DIVERSITY OF THE PENSION SYSTEMS IN THE EUROPEAN UNION COUNTRIES

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Abstract

The objective of this paper is to realize a configuration of today's pension systems in the various countries member of the European Union. The authors put into discussion also the importance of private component in the supply of pensions, summarizing the debate regarding a certain harmonization between the pension systems from the member countries of European Union. In the final part of the paper, there is also brought into discussion the influence of the financial crisis on the current pension schemes, with its potential roll-backs of reforms made so far.

Keywords: pension system, pillars, European Union, reform
JEL classification: H55, G23, G15

1. INTRODUCTION

The objective of this paper is to realize a configuration of today's pension systems in the various countries member of the European Union. Even though there are important differences that prevail over uniformity in what regards the pension systems from the old and new member states of the European Union, there can be stated that there exists a sort of convergence process that may increase over the time, thanks to the close connection with the public finance issues and the general demographic trend. While the increased life expectancy is one of the major accomplishments reached by the member countries of European Union, the ageing process represents a challenging problem for their economies, for their social security systems. This extremely increasing ageing process is not only due to the increased life expectancy rate, but also to the gradually fall of the natality rate, registered in all European Union countries.

Moreover, the ageing process generates an increased old dependency ratio, or else, an increased percent of retired, unemployed people over the employed ones. Statistics show that continue increases in longevity will ensure that the old-age dependency ratio will rose significantly until 2050 (doubling or more its size) Therefore, the countries needed to re-think the architecture of the pension systems, increasing or decreasing the importance of some pillars, in accordance with this powerful trend (it is well known that the pay-as-you-go systems function more properly in a young society, being based on direct financing from the labour force, rather than in an elder one).

The rest of the paper is organized as follows: section 2 is dedicated to describing the current architecture of the pension systems from the old member countries of European Union, section 3 analyses the architecture of the pension systems from the new member states of European Union, section 4 is summarizing the debate regarding a certain harmonization between the pension systems from the member countries of European Union section 5 puts into discussion the influence of the financial crisis on the reforms made so far in the current architecture of the pension systems, section 6 is drawing the final conclusions.

2. ARCHITECTURE OF THE PENSION SYSTEMS IN THE OLD MEMBER STATES OF THE EUROPEAN UNION

Getting a clear image of the current architecture of the pension systems is not an easy task, given the existing pecularities of each individual national system. This is the main reason for which there were many attempts to realize a classification of the pension systems, resulting in several approaches, through them being worth mentioning:

a. the traditional one, which classifies the pension systems according to the importance of the three pillars (the first pillar - mandatory pensions, second pillar - occupational pensions, third pillar – personal, voluntary pensions);
b. OECD clasiffication, which make a parallel between public/private pension, occupational/personal pension (these two being next divided in: mandatory and voluntary), defined contribution/defined benefit pension;
c. World Bank classification, which takes also into consideration the three pillars, but with a different approach (the first pillar – public pension systems known as pay as you go or PAYG, the second pillar – privately managed pension systems, defined contribution ones and the third pillar – voluntary, privately managed pension systems, based on personal accounts).

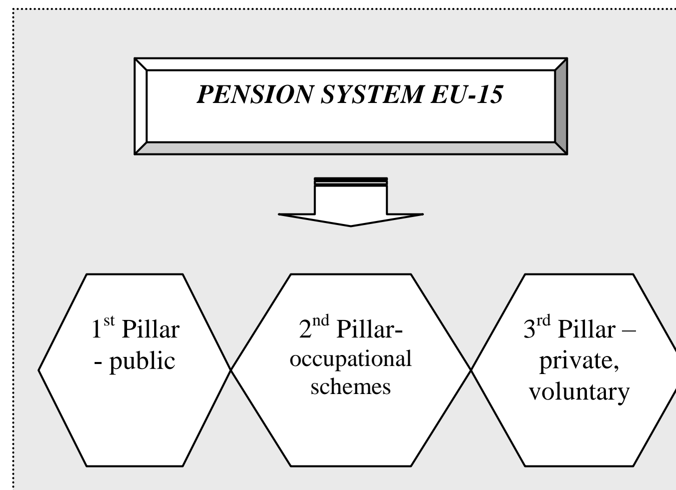
In our approach, the current architecture of the pension systems from the old member states of European Union relies on the three pillars (Figure 1):

i. *First pillar*: is represented by the public, mandatory, redistributive system (pay-as-you-go) and guarantees a minimum level of pension. The workers pay the contributions for the entitled pensioners through state mediation. Every worker has the right to receive a pension in accordance with his contributions during the working period;
ii. *Second pillar*: is a private capitalization pension scheme, a voluntary and defined- contribution pension system. The workers make personal contributions to a pension plan, which is being managed by a pension fund and generate a return, that will capitalize and result

in an income to receive by the pensioner at the time of retirement.

iii. *Third pillar*: is also a private capitalization system, but it is personal and voluntary.

The first pillar is designed to ensure a basic level of resources (a minimum one), while the second tier is designed to provide supplementary income for pensioners, through the right investments made by pension funds. The third pillar consists of personal, voluntary savings scheme for the future, thought on medium or on long term. In many of the countries of European Union, coverage of voluntary private pensions is widespread because mandatory provision is relatively small.



Source: [realized by authors]

Figure no. 1 Architecture of the pension systems in EU-15 member states

In what regards the main trends registered lately in the architecture of the pension systems from EU-15, we can mention the shift from mainly public pension provision to mixed public/private defined-contribution schemes or the change in private pensions from defined-benefits to defined-contribution.

According to OECD (2009), the first tier of the pension system can be:

- ***a basic scheme*** one, which means that it pays a flat-rate benefit (the same amount is paid fro every retiree) conditional either on residency (in the Netherlands, for example) or on years of contributions (Ireland and the United Kingdom);
- ***a resource-tested scheme*** one, which mean that it has a target level of income and reduce benefits in proportion to all other income sources; it pays a higher benefit to poorer pensioners and reduced benefits to better-off retirees;
- ***minimum pensions*** only take the value of pension income into account when calculating entitlements. Unlike resource-tested schemes, they are not affected by income from savings or assets other than the relevant pension. In the cases of minimum pensions and basic schemes, the benefit

entitlement is shown for a worker who enters at age 20 and works without interruption until he or she reaches the *normal* pension eligibility age.

The programmes within the second tier are meant to provide retirees with a level of income depending on their previous earnings. Unlike the first tier, they do not aim at preventing poverty by providing minimum standard of living. They can be of defined benefit (DB), points schemes or defined-contribution (DC) type.

The majority of the EU-15 countries have a standard official retirement age of 65, both for women and men (with exception of France, Germany, Ireland and UK). Many of them have proceeded though to progressively increase the retirement age, meaning a less severe introductory phase (Denmark, Germany, Netherlands, UK). Alongside the demographic reasons for this behavior, we can mention also the early retirement often queries, that place an unsustainable burden on the public pensions. In fact, increasing the percentage of the persons aged 55 to 64 years old is one of the objectives of social policy stated within the European Union in the Lisbon and Amsterdam Treaties.

Table no. 1 Characteristics of the pension systems in EU-15 (old member states of EU)

Country	**Pension Age Normal**		**First pillar**	**Second pillar**	**Third pillar**
	Women	**Men**			
Austria	60	65	Defined-benefit public scheme with an income-tested top-up for low-income pensioners	Occupational scheme; contractual or just from the employer part	Voluntary private pensions
Belgium	65	65	Earnings-related public sheme with a minimum pension and a means-tested safety net	Occupational schemes; Defined contribution; Mandatory	Voluntary private pensions
Denmark	65 (67 by 2027)	65	Public basic scheme + ATP (the Danish labour market supplementary pension) +SP (the special pension savings scheme)	Occupational schemes; Fully funded defined-contribution schemes; Quasi-mandatory	Voluntary private pensions
Finland	63	63	Basic state pension (national pension)	Occupational scheme; contractual or just from the employer part; Quasi-mandatory	**-**
France	60	60	Earnings-related public pension	Occupational scheme; contractual or just from the employer part; mandatory for the employee	Voluntary private pensions

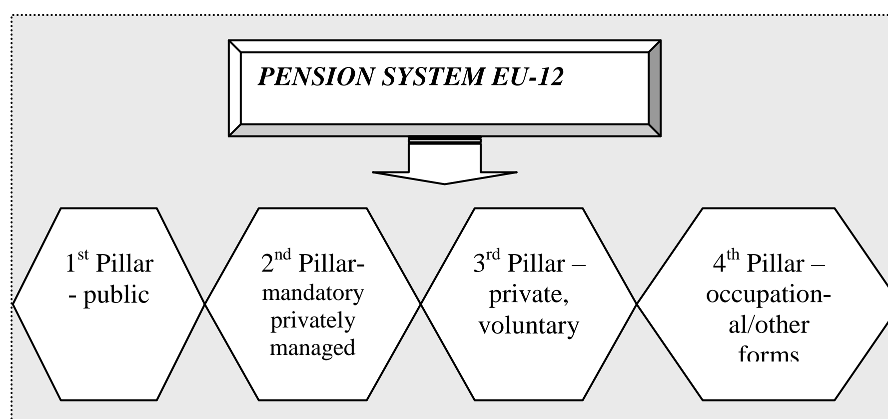
Country	Pension Age Normal		First pillar	Second pillar	Third pillar
	Women	Men			
Germany	65 (67 by 2029)	65	Statutory public pension system, PAYG system, social assistance safety net for low-income pensioners	Occupational scheme; contractual or just from the employer part; mandatory for the employee	Voluntary private pensions
Greece	60	65	Earnings-related public scheme + minimum pensions/social safety nets	Occupational scheme; contractual or just from the employer part	Voluntary private pensions
Ireland	65	65	Basic state pension + means-tested pension (safety net for low-income elderly)	Occupational scheme; contractual or just from the employer part	Voluntary private pensions
Italy	60	65	Notional accounts	Voluntary occupational system	Voluntary private pensions
Luxemburg	65	65	Public pension scheme (a flat rate part depending on the years of coverage and an earnings-related part) + minimum pension		Voluntary private pensions
Netherlands	65 (67 by 2011)	65	Flat-rate public scheme	Earnings-related occupational system; defined-benefit; quasi-mandatory	Voluntary private pensions
Portugal	65	65	Earnings-related public pension scheme + means-tested safety net		Voluntary private pensions
Spain	65	65	Earnings-related public pension + means-tested minimum pension	Occupational scheme; Mandatory	Voluntary private pensions
Sweden	65	65	Earnings-related public pension	Occupational schemes; Quasi-mandatory	Voluntary private pensions
UK	65 (68 by 2046)	65	Public scheme (a flat-rate basic pension + earnings–related additional pension)	Occupational schemes; Voluntary	Voluntary private pensions

Source: [realized by authors, data provided by OECD (2009)]

3. ARCHITECTURE OF THE PENSION SYSTEMS IN THE NEW MEMBER STATES OF THE EUROPEAN UNION

Beginning with the ’90, the majority of the CEE countries have initiated reforms of their pension systems, in close connection with the ones realized by EU-15 countries. As far as concerns the first pillar (the public pension system), the following changes have been made: the retirement age has been increased, the volume of the anticipated retirement requests has been reduced, the pension methodology has been improved. In the same time, the second pillar was introduced (fully-funded privately-managed pension systems), based on individual accounts. With the exception of Czech Republic and Slovenia, the third pillar is currently less developed (Milos et al., 2010).

In a simple approach, the current architecture of the pension systems from the new member states of European Union can be described as below (Figure 2, Table no.2):



Source: [realized by authors]

Figure no. 2 Architecture of the pension systems in EU-12 member states

We can notice that, due to the ongoing reform, the multi-pillar system is currently functional, still with differences among countries in what concerns the retirement age, year of introduction of the 2nd pillar, rules concerning contributions and eligibility of individuals (Table no.2). The common feature is their objective of supplementing the public pension, diversifying the retirement benefit in order to allow a decent income after retirement. In the distributive first pillar, most countries (with the exception of Poland and Latvia) have chosen a defined benefit (DB) system, as was typical of the old pension systems. As far as concerns the second pillar, its market is still at its beginning, the oldest market in the region being Hungary, which has implemented the 2nd Pillar in 1998. The biggest market in the region in 2010 belonged to Poland (14,11 % in GDP) and the smallest one to Romania (0,49 % in GDP), which has started to implement the 2nd Pillar only in 2008 [Milos and Milos, 2011].

Table no. 2 Characteristics of the third pillars of the pension systems in EU-12 (new member states of European Union)

Country	**Retirement Age**		**First pillar** • *Public* • *Universal coverage, redistributive, DB*	**Second pillar** • *Defined contribution one, totally financed* • *Privately managed pension funds*	**Third pillar** • *Defined contribution one, totally financed*
	W	**M**			
Bulgaria	60	63	Y	From 2002; mandatory for public sector and freelancers under 42 years	From 2002; Voluntary – Personal
Cyprus	65	65	Y	-	Occupational scheme; contractual or just from the employer part; mandatory for the employee
Czech Republic	62 (65 by 2013)	65	Y	-No 2nd Pillar yet, 3rd Pillar very developed	From 1994; Mandatory - common accounts
Hungary	62 (65 from 2020)	62 (65 from 2018)	Y	From 1998; mandatory for public sector and freelancers new entered on the labor market	From 1994; Voluntary - personal
Estonia	61	63 (from 2016)	Y	From 2002; mandatory for public sector and freelancers under 19 years	From 2002; Voluntary-personal
Latvia	62	62	Y, DC	From 2001; mandatory for public sector and freelancers under 30 years	From 1998; Voluntary – occupational, Voluntary – personal
Lithuania	60	62	Y	From 2004; voluntary for public sector and freelancers	From 2004; Voluntary-personal
Malta	60	61	Y	-	-
Poland	60	65	Y, DC	From 1999; mandatory for public and private sector and freelancers under 30 years	From 1999; Voluntary-occupational, From 2004; Voluntary – personal
Romania	58 (from 2015 60)	63 (from 2015 65)	Y	From 2008; mandatory for public and private sector, under 35 years	From 2007; Voluntary-personal
Slovakia	61 (from 2014 62)	63 (from 2014 62)	Y	From 2005; mandatory for public and private sector, voluntary for freelancers	From 2006; Voluntary-personal

Slovenia	61	63	Y	From 1992; Occupational schemes, mandatory for public sector, banking sector and dangerous condition sector, voluntary for the rest	From 1992; Voluntary - personal

Source: [realized by authors, data provided by OECD (2009)]

Since in most of the considered CEE countries, funded individual accounts are only a small part of the overall pension, which is mainly provided by the state, alongside with social pensions or minimum pension guarantees, the negative demographic evolution puts a supplementary pressure on the pension reform. Therefore in the literature it is pointed out the necessity of the reform despite the severity of the financial crisis, considering that it "pales in comparison to the demographic crisis which the region will face. […] With the aging of the population, people will increasingly have to save additional money for their own retirement if they want more generous benefits" [Schwarz et al., 2009]. Others have argued that "trying to solve the problem of public finance sustainability by radically shrinking the second tier of the pension system has obvious costs in terms of poverty among old-age pensioners" [Jarrett, 2011].

4. THE FUTURE OF EU PENSION SYSTEMS: WILL THEY EVER CONVERGE?

In all Europe, population is experiencing, an ageing process, caused by a sharp reduction of birth rates and a significant increase in life expectancy. Alongside the social security expenditure, these trends must be thoroughly analysed and controlled in order to maintain an adequate adjustment of the current pension systems to the new conditions. The demographic transition exercises a pressure on traditional social security schemes. These facts suggest a common line of reforms for all countries of European Union, regardless the architecture of their pension systems: decrease the volume of public pensions and/or reform the pension systems (by encouraging supplementary pension schemes (occupational and personal) to alleviate public budget) and/or increase the natality rate and /or increase the retirement age and/or increase the contributions of the population. In other words, it represents a step forward towards greater pension uniformity, that would result from strengthening the long-term sustainability of each single system.

Without any real "harmonisation policies" towards a single pension design, still we have reform programmes that fulfill some principles which are at the base of the unification process.

In a recent study of OECD [OECD, 2009], there are mentioned some clear objectives and principles that all well designed pension systems must share. These reforms are built around a framework of six objectives of retirement income provision meaning: *coverage* of the pension system, by both mandatory and voluntary schemes; *adequacy* of retirement benefits; *financial sustainability* and *affordability* of pensions to taxpayers and contributors; *economic efficiency:* minimising the distortions of the retirement-income system on individuals' economic behaviour, such as labour supply and savings outside of pension plans; *administrative efficiency:* keeping the cost of collecting contributions, paying benefits and

(where necessary) managing investments as low as possible; and *security* of benefits in the face of different risks and uncertainties.

From another point of view [Fornero (2005)], there are outlined some principles that every pension system must take into consideration when designing its architecture: *the principle of competition* that must be applied to private pension plans (it assumes that there are no restrictions, neither for investing resources in any country of the Union, nor as far as concerns the supply of financial and insurance services by operators in a different EU country than the country of origin of the purchaser); *the principle of mobility* of the production factors, and not at last, *the non-discrimination of workers* on the basis of age which is in clear contrast with a retirement age fixed by law. Fornero (2005) points out on the fact that these principles "lead to a very innovative interpretation of social security on which the flexible and portable European pension could effectively be founded. They build upon the same basic philosophy as pension architecture, markedly different from the mere welfare-based concept and from the rules of the past. These rules are not only used to consider social security as an instrument for ensuring an income in old age, but also as a vehicle to realize redistributive, industrial, employment-related policies". On the other hand, Fornero (2005) draws the attention on the fact that the current policies facilitated an attribution of benefits without clearly identifying costs, in this way creating a conspicuous "implicit debt" and a variety of negative collateral effects (like the redistribution of benefits regardless the principle of equity; the favouring of production restructuring by early retirement, fiscal reduction on social contributions and lowering of payroll taxes in order to temporarily lighten, the labour costs and enhance employment).

Holzmann (2003) is also pledging for a reformed and coordinated pension system in Europe, bringing the following arguments: the current high expenditure level, the ongoing socioeconomic changes which are rendering current retirement income provisions inadequate at the social and economic level and the globalization which creates chances and challenges, and require flexibility and better functioning factor markets.

In our opinion, there are more reasons to believe that the architecture of the national pension systems will finally converge. First, agreeing with Holzmann's point of view, because of the high level of social protection expenditure and of course related budgetary pressure that will increase even more given the projected further ageing of population, the architecture of the pension system will have to move to a different scheme, base more on the private pension funds. Secondly, due to the fact that, in time, gradually, all the EU pension systems will finally be financed not with a tax on earnings, like nowadays, but instead with annuities generated by the financial assets in which private pension funds are investing. This will lead to a better rate of return that will not be affected by the negative demographic changes.

While the convergence process appears to be the logical path to follow, in practice the measures meant to foster pension system reform are not easy to be taken. Dixon (2008) describes the pension reform like a highly contencious issue in most countries, giving the fact that from a political point of view, it is rather unpopular and undesirable. Nevertheless, the national authorities were forced to look carefully at this issue once with the appearance of the financial crisis.

5. THE INFLUENCE OF THE FINANCIAL CRISIS ON THE ARCHITECTURE OF THE PENSION SYSTEMS

In our opinion, the international financial crisis had a negative impact on the pension systems, both on the first and the second pillar. It is true that, given the volatile nature of the investments made by private pension funds, the second pillar was more affected. While the second pillar was introduced for avoiding some specific risks for the future of pensions (i.e their sustainability and adequacy), this pillar is more affected by the financial risk at which financial markets are exposed when a financial crisis occurs. Although less affected, the first pillar is also negatively influenced by the financial crisis, once with the reduction of the aggregate national income.

In many of the European Union countries, especially in the new member states, which have adopted/developed later the second pillar, the financial crisis has raised questions in what concerns the benefit of moving to a mixed pension system, in comparison with the former one, which relied exclusively on public pay-as-you-go schemes. Some of them have even taken some concrete actions in this respect, frizzing or adjusting differently in comparison with the prior calendar the second pillar contribution rate (e.g. Estonia, Lithuania, Latvia, Romania, Estonia), which was not so high prior to this action. Moreover, more radical measures have been taken by some CEE countries, allowing individuals to switch back to the old system, getting out of the second Pillar (e.g. Hungary, Slovakia) or making the second pillar voluntary to new entrants on the labour market (e.g. Slovakia).

We believe that all these actions are short-term solutions taken by the authorities in order to alleviate the budget tensions, but the reform of the pension system must be continued. While the financial crisis is decreasing in its intensity, the current problems of adequacy and sustainability of the pension systems remain. In order to prevent a reversal of the reforms made so far, an important step that needs to be taken by the authorities would be to restore the people's faith in private pension funds and this particular manner of saving. These include better regulation, increased transparency which allows the future pensioners to know precisely which is the investment strategy of the pension fund at which they have their capitalization scheme, which is their risk and their expected rate of return. If policy makers do not succeed in convincing people that a combined public and private pension system is the future for the pension systems, all their efforts to maintain prosperity in ageing societies has been made in vain.

6. CONCLUSIONS

Even though there are important differences that prevail over uniformity in what regards the pension systems from the old and new member states of the European Union, there can be stated that there is a sort of convergence process, given the trend of the progressive shift from PAYG systems to capitalization systems. Although the financial crisis has lead to uncertainties regarding this shift, we consider that this is a temporarily situation, that can be overcome by the efforts of the policy makers. The financial unsustainability of the pension systems remains a problem that needs to be solved, and the solution cannot come from elsewhere rather than from a reformed system, where the private component is of main importance.

Future research may take into consideration an empirical analysis that will try to quantify precisely at which level of convergence the EU pension systems really are. On the other

hand, there can be thought some econometrical models that will try to prove whether the developing of the private component of the pension system and the pension reform in general are actually leading to economic growth.

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