

# POPULATION AGING AND PENSION REFORMS

## 1- Introduction

Demographic trends in OECD countries create concern about the fiscal sustainability of states' pension systems. Economically, there are many reform options to respond this problem. However, feasibility of reform options, implementation capacity, political and social concerns are as important as economic considerations. Thus, there is no one size pension reform fitting all countries. Good pension schemes come in a variety of forms depending on political response to different purposes of pension systems and country specifics. It is often argued that moving to funded schemes would solve fiscal problems, because funded schemes sustain high economic growth. However, essence of the problem is not the weaknesses of the current *pay-as-you-go* (PAYG) systems or superiority of *funded pensions*, but political inertia to adjust pension systems to altered demographic conditions which deteriorates fiscal sustainability of state pensions gradually (Barr, 2006). There are many factors behind the political inertia such as self-interested politicians and globalization. However, main point in any type solution option is sustaining high and stable economic growth and demonstrating effective government.

## 2- Essence of the Demographic Problem

Prima facie evaluation of demographic problem indicates that rising life expectancy and low birth rates are major threats for the sustainability of state pensions in the long run. However, heart of the problem is not increased life expectancy, but early retirement (ibid.). In the 1950's, people spent an average of 53 years working, and 11 years in retirement, but in 2004, they are spending more years in school, 48 years working, and 20 years in retirement (Whiteford and Whitehouse cited in Barr, 2006). Primarily, a robust pension reform proposal should capture the essence of the problem. An analytical approach requires dividing problem into some sub-issues: Firstly, does increased life expectancy also means long productive life or not? If yes, can retirement age be adjusted to increasing life expectancy and what can be the supporting policies in labour market to sustain productivity and old age employment? Secondly, are current PAYG pension systems inherently inefficient to respond demographic problem and funded pension systems superior to PAYG systems? Lastly, depending on the answers of previous questions, what will be optimal and feasible policy options to assure fiscal sustainability, while preserving balance among the different objectives of pension system? In the following parts I will answer these questions.

## 3- Dealing with Demographic Pressures and Different Pension Schemes

Any type of pension reforms requires combinations of *lower benefits, rising contributions* and *later retirement*. There is one more choice which enables less painful pension system: *economic growth*. First three measures are only distributing output in different ways between workers and pensioners in a zero-sum game (Barr, 2006). And also, even these measures economically respond

to the problems, they are not easily implemented because of political concerns and public expectations. Still, depending on the country characteristics, different combinations of these measures can be implemented by considering all concerns.

Life expectancy is not the only parameter changed. Quality of life and health services are improved as well in recent decades. Moreover, nature of the jobs changed with the technological improvements. Manpower is less required for most jobs. In short, people can work more years for most jobs. Thus, later retirement can be a good policy option. It is more in line with the different objectives of pension systems, and gives less pain to the people. However, it should be supported by labour market development policies. Sustaining high productivity for longer years and adjusting late retirement age will not only help to solve fiscal problem but also support economic growth. If a person's marginal labour productivity is positive in longer working years, labour supply will be high. Under efficient labour market conditions, wages will decrease and output will increase without causing young people's unemployment (Barr & Diamond, 2006). However, moving to late retirement should be achieved gradually and implemented in a flexible way. Old-age employment programs should be carefully designed in order not to disturb labour markets (ibid., UK Pensions Commission, 2005). More elastic working hours, creation of part-time jobs, re-training programs can be some supporting policies. In this way, expectations of people will be disturbed less and high level of old-age employment achieved.

An increase in average pensionable age and high productive old-age employment are essential, but will not be sufficient responses to the demographic challenge. Economic growth should also be increased in other ways. There is one more choice which also facilitates economic growth; increasing *capital* level. Although previous policy recommendations implemented indifferently in any types of pension systems, some scholars argue that main superiority of funded pension over PAYG system is its better position in capital accumulation and economic growth (Feldstein, 2005, Barr 2006). The claim is that funded schemes will increase savings, which will increase investment and economic growth.

However, as Barr (2006) indicated, relationship between funding and growth is neither simple nor automatic. Firstly, there is no certainty that funding increases national saving. People may respond to compulsory funded savings by decreasing their voluntary savings. Besides, government savings may also respond adversely. Moreover, saving increase may not be an optimal policy. As in the case of China, a country may actually have high level of saving. So, funded pension may deteriorate economic parameters (Barr & Diamond, 2006). Secondly, channelling the incremental savings to productive investments is another problem. It requires efficient and developed financial markets, adequate management capacity of private pensions and effective administrative and monetary capacity of public agencies (Barr, 2001). Current financial crisis indicates that this condition is not achieved even in most of the financial markets of developed

countries. Lastly, pension systems are too complex and there are high uninsurable uncertainties which are beyond the management capacities of private actors. Hence, information processing problem is major concern for private actors. Even if the all information would be provided, it is hard for people to make best long-run rational choices (Barr & Diamond, 2006).

Another analytical mistake made by some scholars is considering only benefits of funded schemes without taking into account all relevant costs. It is claimed that funded scheme will sustain high growth, since the marginal product of capital is higher than return of pension. However, comparing only rates of returns is not economically and financially logical. Other relevant factors should be taken into account for a complete analysis (ibid.). Firstly, fiscal costs of moving to funding are not trivial. In funding schemes, contributions of younger workers go into their individual accounts. So, pensions of current retired people should be financed some other sources, such as additional taxation or borrowing (Barr, 2006). Secondly, administrative costs are not same under different pension schemes. Generally, it is high in individual accounts and low in state schemes. 1 % administrative charge over a working life will reduce the accumulation about 20% (Diamond, 2004). Lastly, even though pension fund provides higher return, it is not risk free. Thus, comparing risk-adjusted returns of different pension schemes is more meaningful.

In short, when all the factors are taken into account, it is not easy to say that funded pension is superior to PAYG and cope with demographic pressure better and sustain high economic growth. However, it does not mean that it is a bad option. But, success of the funded pension schemes depends on many other factors. If the preconditions are met, even the fiscal sustainability of public pension is not a problem; a move in that direction can be a sound policy (Barr 2001, Barr & Diamond, 2006).

#### **4- Potential Policy Options**

In previous section, I analyzed different policy options considering differences in pension schemes. It demonstrates that there is no one-type solution for every country. Thus, I will present a bundle of optimal and feasible policy options:

- Main consequence of the demographic changes will be potential output shortage in the future. As mentioned in previous pages, mainly, governments should focus on economic growth and invest more on human and physical capital to increase productivity and so output. International level human and capital planning can be an option in medium and long term perspective.
- As an orthodox policy option, an optimum mix of *lower benefits, increased contributions* and *later retirement* can be implemented (Diamond & Orszag, 2005). Especially, state pension age should rise gradually and implemented flexibly. It should be supported with labour market developments. This option eliminates the additional risks and costs of

relatively radical reforms such as funded pension schemes, of which success depends on satisfaction of some preconditions (Diamond, 2004).

- Pension systems have many objectives, but pure funding schemes are not capable of responding all objectives at the same time. Private individual accounts cannot insure properly all related risks. It is clear that even in the most developed countries, stock markets prone to high risks and these risks are crucial threats for the ‘insurance’ function of state pensions. Moreover, pension systems should concern poor and vulnerable people and ensure a reasonable level of life quality for their retirements. So, redistribution function of a pension system is very important (Barr and Diamond, 2006). Thus, moving to mixed type pension schemes can be a good option when the required conditions for individual accounts are met. ‘Three-pillar’ approach emphasizes different aspects a good mixed type pension scheme. As a first tier, a mandatory publicly managed PAYG pillar is essential for different purposes of pension schemes. It can be supported with mandatory membership of privately managed funded pension in second tier and voluntary contributions to funded pensions in third tier (Barr 2006). However, weights of each tier depend on conditions of specific countries. Finally, funded schemes should be supported by government to achieve all the objectives of pensions. Governments need high regulatory capacities to protect the consumers against uncertainties that they cannot manage by themselves by effectively regulating markets and easing the information processing in funded scheme pillars. (Barr, 2001) As in the case of Sweden and UK, centralizing the administration of funded schemes can also decrease the costs to reasonable levels (Barr, 2006). Applying automatic enrolment to pension saving schemes can increase the participation level for third tier. While respecting people’s freedom of choice by providing some individual account options, limiting the number can minimize the effect of information processing problem.
- Notional defined-contribution (NDC) which is actually a PAYG system, but has actuarial characteristics and can be alternative to funded schemes (Barr 2006). NDC is not prone to financial market risks like the funded schemes and also high transition and administrative costs of funded schemes can be abolished (ibid). However, one should not forget that NDC like funded schemes does not respond demographic pressure but brings discipline and equilibrium between revenue and expenses of pensions.

## **5- Conclusion**

Changes in demographic parameters threaten the sustainability of state pensions in the long run. Economically there are many options for the solution of the problem. However, optimality and feasibility of any reform options depend on many factors. When all the factors are taken into account, it is not easy to say that funded pension is superior to PAYG and cope with demographic

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pressure better. So, debate between PAYG and funding is not central question addressing the population aging. Good pension system can be in different forms depending on political response to weighting different objectives of pension systems and country specific conditions. Ultimate response to demographic pressure requires stable and high economic growth and effective government in any pension systems.

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