the national health insurance fund that is managed by the National Health Insurance, gathering at his disposal and other financial resources.

Private medical services market reached 12% in 2013 in Romania. The reason for that is the fact that the demand for private healthcare is not sufficiently developed related to income level of Romanians, which are less likely to invest in private health services.

In the table below we highlight health expenditures made in the private and public sector in Romania as % of GDP in 2003-2012. As can be seen, even if the trend of health care costs in the private sector is increasing, they are not a key driver of health services.

Table 2 Expenditure on health care in Romania, by provider

| Health care spending | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------|------|------|------|------|------|------|------|------|------|------|
| Private sector       | 0.81 | 1.36 | 1.05 | 1.03 | 0.93 | 0.98 | 1.19 | 1.16 | 1.16 | 1.10 |
| Public sector        | 4.41 | 4.03 | 4.41 | 4.01 | 4.20 | 4.29 | 4.40 | 4.65 | 4.34 | 4.36 |

Source: Eurostat: http://appsso.eurostat.ec.europa.eu/nui/show.do

In November 2014, the Ministry of Health approved the National Health Strategy for 2014-2020 and Action Plan 2014-2020 for the implementation of the national strategy, a strategy that will introduce the following changes in the system after implementation ((http://www.ms.ro/?pag=62&id=13522&pg=1):

- Development of basic health services, accessible to all, quality and cost-effective, focusing on prevention;
- Better integration of medical care by strengthening outpatient clinical services;
- Reorganization of hospital services and ensuring the continuity of care.

The evolution of the national health insurance Fund balance is, according to budget execution reported by the Ministry of Finance as follows:

Table3 National Fund for Health Insurance in the period 2006-2013

| Ani        | 2006  | 2007  | 2008   | 2009   | 2010    | 2011 | 2012   | 2013  |
|------------|-------|-------|--------|--------|---------|------|--------|-------|
| Sold FNASS | 485.4 | 102.5 | -484.3 | -651.0 | -248,65 |      | -379,4 | -21.3 |

Source: Execution of the BCG 2006-2013, http://www.mfinante.ro/execbug.html?pagina=buletin

Thus continuing the analysis, the health insurance fund deficit continued to persist in all the years since 2009, except for 2011, when was a surplus which was compensated, according to law, with the amounts received as grants from the state budget. In this sense, sustainability issues persist due to health policy options, sometimes hesitant, sometimes contradictory and mismanagement of public resources (Zaman, C. 2013).

In addition, the clawback tax are an important discouraging on the drugs market, reducing competitiveness and volume of investments in the domestic producers of drugs in these conditions they prefer to export more drugs (Banila, 2013b). This tax is perceived as a brake on the development of companies producing generic drugs by reducing local production, delaying investment in development and even staff reduction.

It was also noted the increasing proportion of the population over 65 years in Romania, as a result of reduced fertility and mortality and, of course, the increase of the migration of younger age individuals. Have been gradually developed some specific services for this group of the population, but far, fewer than in the rest of Europe. Home care and alternative care, for example, are supplied mainly by small organizations. However, the National Health Insurance signs few of such contracts versus the needs in Romanian society, given that there is an acute lack of care in retirement homes.

The sustainability of the health sector is affected including by the method of allocation of funds in the system, the lack of transparency in public spending and the phenomenon of corruption - the health system is recognized as one of the most corrupt systems.

Long-term care in Romania refers to the care of the elderly and people with disabilities, governed by different laws. In general, the responsibility for organizing long-term care in our country belongs to local authorities, but NGOs have an important role. As institutionalized beneficiaries of the system, they shall be the beneficiaries of the community services (residential centers, day centers) and cash benefits (pensions, transfers for social assistance, disability allowances, etc.). Long-term care is coordinated by the National Council for the Elderly.

Long-term care system should be reformed in Romania, highlighted rigorous and organized so that older people who wish to benefit from such services (and the phenomenon of migration has increased the number of elderly who are in a position to live alone and waiting for the state to intervene). State institutions are not enough and occurred waiting lists, while private centers have established fees that exceed the financial possibilities of the elderly.

People with disabilities are better organized by state institutions and the information is more accessible, but still remains in the present the discrimination problem.

Long-term care is based mainly on passive aspects such as: medical and financial support and less actively integrate these groups of people in society, their involvement in activities that positively modify the path of life. Moreover, the number of people working in the system is not enough. These issues should be priorities for public decision-makers involved in managing the sector.

The sustainability of long-term care system is closely linked to the sustainability of the pension system and the health system while the forms of support involve beneficiaries of these two components. The phenomenon of population aging on the other hand, adds pressure on longterm care system that will require more financial resources in order to provide LTC's organization (Basil, 2012).

In addition, the analysis adds an interesting perspective, that of comparing the employment rate of the system, given the age category 15-64 years and the employment rates of the 55-64 age category. Thus, it is found that in the analyzed period, in Romania, the employment gap between system and work integration component targeting elderly people is 20 percent. That looks like it is where policymakers must intervene in the future to alleviate the pressure imposed by the aging of the population.

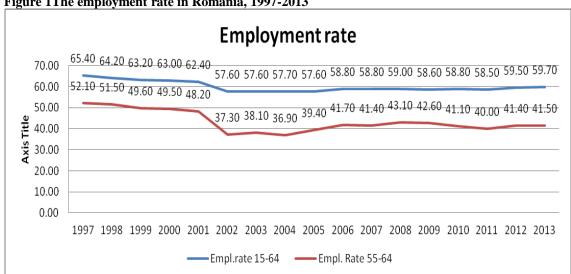


Figure 1The employment rate in Romania, 1997-2013

Source: www.insse.ro, TEMPO database

The increasing ageing population will affect tax revenues of governments and will increase public spending on pensions system, health care and other benefits related to age (Tosun, 2003, Elmeskov, 2004).

The most obvious channel through which demographic pressure will affect the budget balance is public spending. Consumption of public goods is more pronounced for older people, especially in regard to the mechanism of income after retirement and medical care. The health cost increases dramatically with age. Moreover, population aging will relieve the education system, since this category of the population will decrease.

Demographic pressure will affect the public revenue, due to the fact that they will be fewer young people to enter in the labor market, so that the participation rate of the labor force might know a decline. In addition, the system of taxes will be affected by these developments. In addition, it was found that while the government increases taxes to meet the needs of increasingly large in the pension and health system level, will lead to a reduction in fertility rate due to lower disposable income for individuals and families (Hock and Weil, 2012), which would enhance further the phenomenon of aging, which will cause significant changes in the

Issue 6/2014 192 allocation of public funds. Some authors (Eiras, Niepelt, 2012 Lisenkova et al. 2012) have shown that, due to the phenomenon of aging which obliges governments to allocate additional resources to the detriment of education or social security investments; there will be a negative impact on the growth.

Table 4 Evolution of BCG social security transfers (% of total public expenditure BCG)

| Year                          | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Transfers - social protection | 27.43 | 28.06 | 28.34 | 33.13 | 33.97 | 33.11 | 32.25 | 31.68 |

Source: Own calculations based on BCG executions 2006-2013

http://www.mfinante.ro/execbug.html?pagina=buletin

In Romania, and not only, the level of the social transfers to the population is very high, which is an additional reason for concern in terms of aging, with direct impact on pension costs and health insurance. Thus, in the period 2006-2013, this budget component increased from 27% in 2006 to around 32% in 2013, so an increase of about 5 PP, calculated as a percentage of total public expenditure, according to the table above.

## CONCLUSIONS

In Romania, the evolution of the proportion of the population aged 65 and over increased from 11.8 in 1995 to 16.3 in 2013. In addition, life expectancy at birth has evolved in terms of growth, from 69.46 to 74.69 years, in the same period. These are prerequisites for the concern about the sustainability of public finances of public decision makers and the evolution of fiscal indicators, especially due the fact that the ageing populations will increase from this time in the future.

The necessary actions must be directed towards modernizing the system of LTC, on ensuring sustainability of the pension and the health system and revival of economic growth that can sustain the expected impact of ageing.

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