HOW DOES FINANCIALISED PENSION PROVISION EXACERBATE THE IMPACT OF THE CRISIS IN EUROPE? *

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This paper aims to discuss the effects of pre-funded pension provision in many European countries in exacerbating the impact of the economic crisis. Pre-funded schemes have gained importance with pension reforms in last three decades that replaced the publicly managed, pay-as-you-go pension systems with private, individual pre-funded accounts. This is indicative of the penetration of finance into economic and social life in general though the specific instance of the financialisation of pension provision. In this context, two ways in which financialisation of pension provision has aggravated the crisis are discussed. First the role played by pension funds as institutional investments in the financial market is investigated. Since the significance of pension funds has grown even further with recently established pre-funded pension schemes, their investment decisions in general, and risk aversion strategies in particular, are of paramount importance during and after the 2008 crisis. The speculative impact of pension funds has been posited previously but the literature has not provided any empirical evidence regarding the influence of pension funds over the latest crisis. The second way that pre-funded pension schemes have worsened the impact of the crisis is through the decrease of pension income as a result of losses during the financial turmoil. As the importance of pension income in the alleviation of poverty, in particular amongst the elderly, rises to the surface during economic crises, the outcomes of pre-funded pension schemes contingent upon financial market performance, need to be revealed. Therefore, both economic and social effects of financialised pension provision are assessed in the same framework whereas most work on this subject focuses on one dimension at the expense of other.

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1. Introduction

Pension systems are established to provide income for elderly and people who are not able to work. In this regard, pension systems across the EU are to be found in three forms: **social insurance**, **social assistance** and **individual** pensions. Amongst these, the most dominant form is social insurance pension systems and they are comprised of two versions: **social security pension scheme** which is publicly-owned and covers major fraction of population; and, **earnings-related scheme** which is established by employers. Social security pensions are mandatory and they are financed on a pay-as-you-go (PAYG) basis. PAYG means the current contributors of the system finance the previous generation's contributors who are now retired. Thus, current contributors when they are retired would be financed through next generation's contributions. Therefore, PAYG is an *inter-generational* system. Moreover, in this system, the level of future pension benefits are determined through contracts, in other words these are defined-benefit schemes in which the contributor has an idea of future pension income level. On the other hand, earnings-related pensions are either owned by governments or non-government entities. And, they can be financed through PAYG basis or pre-funded basis. Pre-funded financing method means that pension benefits are not provided through inter-generational transfer system. Rather, this is an accumulative system where each participant has to accumulate funds for his/her pension income. What is more, if pension scheme is funded, the pension contributions are generally evaluated in the financial markets through pension funds. Thereby, pension income is dependent upon the return in the financial market. The second form of pension provision is social assistance benefits which include minimum guarantee pensions mentioned before. These are granted to people who are not eligible for social insurance schemes summarised above. These benefits are generally provided on the basis of a means test that is seen as the evidence of being in need for living under a certain income threshold. The third form of pension provision consists of individual pension schemes. The application of them is highly diverse though they are mostly seen as supplementary pension benefits.

These general characteristics of pension provision in EU countries have been through under a substantial reform process in the last decades. When we review the recent transformations through which pension schemes in EU countries have been, we see that there are three main tendencies in this regard: a) A shift from PAYG schemes to pre-funded schemes; b) A shift from defined benefit to defined contribution schemes (introduction of NDC most importantly); c) Integration of financial concerns into pension provision plans more and more. On the basis of the review of recent pension reforms as summarised in the next section, we argue that **pension provision in the EU has been financialised**. In the next section, we evaluate recent reforms in the context of financialisation.

2. Recent Pension Reforms and Financialisation of Pension Systems in the European Union Countries

Pension systems in the EU countries have been reformed substantially in recent years. We divide reforms into two: *parametric measures* which change the level and requirements of pension contributions and benefits; and, *paradigmatic measures* those change the structure of pension system fundamentally. In more detail, parametric measures tighten the eligibility criteria, such as higher eligibility age for retirement, longer contribution period and abolition of early retirement options.

Table 1 Parametric measures and the countries have applied them

Parametric measure	Country
Higher eligibility age	Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Ireland, Latvia, Malta, Poland, Romania, Slovenia, Spain, the Netherlands and the UK
Longer contribution period	Belgium, Italy and Spain
Abolition of early retirement options	Austria, Poland, Romania and Slovakia

As can be seen from above, the most important parametric measures have been applied in many member states. Measures regarding higher retirement age come into force gradually and the most common retirement age requirement seems to be 65. Another issue to point out in this context is the gender dimension. Within the latest reforms, the retirement age has been equalised for women and men. Therefore, women eligibility age has been increased faster than men since it was traditionally lower than men's retirement age. In addition to these, the rate of contribution has changed for employees and employers, as in the case of Cyprus, Ireland, Slovakia and Latvia; and, the indexation and calculation method of benefits have been altered.[1] Within these, in particular the change in the calculation method has been the most important one.

The calculation method of benefits determine the level of pension entitlement. There are three different calculation methods in the European Union countries: *defined-contribution, defined-benefit* and *notional defined-contribution* methods. Under defined-benefit schemes, the participator of the pension system is guaranteed a certain level of income for retirement. Therefore, the responsibility for provision of a certain income level lays on the system, not on the pensioner. However, in the defined-contribution method of calculation, only the level of contribution is determined. In other words, the retirement benefits are not known in advance. This may not cause any problems in some circumstances. However, if in a pre-funded pension system the contributions are evaluated in financial markets and those financial markets are not stable enough, then there is big risk for the pensioner. For instance, a pensioner who experiences a financial crisis during his contribution period ends up with much lower pension income than the previous or next generation of pensioners. In other words, participator in defined-contribution schemes carries the whole risk burden of the pension income. In this light, when we review recent reforms, we observe that there has been a striking **shift from defined-benefit schemes to defined-contribution schemes across EU countrie**s. In those countries with well-developed funded schemes, such as the UK, Sweden and Germany, the shift

1 "Indexation of pension benefits to inflation or otherwise has meant the increase of the pension benefit each year under a defined-benefit scheme. In general, governments or particular institutions determine this method of indexation on the basis of the Consumer Price Index and/or growth rate of Gross Domestic Product for the relevant year. Across EU countries, the most common method of indexation is Swiss Index which means benefits are indexed, at the beginning of each year, by the arithmetic average of wage growth and inflation determined for the first half of the preceding year. In recent years, some countries introduced new indexation methods on different bases (Hungary, Ireland, Lithuania, the UK and Luxembourg). Whereas some of these measures are directly related to the efforts for compensating or confronting the impacts of crisis (by excluding the unfavourable influence of negative GDP growths, for instance), others were implemented as a result of long-term policy targets." (Saritas, 2014, pp. 6–7)

has been interpreted as result of maturation of pensions. Moreover, in countries which used to have statutory pay-as-you-go (PAYG) systems in the past but replaced/complemented these with new funded schemes, such as Czech Republic, Estonia, Hungary, Lithuania, Romania, Slovakia and Slovenia, new schemes are established on a defined-contribution basis.

However, in such a financial instability time, defined-contribution method has been subject to severe criticism, mostly focusing on risk management. Thus, in order to confront the risks brought by defined-contribution schemes, a new way of calculation, namely notional-defined contribution (NDC) method has been introduced recently. For instance, Latvia, Italy, Poland and Sweden are countries which has introduced NDC recently. Then, the question is, does NDC really decrease the risk? The answer is hidden in the distinctive way of this method. According to this, the system with NDC is financed through inter-generational transfers, namely PAYG-basis. Hence, the current contributions are used to finance current pensioners' benefits. What is different with NDC is that each participant has a notional contribution account in which the growth rate of contributions is determined according to the change in the earning base. It is different than defined-benefit for fixing the contribution amount on the contrary of future benefit. Therefore, still, the future income level is not known in advance. Nevertheless, NDC is argued to be more flexible and stable than other calculation methods.

As mentioned above, alterations within the eligibility criteria and calculation methods change the level of pension benefit however do not differentiate the structure of pension system. On the other hand, paradigmatic shifts such as restricting the pensions system from **PAYG-financed towards funded; re-distributive to individual; and fragmented to unitary** changes the system fundamentally. These paradigmatic shifts represent the integration of finance into pension provision. In more detail, as mentioned above, PAYG schemes are inter-generational systems where current contributor finances the current pensioner an in turn expects to be financed for retirement in the future. Besides many characteristics, PAYG schemes are re-distributive systems for transferring pension income through generations as well as from men to women because the latter live longer in general. This system exists in every country in Europe except Cyprus, while the significance, function and coverage vary widely.

Table 2 The structure of PAYG system and the country it exists

The structure of PAYG system	Country
System is **contributory** (relies entirely on **earnings** history); functions as the **main** pension-provider; is calculated with the **defined-benefit** method	Austria, Belgium, Czech Republic, Estonia, France, Greece, Finland, Hungary, Italy, Lithuania, Luxembourg, Portugal, Malta, Romania Slovakia, Slovenia, Spain and the UK
System is **non-contributory** (is financed by taxes); has universal character; functions as the provider of a **minimum**, flat-rate income for old age	Denmark, the Netherlands and Ireland
System functions as the PAYG component of the **NDC scheme**; the calculation of benefits is on a notional defined-contribution basis	Latvia, Poland, Italy and Sweden

The second financing mechanism of pension system is through accumulation of funds. In these pre-funded systems, each individual accumulates his/her future pension income during working period and contributions are evaluated through financial markets. In countries such as Cyprus, Bulgaria, Ireland, Estonia, Finland, Slovenia and Lithuania, pre-funded schemes are state-owned whereas in the rest they are private, except in the Netherlands where pension funds are governed mutually by trade unions and employers. In state-owned pre-funded pension systems, participation is mandatory and most of funded schemes are occupational which means participants are from the same professional group. Finally, funded pension schemes calculate their benefits generally on a defined-contribution principle.

After this brief reminder, we now return to our focus the paradigmatic shift. When we review recent pension reforms we see that there is a considerable shift from PAYG systems to funded system across the EU countries. In Bulgaria Estonia, Hungary, Latvia, Lithuania, Romania, Slovakia and Slovenia the existing PAYG system has been replaced or complemented with funded pension schemes since the late 1990s. In effect, in order to understand the underlying reason behind this shift, we have to go back to 1994 when the World Bank published the report "Averting the Old Age Crisis" (World Bank, 1994). In a nutshell, in this report it was argued that the world population was ageing and existing pension PAYG pension systems were not sustainable in this regard. On the basis of this argument, a three-tiered (three pillars) pension system was advised in the report. This system consists of two mandatory pillars (one publicly-managed, tax-financed, and one privately-managed and fully-funded) and one complementary, funded, private, voluntary pillar. Hence, the first pillar would alleviate old age poverty by using the taxation power of government while the second pillar would perform to smooth savings and boost capital accumulation and financial market development. And the third pillar would provide additional income for individuals who are able to afford and choose to participate. As a result, in countries where the funded system gets importance compare to PAYG system, the pension provision is getting converged to World Bank's advice. Moreover, within the remaining PAYG systems, the re-distributive function of system is eroded through the unification of eligibility rules. However, those rules comprising of the fragmented structure of pension systems were suggested in the first place for the purpose of protecting less-advantaged people within the population. For instance, abolishing the advantages of women increases the inequality between women and men at the expense of women because women are disadvantaged in the labour market and it is harder for them to find a well-paid job at later ages, after raising children in particular. Moreover, while trying to decrease the fragmented structure of pension systems, through unification of eligibility criteria, vulnerable working groups loose their protection rights. For instance, in Belgium, Cyprus, France, Greece, Latvia and Romania the advantages given to people who work for hazardous and arduous occupations have been subject to restriction after the recent reform process. As a result, it can be argued that after these changes, pension systems have become more uniformed, less fragmented whereas they also have lost the ability to produce different services for different needs.

Now the issue is how to interpret all these reforms? When we review the overall reform outcomes, we see that there is a tendency for financialisation of pension provision. By financialisation, we refer to Fine's definition (2012:12):

"Financialisation is characterised, its consequences have been: reductions in overall levels and efficacy of real investment as financial instruments and activities expand at its expense even if excessive investment does take place in particular

sectors at particular times (as with the dotcom bubble of a decade ago); prioritising shareholder value, or financial worth, over other economic and social values; pushing of policies towards conservatism and commercialisation in all respects; **extending influence of finance more broadly,** both directly and indirectly, **over economic and social policy; placing more aspects of economic and social life at the risk of volatility from financial instability** and, conversely, places the economy and social life at risk of crisis from triggers within particular markets (as with the food and energy crises that preceded the financial crisis)." [emphases added]

In this light, *financialisation of pension provision can be defined as the integration of finance into pension provision through transforming pension systems in a way which serves for financial interests*. In addition to this, with financialisation financial missions are attributed to pension systems at the expense of traditional expectations from pensions. For instance, when we review the Averting the Old-Age Crisis Report (1994), we see that a new mission of extending and developing financial markets is attributed to the pension systems. In the report pension systems are suggested to function as a way of increasing saving rates, developing financial markets and enhancing economic growth. According to the Report, this would be achieved through establishment of pre-funded pension scheme because pension funds would invest in the financial markets and this would improve the financial deepening.

As mentioned before, many European Union countries have founded pre-funded pension schemes either entirely replacing the existing PAYG scheme or complementing it. In some occasions, these pre-funded schemes are even mandatory which means the promotion of financial interests has been conducted by states with the usage of governmental power. In a similar vein, the advice of defined-contribution scheme and its increasing prevalence points out the fact that more risky pension schemes for participants are preferred whereas no risk is shared by the financial intermediaries (funds which pension contributions are invested through) in terms of providing a sustainable pension income. Policymakers in different countries were persuaded to follow these imperatives through several mechanisms. For instance, since the 2008 crisis, some countries introduced pension rules as a part of bailout agreements with international financial institutions as in the cases of Greece and Ireland. This points out the persuasion power and insistence of international financial institutions for pushing funded pension schemes. On the basis of this review, we argue that pension provision across the EU countries has been substantially financialised. This has brought about prioritising the financial interests whereas putting pensioner's future income under stake. Now the question begs for answer is that what would be impacts of financialised pension provision? In this context, we handle two impacts: the first is the impact of pension funds as institutional investors in the era of financial instability; the second is the poverty alleviation mission of old-age income which is under stake whereas the environment after crisis puts much importance on it.

3. Pension funds as institutional investors and the Crisis

In this section we evaluate the role played by pension funds as investors in the financial market. The significance of pension funds has grown even further with recently established pre-funded pension schemes as mentioned above. Thus, their investments decisions in general, and risk aversion strategies in particular, are of paramount importance in the financial instability environment after the crisis. Therefore, in terms of our financialisation approach, measures brought about in order to restrict the risky investment decisions of pension funds has crucial significance.

When we review recent reforms in this light, it is appropriate to observe that most of the EU countries responded to the financial crisis through regulations related to the pension funds because the increasing significance of funded pension schemes exposed households to the volatilities of financial markets. For this reason, some governments have introduced measures against risky investment of pension funds in the aftermath of the 2008 crisis. Estonia, Ireland, Slovakia and Sweden introduced regulations for investment rules for pension funds in order to restrict pension funds not to invest in risky assets. This can be interpreted as a break with financialisation of pension provision. However, it is also a fact that when pension funds mature**,** allowing for riskier investments is inevitable. Despite the financial crisis circumstances, for instance, in Slovakia, regulations that organise investment activities of pension funds have been changed recently in a way which **allows investment in riskier assets**. The reason underlying this reform is suggested to be the maturation of the pension funds and problems originating from difficulties in finding profitable investment options. In a similar vein, in Austria some public subsidies are planned to **encourage investment in private** pension schemes whereas investment in these schemes is regulated in a way that offers the option of **less risky** investments. In the Czech Republic, in 2011, existing voluntary funded scheme is reformed with the aim of increasing the security of the capital of participants and of encouraging people to increase their contributions.

All these reforms can be interpreted as follows: The financialisation of pension provision has not stopped despite the obvious risk it brings about and seen clearly in the aftermath of financial crisis. Further, the promotion of financial pension schemes has continued with acceleration. For instance, tax incentives, which are used to subsidy the participation into private pension schemes, have continued to even though while state budgets suffer from financial deficiencies. When we think about the fact that most people joining private pension schemes, the so-called third pillar, are middle- or high-income earners, the issue becomes even more problematic. For the reason that in this situation state subsidies the pension income of already advantaged people at the expense of more vulnerable people for redistributing income from down to top. Therefore, financialised pension provision aggravates the budget balance of state while promoting more capital inflow for financial markets. While doing this, the only restriction for pension funds seems to be temporary investment regulations in relation with financial crisis. Nevertheless, this is even not a concrete measure when we think about the loosening of regulations in some occasions in relation with the difficulty of profitable investments, such as in Slovakia. Hence, this shows us that if the pension scheme matures and pension funds find it difficult to invest in profitable options, every government might be obliged to eliminate restrictions against risky investment decisions of pension funds. Moreover, pension funds themselves deserve most attention in terms of investment decisions. Because, a pension funds has to find more and more profitable investments in order to increase the return which gets more necessary as the fund gets mature. That is why they always search for relatively risky investments those bring higher returns. Therefore, financialised pension provision, which introduces more funded schemes, has an exacerbating role in terms of instability within the financial markets. To sum up, when we evaluate all these developments in relation with the crisis, we see how it matters the risk-aversion strategies of pension funds and how it gets more risky with the spread of financialised pension schemes.

4. Pensions, Poverty and the Crisis

In this section we evaluate how financialised pension provision has worsened the impact of the crisis through decreasing pension income as a result of pension funds losses during the financial turmoil. This has a crucial importance because pension income is the fundamental tool for the alleviation of poverty amongst the elderly.

The way in which financialised pension provision exacerbates the poverty rises to the surface during financial crises because returns on pre-funded pension schemes are contingent upon **financial market performance**. When we review recent reforms, it is observable that most governments have decreased the pension benefits to keep government social expenditure under control in the aftermath of the 2008 crisis. Pension benefits have either been frozen (not increased annually) or indexed on a different basis which lowers the level of pension benefits. In Ireland, most defined-benefit schemes (75%) are now in actuarial deficit and do not meet the minimum funding standard. The impact of the current crisis is also evident in the decline in the number of occupational schemes and in the fall in supplementary pension coverage rates. In the aftermath of the crisis in Portugal, losses in the value of pension fund portfolios placed a serious strain upon these schemes, and the liabilities have now been transferred to the state. What is more interesting in this context is that despite the increase in social expenditure after the crisis, this has not directly affected pension benefits. For instance, in 2010, EU27 countries spent 29.4% of their GDP for social protection whereas the proportion of **old-age pension expenditure** within the overall social protection expenditure **remains constant** (at a level of 0.7% of GDP in EU27 countries). When we look at the details, we see that the main focus is unemployment. However, unemployment amongst the elderly is not seen as a major problem despite exceptions such as Sweden where measures are introduced for increasing employment across old ages. When the decrease in pension income due to losses of pension funds within the financialised pension schemes is thought with the increasing problem of secure employment for elderly, we arrive at a vital problem of **poverty amongst elderly**.

Table 3 At-risk-of-poverty rate of older people by sex (2011)

		Males	Females
EU (27 countries)	15.9	13.2	18.1
EU (15 countries)	16.4	13.9	18.4
New Member States (12)	13.6	9.1	16.6
Euro area (17 countries)	15.3	13.2	17.1
Cyprus (highest)	35.5	33.4	39.8

Source: SILC. [2]

The risk of poverty threshold indicates the risk of poverty percentages and it is set at 60% of the national median income before social transfers. On the basis of the table it can be argued that poverty amongst elderly is too high for countries with well-developed pension systems and long histories of pension provision. Strikingly, numbers are even more disappointing in the case of women whereas all pension reform reviewed above show the intention of equalizing the eligibility criteria of women with men. Given that, the regulations that were put in place to decrease the disadvantages of women in their working lives will be abolished.

2 The table is adapted from Saritas (2014).

As a result of worsening impacts of financialised pension provision, governments developed some compensation mechanisms for anticipated losses. In Sweden, pension incomes decreased because of the combined effect of the balancing mechanism, see below, and low income growth (by 3% in 2010, and 4.3% in 2011). To confront this loss, the government introduced an additional basic tax allowance in 2009 for pensioners of 65 years or older. In Estonia, transfers from the social tax to the mandatory funded scheme were temporarily suspended for some periods between 2009 and 2011 in order to reduce the deficit of the state PAYG pension system. However, a compensation mechanism will transfer additional social tax revenues to the funded scheme in 2014-2017. Pensions are important poverty reduction tools because they are main income source for elderly. In this regard, minimum income provisions are suggested within the latest reforms for poverty alleviation. The underlying policy target behind this is establishing *safety nets* to provide a 'sustainable' income above poverty. On the other hand, the replacement rates offered within the safety net measures are far from providing desirable standards of live. Such safety nets keep a certain proportion of elderly population *slightly* above poverty levels. In this light, we argue that the prioritisation of financial interests at the expense of elderly in the need of income would lead problems in the future regarding poverty amongst old-people. This is obvious more than ever in the aftermath of the crisis when poverty amongst elderly stands as a vital problem of the EU. Therefore, financialisation of pension systems should be re-considered beyond unsatisfactory solutions such as safety nets. Placing the traditional missions of pension systems, such as providing a desirable income for later ages, might be a good departure point in this regard.

5. Concluding Remarks

In this paper, we review recent pension reforms across the EU countries with the purpose of revealing the increasing integration of finance into pension provision. Transformation of PAYG systems into funded systems, increasing preference of defined-contribution scheme at the expense of defined-benefit scheme and attribution of financial missions to pension systems while placing traditional functions of pension schemes as a secondary position are main tendencies observable within the reforms. All these processes support the financial interests, markets and motivations within the pension provision. Therefore, we argue that this can be interpreted as the financialisation of pension provision. On the basis of this argument we examine two impacts of financialised pensions. These are pension funds' role as investors in financial markets and the strength of new form of pension systems in terms of poverty alleviation amongst elderly. Regarding first impact, we posit that the spread of pension funds renders the pension income contingent upon the performance of financial markets. Further, pension funds themselves are argued to be a source of instability for their continuous search for riskier and more profitable investments. Therefore, financialised pension provision puts old people's only income source under stake while financial volatility is under light in the aftermath of financial crisis. Regarding the second impact, we argue that poverty amongst elderly is still a crucial problem for the EU countries where provision of pension started long before. In particular after crisis, the key role played by pension income in poverty alleviation is clearer than ever before. However, the spread of financialised pension provision decreases the pension income security by rendering it contingent upon financial market performance. As a result of these, we argue that financialisation of pension

provision across the EU countries should be re-considered in the light of financial instability and poverty amongst elderly in the aftermath of financial crisis.[3]

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3 In this paper we heavily draw upon the EU reports on pension systems. Such as: (European Commission, 2010); (Directorate-General for Employment, Social Affairs and Inclusion of the European Commission and the Social Protection Committee, 2012); (Directorate General For Internal Policies Policy Department, 2011); (Directorate-General for Economic and Financial Affairs, 2009).