Elements Of Configuring Pension Systems

~ *Ph. D. Student* **Florian Gurămultă** *(The Romanian Academy, Romania)*

E-mail: floring14@yahoo.com

Abstract: *Social policies have a special role in economy as they support the population, especially that part of the population experiencing a decrease in working capacity. Social services have a major role in social policies, whose domains of reference are: social security, housing, health, education, unemployment, etc. They do not only analyse society and its problems (inequality, poverty, discrimination, unemployment), but solve the respective issues by specific means including decisions and actions to increase welfare.*

When designing social policies, one must also consider the architecture of the structures implementing the programs through which this wealth is generated. Account should be taken of the fact that international studies show that people around the world are concerned about a number of serious demographic issues such as the steadily declining birth rate and the fast growth of the average age of population. Thus, the population of an increasing number of states is reduced, but at the same time we are witnessing a global aging phenomenon. These trends became visible decades ago; however, population aging has been having a negative impact in recent years. Throughout the world, states have reformed or reconfigured their public pension system, mainly by introducing private savings schemes for retirement. The causes are generally the same: the population ages, the periods of pension payments increase, the number of social security contributions decreases, public pension no longer provide a reasonable rate of replacement of the income from the active period, and the public pension systems are no longer enough for the payment of pensions.

Key words: pension funds, prudential supervision, economic crisis

Introduction

The phenomenon of population aging is a process that has been gaining significance in the last forty years; it occurs globally and its severity has been acknowledged over the last few years. This was also possible due to the fact that modern computing techniques provide more pertinent analyses, concurrent with widening the available databases useful in studying this phenomenon.

As can be seen from United Nations data and information, the proportion of the elderly is increasing and will continue this trend on long term, even in those regions where the birth rate is higher than the replacement rate.

The changes already made in the structure of older age groups have a stronger impact than hoped for the economic, social and political development.

The effect of aging population such as the benefits that each state has to provide for citizens will have to be granted over longer periods than 40 years ago and to remain sustainable; social security systems will have to change radically.

Increasing life longevity can lead to multiple costs and an increased demand for dedicated services, as elderly people are generally vulnerable to various chronic diseases.

Reducing fertility and mortality rates is the main determinant of triggering and expanding the aging process.

In addition to actions aimed at achieving the welfare of population, it is also necessary to consider the ways in which specific actions in the field can be achieved at the highest level of efficiency.

Social policies can also be viewed from a different perspective as concrete activities of government policies including all social services that contribute to increasing the well-being of the citizens in a country.

Thus individual and collective well being can be achieved both by direct mechanisms arising from the functioning of the market, when it is primary distribution linked to the allocation of resources and income mechanisms and redistributive mechanisms such as transfers.

Primary earnings obtained directly by market mechanisms can define at a first level the collective welfare. The market itself shows that there are a number of limits preventing the desired welfare level in a society.

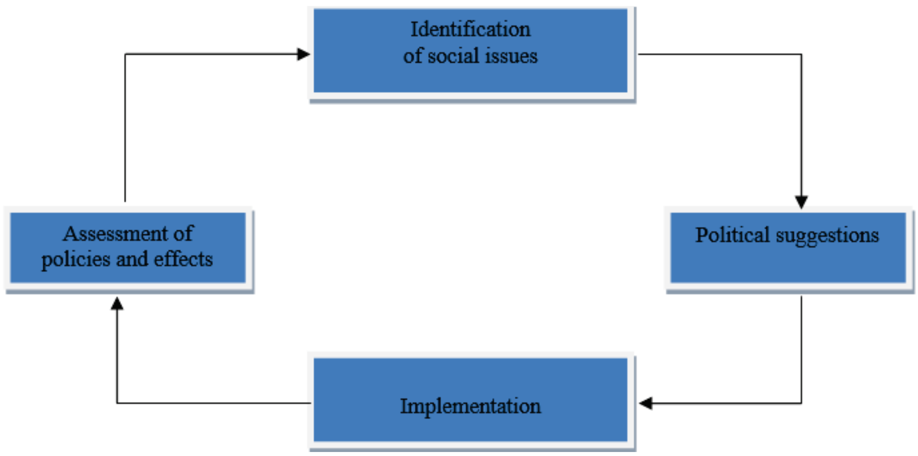
1. The need to reform the pension system

Goods that characterize collective welfare, especially public or social ones, tend to be produced in insufficient proportions in the market economy. For this reason, it is necessary to intervene with corrective mechanisms (redistribution of welfare) supporting the population in need and which essentially represents the object of social policies.

By considering political science, the notion of cyclical political process, generating and reviewing social policies can be described as an iterative model, as can be seen in Figure no. 1 on the Policy Cycle[1] [Cace C., 2004].

1 Cace, C. (2004) Asigurările sociale - management, evoluții și tendințe. București, Editura Expert

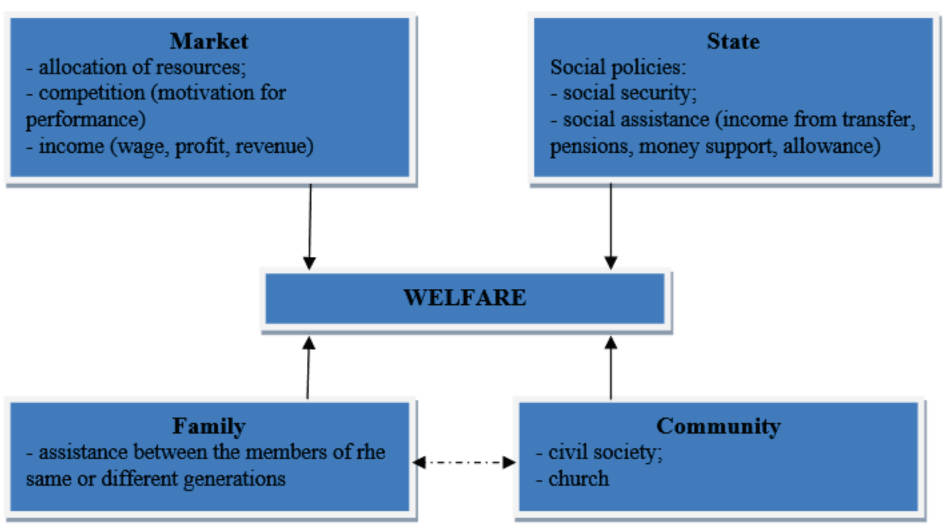
Figure 1 Policy cycle



Welfare is a complex notion including a series of mechanisms by which it can be achieved; the literature is rich in this field. Figure 2 - Sources of individual welfare shows a synthesis. Most authors consider that the main sources of welfare are: the market, family, community and the state[1] [Preda M., 2002].

2 Preda M. (2002) Politica socială românească între sărăcie și globalizare. Iași, Editura Polirom.

Figure 2 Sources of individual welfare



Redistribution of welfare is done by:

- funding from the government or collectively for public goods or goods of public interest and support for consumption of public interest goods by gratuitousness, subsidies, tax incentives;

- financial transfers – revenue by transfer (by social security or social assistance mechanisms) or transfers in kind (by exclusive social assistance mechanisms).

Social security can be defined as a set of measures established by law, designed to maintain individual or family income or to provide income if all sources of income have disappeared or when exceptionally large expenditures arise, which can expose the population to risks (child raising costs, payment for health care).

At the same time, social security can provide financial resources for people in need for various causes (such as sickness, disability, unemployment, loss of life partner, maternity, childcare, and retirement from active life).

Social insurance is a special form of protection that society grants to its members, assistance which counters the effects of various economic risks (loss of income due to illness, reduced work capacity in old age, unemployment).

Some authors consider social insurance as a component of the social security system seen as a sector of social policies, or, in some cases, the sign of equality between these terms.

Social insurance is significantly different from other forms of public assistance or support. The resulting benefits generally depend on contributions and become a right of those who receive them.

Contributions come from employees, employers and, in some cases, from state budget. They are collected in special funds that provide the financial support of the benefits.

Most of the nations have developed complex social security programs over the years.

They have many elements specific to the national culture (seen in a broad sense) of the countries concerned but, at the same time, they have a number of common features:

- they are related to the so-called social risks that may materialize during an individual's life;

- they are regulated by law;

- they provide financial benefits to individuals who have lost their income due to their advanced age, correlated with the increase of their work capacity (by disability, sickness, maternity, work accidents, unemployment) when the risk becomes evident;

- getting benefits depends on their contributions.

The existence of broad regulatory framework on the use of compulsory insurance as a mechanism for obtaining various social benefits means accepting the increase of state intervention.

In most cases this means an increase in taxation as a way of financially supporting the benefits of the entire social security system, which is why social security contributions can also be considered as taxes on the income earned by the active population.

2. The economic impact of aging in literature

The relation between the economic policy and population change has been analysed under various aspects in literature. According to a research on how population growth can affect economic development, there are three schools of thinking[2] (Bloom et. al, 2001).

According to this pessimistic view, population growth restricts economic development due to the demand from the population that exceeds the supply of fixed resources.

The history of this theory can be traced back to Malthus (1798); it was periodically sustained over the centuries; the most influential opinion was Ehrlich's, whose work is entitled "The Population Bomb" (1968).

Later, economists disagreed with the pessimistic school of thought, respectively since the 1980s, arguing that the prices of many fixed resources decrease on the long term due to technological innovation.

Therefore, as the population grows, the ingenuity of mankind grows as well (Bloom et al., 2003).

The group of optimists who promoted these ideas was led by Julian Simon, who proved that fast population growth can rapidly lead to a positive impact on the development of economy in the work "The Ultimate Resource" (1981).

Considering these elements, a series of economic analyses later concluded that the statistical correlation between population and economic growth is weak, thus leading to the emergence of a neutralist school; in their view, the population issues have a relatively minor role in influencing the general economic environment.

Bloom et al. (2003) also showed that any of the three schools of thought may return to the theoretical models anytime and the data will more or less be able to support their assumptions.

Also noteworthy is the analysis[3] made by Nagarajan et. al. (2013) on the literature regarding the impact of aging population on economic growth. The authors' purpose was to review over 600 scientific papers published between 1975 and 2013, which were focussed on the economic growth and how the aging population could affect it. Thus, their aim was to analyse how important this research topic was in the literature, and ultimately to identify those scientifically relevant works concerning the mechanism involved in the relationship between aging and the economy.

It can be said that the influence of the aging issue on economic development is fully undergoing development and thus a series of studies dealing with this topic began to appear in the literature.

Mainly, there are two trends stating that the relationship between population aging and economic growth is either negative or positive.

The first trend includes the research[4] ,

2 Bloom, D.E., Canning, D., Sevilla, J. (2001), The Demographic Dividend. A New perspective on the Economic Consequences of Population Change, A RAND program of Policy-Relevant Research Communication;

3 Nagarajan, R., Teixeira, A.A.C., Silva, S. (2013), The impact of aging population on economic growth: an exploratory review of the main mechanisms, forthcoming, FEP Working Paper, Faculdade de Economia da Universidade do Porto

4 Narciso, A. (2010), The impact of population ageing on international capital flows, MPRA Paper, 26457;

paper[5] , analysis[6] , research[7] , done by Narciso (2010), Bloom et. al. (2001), Lisenkova et al. (2012), Walder and Döring (2012).

The second trend includes the studies[8] and research by Lee et al (2011).

An important element of the empirical analysis carried out in the literature regarding demographics mainly but also the economic impact due to the aging of population, points out that the impact of aging population on economic growth does not significantly vary from the perspective of the main dissemination mechanism. In general, irrespective of the mechanism (consumption and saving patterns, public expenditure and human capital), the preponderance of the negative effects of aging on growth is obvious (covering over 70% of all events).

Some authors consider that a decline in household savings due to aging is associated with a simultaneous decline in the real yield of capital taxes or real interest rate yield, which is considered an important, negative effect on economic growth

There is, however, a smaller number of articles (about 11% of the total) who, by empirical research, find a positive relationship between consumption, saving and the aging of the population. A convincing example is China, where economic growth occurs at the same time as an increase in the dependency ratio of the aging population.

3. Reforming pension systems at international level

Given the phenomenon of population aging, but also the declining birth rates, and the fact that public pension systems are increasingly struggling with these elements, private pension systems have become more significant.

Such systems are designed in different states and are in different phases of development, namely in the accumulation phase or in the benefit payment phase.

Depending on their functioning, needs and regulatory and supervisory institutions, the private pension schemes developed so far have different features.

In order to classify pension systems, a number of criteria may be considered, namely:

a. depending on the way of financing, there are

- "pay as you go" systems - they are based on the principle of social solidarity between generations - employees pay for the retirement pensions of the people retired at that time; usually they are mandatory and publicly managed;

- privately managed funded schemes - the participant pays contributions or, may

5 Bloom, D.E., Canning, D., Sevilla, J. (2001), The Demographic Dividend. A New perspective on the Economic Consequences of Population Change, A RAND program of Policy-Relevant Research Communication

6 Lisenkova, K., Mérette, M.,Wright, R. (2012), The Impact of population ageing on the labour market: evidence from overlapping generations computable general equilibrium (OLGCGE) model of Scotland, Discussion paper in Economic, Strathclyde, 12-13;

7 Walder, B. A., Döring, T. (2012), The effect of population ageing on private consumption –a simulation for Austria based on household data up to 2050, Eurasian Economic Review, 2: 63 – 80;

8 Lee, H. S., Mason, A., Park, D. (2011), Why does population aging matter so much for Asia? Population aging, economic security and economic growth in Asia, ERIA Discussion Paper Series, ERIA-DP-2011-04;

be, the participant and the employer pay;

- kept in accounting records.

b. Depending on the legal basis and the way of establishment, there are:

- systems established by law;
- systems established by collective agreement;

c. depending on the way of joining, there are:

- mandatory systems;
- voluntary systems;

d. considering the type of benefits obtained, there are:

- defined contribution (DC) systems - with defined contributions - the benefits obtained vary according to the results of the investment of the participant's assets;
- defined benefit benefits (DB) (defined benefit) - a certain benefit is established and contributions calculated to achieve this benefit;
- hybrid systems - brings together features of both DC and DB systems;

3.1 The pension system in the European Union

There is no uniform scheme of the pension system in the European Union; there are different combinations of the three pillars of traditional classification in each Member State:

- the first pillar - regulated pensions;
- the second pillar - occupational pensions - related to the work place, established by employment contracts;
- the third pillar - individual pensions, unrelated to the job;

3.2 The pension system developed by OECD

OECD[9] has developed its own pension classification, valid in the Member States, which includes:

- public systems - pension social insurance and other similar systems, private schemes, administered by private institutions other than the government;
- occupational schemes / individual pension systems - personal;
- systems with compulsory / voluntary participation;
- defined contribution (DC) systems - defined benefits / DB (defined benefit) - defined benefits;
- systems which are financed / not funded / kept in employers' accounting records;

3.3 The World Bank's pension system

At the level of the World Bank, a three-pillar classification is used but with the following meanings:

- pillar I - "pay as you go" public pension schemes - PYG, publicly managed, DB type;
- pillar II - privately administered pension schemes of DC type;

9 The Organization for Economic Cooperation and Development (OECD) is an international organization of those developed nations that accept the principles of representative democracy and free market economy. The Organization originates in 1948 as the Organization for European Economic Cooperation (OEEC), to help manage the Marshall Plan for Europe's reconstruction after the Second World War. Later membership was extended to non-European states, and in 1961 it was reformed with the name Organization for Economic Co-operation and Development (OECD), French: Organisation de coopération et de développement économiques.

- Pillar III - privately-managed, voluntary, based on individual accounts.

3.4 The private pension system in Central and Eastern Europe, Western Europe and globally

In Central and Eastern Europe, 11 states have adopted the multi-pillar private pension model recommended by the World Bank. The reform started in the region in 1994, first with the third pillar of voluntary private pensions and then with the pillar II of compulsory private pensions.

The countries in the region have adopted the World Bank's basic model, adapting it and amending it in national legislation considering their specific features. On the list of countries in the region, which are considering similar reforms, are the Republic of Moldova, Ukraine, Russia and other countries. At the end of 2008, the 11 private pension systems in Central and Eastern Europe operated over 300 private pension funds, which managed around 60-65 billion euros for more than 35 million clients.

In Western Europe, private pension schemes are different from the Eastern ones. The basic model is that of occupational private pensions as regulated at the level of the European Union by Directive 41/2003 of the European Parliament and of the Council of the European Union on the supervision of occupational pension institutions offered and managed by employers.

As a rule, the practice came before the law, as companies began to offer "private pension packages" long before the field became officially regulated. Differences to the Eastern system, such as the Romanian one, are multiple and very complex. Not all Western states have private savings schemes, although public pension systems face the same demographic issues as those described above.

Globally, more and more countries resort to the private solution to reform their public pension system. The Occupational Pension Model, very widespread in Western Europe, is also adopted in the United States and many other countries. The differences between private pensions schemes around the world are, however, even more complex than those on the European continent.

Globally, the total assets of private pension funds amounted to around 20-25 thousand billion euros (trillion euros) at the end of 2008. The number of people saving on old age in various private pension schemes exceeds one billion people.

4. The reform of the pension system in Romania

Romania is in the same situation or even worse than the global or regional average. All the research (the World Bank, the International Monetary Fund, the United Nations, the European Union, the European Bank for Reconstruction and Development, the National Institute for Economic Research in Romania) show the same: Romania's population is in a significant falling and aging trend, which, in the absence of deep reforms, will lead to the explosion of the "demographic bomb" in decades.

Reduction and aging of population means increasing pressure on the public pension budget (Social Insurance Budget), which has to support, with fewer contributors (employees and social contributors), an increasing number of beneficiaries (pensioners in the public system).

Romania's demographic problems show that the public pension system is no longer sustainable in its present form and requires profound reform in order not to collapse in the future decades.

The pensioners' contributions during their active life have not been directed to a fund, which is in banks, where interest rates continuously increase the amounts. The state social insurance system in Romania operates based on the principle of intergenerational compensation.

In fact, solidarity between generations is manifested by the fact that active people finance the current pensions of those who have lost their working ability. Revenue comes from social security contributions paid by economic agents and employees.

This is the main reason why the Romanian government introduced the private pension system in 2007, following a model tested and recommended by the World Bank. The private pension system is made of pillar II - mandatory and pillar III - optional, private pensions.

Currently, over 30 countries around the world have adopted similar multi-pillar pension systems on the World Bank's recommended construction. Most are located in Central and South America (the first time in Chile in 1979).

In all these states, including Romania, the public pension system is fully influenced by the impact of the "demographic bomb":

- 8.2 million employees contributed to the public pension system, supporting 2.5 million beneficiaries (state social security pensioners) in 1990;

- 4.9 million employees contributed to the public pension system, which supported 4.7 million beneficiaries (state social security pensioners) in 2008;

- the ratio changed from almost 3.3 employees who supported a pensioner to an almost equal ratio (according to data from the National Institute of Statistics of Romania - INS).

The public pension system (the so-called state pillar I) operates according to the redistributive principle (PAYG = pay as you go): the state collects social pension contributions from employees and pays them immediately, in the form of pensions, to current retirees.

Statistical data already shows that this redistributive logic can no longer operate on a sustainable basis for too long from now on, considering the demographic issues.

Employees (contributors) will be fewer and pensioners (those who benefit from the public pension system) will be more and more.

Another issue is that of the pension-wage ratio, which, according to a report[10] of the European Pension Funds Federation (EFRP[11]) states that the ratio of the state pension and the average wage in the Member States of the European Union will be reduced by 20 percentage points.

Conclusions

A solution to solve this dilemma is the private pension system, where each participant can save for his own future.

The private pension system has several advantages compared to the public ones:

10 "Business perspective on financial market reforms"

- http://www.efrp.eu/LinkClick.aspx?fileticket=tYwg0DXAl5E%3d&tabid=1402

11The European Federation for Retirement Provision - represents national associations of pension funds from European countries, including APAPR (The Association for Private Pension Funds in Romania)

- Participants' money is invested on long tem, rather than being immediately spent, and the participants have the right to own their own accounts where their pension money is saved;

- The private system gives participants the opportunity to a decent pension at retirement;

- Competition between administrators, as well as existing regulations, ensure the efficiency of the system, i.e. effective returns on investments made with participants' money.

It is therefore necessary to continue to implement and develop new components within the pension system, privately managed, voluntary and compulsory, under the conditions of transparent and efficient public control over its management.

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