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The implications of the economic crisis on public old age pension spending in European countries

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Abstract. *The financial and economic crisis has come on top of an existing demographic crisis that is straining the public pension schemes throughout Europe. As the population is aging, projections of future pensions show that they will not reach target replacement income. The demographic and economic crises have forced regulators in Europe to speed up the long-needed pension system reforms, but also to take some immediate steps to help them cope with the immediate effects of the crisis. The main objective of this paper is to analyze the impact of the financial and economic crisis on public old age pension spending.*

Keywords: old age pension, public spending, demographic crisis, global crisis.

JEL Classification: H80, I390, J140.
REL Classification: 8Z, 13Z.

Introduction

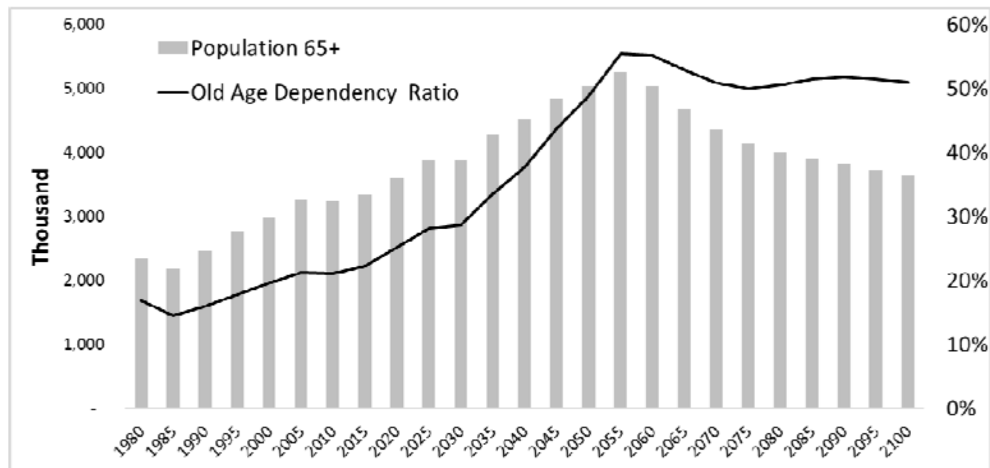
The recent economic crisis has come on top of an ongoing demographic crisis that is straining the public finances of many European countries. The economic crisis has forced regulators in Europe to speed up the pension reforms. In order to cope with the economic and demographic situation, governments have introduced parametric measures like increase of retirement age or of the required contribution period. While these measures were necessary, they have not had an immediate effect on public pension spending that continued to keep the same the pace of growth correlated with the inflation and real wage growth rates. In Central and Eastern European countries, in particular, that had recently introduced a mandatory private component to their public schemes, governments were forced to temporarly shift part of contributions from mandatory private to public schemes in order to cope with current outpayments. Other countries, mainly from Western Europe, have used their public pension funds as a counter cyclical tool, meant to stimulate the recovery of their economies.

The demographic crisis and the pension problem

An incrementally higher proportion of the population will be pensioners that will have to be financed by the salaries of working age population. Within the EU, about 30% of the population is projected to be 65 or over in 2060, up from 17% in 2010 (EU, 2012). In particular, in Romania 35% of the population will be over 65 in 2060, up from 15% in 2010 (EU, 2012). In response to the *aging of the population challenge*, in the last decade many governments in EU have expanded the role of existing private pension schemes or introduced new elements of pre-funded, privately managed pensions into their pension systems (Börsch-Supan, 2012), in order to diversify provision, boost choice, improve transparency and foster greater individual responsibility (EC, 2010). This private component of the pension should contribute to the future adequacy of pensions which are supposed to help avoid poverty and provide an adequate income replacement, but the extent to which it should do so is unknown. The addition of the mandatory private scheme has placed more responsibility on individuals for their pensions, as they now have to choose from various investment funds and decide how to invest their money for a part of their pension contributions. In light of the recent financial crises, this shift has raised the individual uncertainty about retirement income and whether their future pension will be sufficient to provide a financially worry-free old age.

The European Union's projections for old age dependency rates (the ratio between people over 65 years old and people between 16 and 64 years old) show an upwarding trend that will reach a peak in 2060, when this ratio will

be 52.5% (EU, 2012), a level double from its current level. Similarly, the demographic crisis will reach a critical point in 2050-2055 in Romania, when the old age dependency rate projections by United Nations (2012) are going to be at their highest (Figure 1), more than double from its current level.



Source: United Nations: "World Populations Prospects: The 2012 Revision.

Figure 1. *Old age dependency ratio projections for Romania (%)*

As a response to the demographic crisis, European countries are forecasting larger public pension spending. *However, the pace of public spending growth will be outpaced by old population growth rates*. In OECD countries, old population will increase by 43% on average by 2025, while public pension spending will rise by 14% over the same period (OECD, 2012). In the EU27, public pension expenditure will grow to 12.9% of GDP in 2060 from its current level of 11.3% of GDP, while its +65 population will almost double (EU, 2012).

In Romania, the public old age pension expenditure is forecasted to reach 13.5% of GDP in 2060 from its current level of 9.8% of GDP (EC, 2012). The share of private pension expenditure will be relatively small relative to the public expenditure share in 2060, as private pension expenditures are forecasted to be 1.1% of GDP in 2060.

There are several factors that influence the variation of the public old age pension growth, but the largest contributor factor is by far the old age dependency ratio in Romania, as well as in EU27 countries (Table 1).

Table 1. *Contributor factors to the growth of public pension expenditures*

	2010 (%)	Contribution of:						2060 (%)
		Dependency Ratio	Coverage Ratio	Employment Effect	Benefit Ratio	Labour Intensity	Residual Effect	
EU27	11.3%	8.5%	-2.9%	-0.8%	-2.7%	0.1%	-0.6%	12.9%
Romania	9.8%	12.9%	-4.7%	0.4%	-3.7%	0.0%	-1.2%	13.5%

Source: European Commission, 2012: "The 2012 Ageing Report" Economic and Budgetary Projections for the 27 EU Member States (2010-2060)".

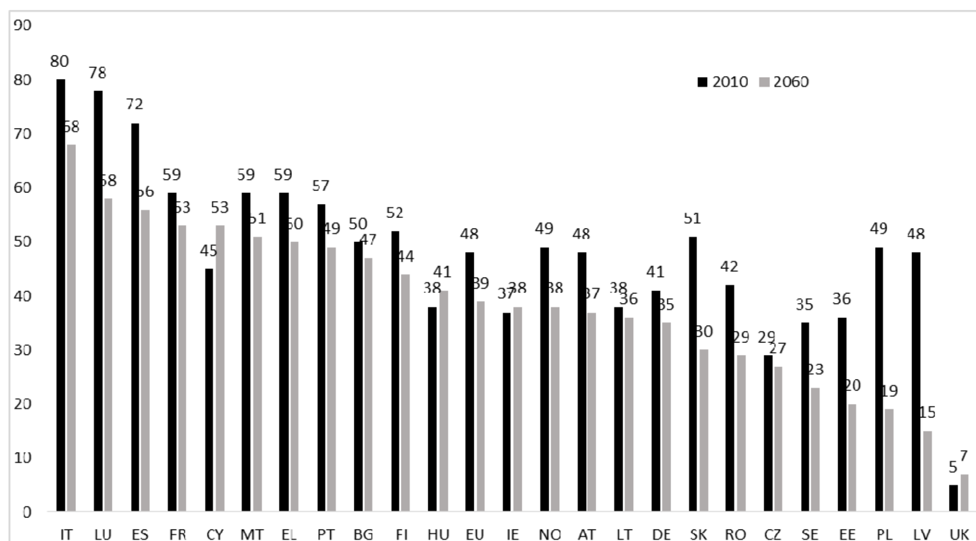
The reforms undertaken by countries within EU were necessary and well justified by the demographic crisis. However, it is not clear to what extent they will contribute to the future adequacy of pensions and to the sustenability of the public pension system (Börsch-Supan, 2012).

A good measure of the extent to which pensions will allow pensioners to maintain a similar life style post-retirement is the income replacement rate that is calculated as the ratio between the average first pension and the average last salary. While the minimum required level of the income replacement rate is still a subject of controversy amongst economists, many agree that it should be at least 60-70% (Scholz, Seshadri, 2009).

The projected level of public pension expenditure relative to the ratio of old people raises *a serious question about public finances' capacity to provide a proper income to future pensioners.* Current projections by international organizations show that, in spite of the reforms, the future pension incomes will not provide an adequate replacement income to pre-retirement revenues. Even current pension income in many countries is not sufficient for maintaining the same life-style after retirement. As shown in Figure 2, current data show that average income replacement rates in EU is 49% (EU, 2012). A survey conducted conduced across 10 leading European countries (AON, 2010) revealed a mismatch between expected income at retirement and expected consumption needs. The "average European" thinks that 74% of the current income would be sufficient to live comfortable, yet upon retirement they will have only 57% of the current income.

The projections for future income replacement rates show that the situation will be even more critical over the next 50 years. The drop of the income replacement rate is a direct reflection of the demographic crisis problem. It is estimated that in EU in 2060 the income replacement rate will reach 39% (Figure 2), while in Romania this rate will be only 29% (EU, 2012). The projected income replacement rates are clearly below minimum desired levels, indicating that future public pensions will not be adequate in many European countries. Recognizing

this problem, the governments of most developed countries heavily support savings for retirement. Many forms of savings receive tax advantages, yet even with these incentives the common wisdom is that the financial assets of most households still fall considerably short of what they need to maintain their consumption in retirement (EBRI, 2010).



Source: European Commission, 2012: "The 2012 Ageing Report" Economic and Budgetary Projections for the 27 EU Member States (2010-2060)".

Figure 2. *Public pension income replacement rates in 2010 and 2060 (%)*

Global crisis impact on pensions

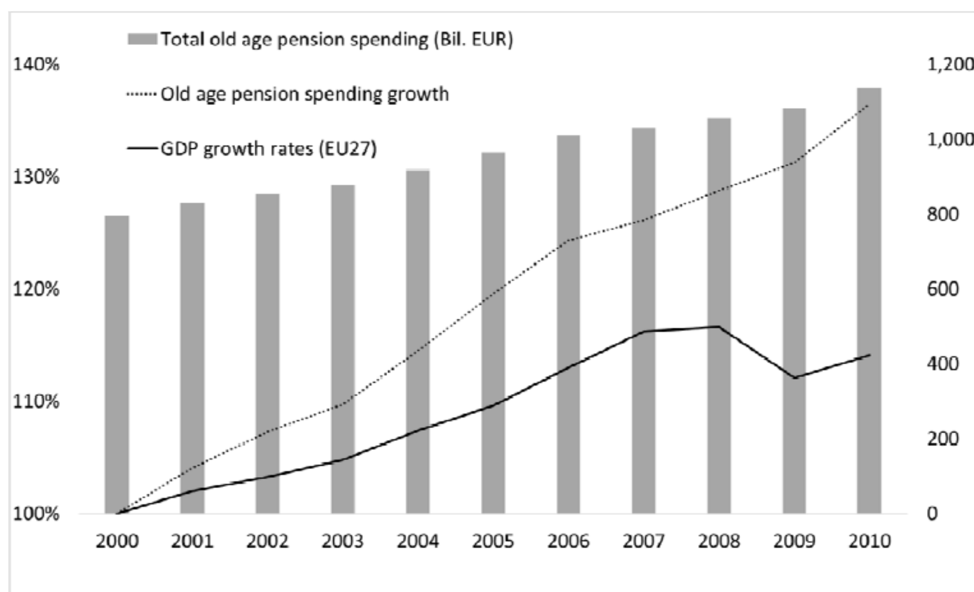
In the wake of the recent economic crisis, many governments have initiated reforms or have accelerated the pace of ongoing reforms to their public pension system. The 2008 financial crisis, followed by a deep economic crisis, *provided an extra opportunity to accelerate the pace of long-needed reforms in order to improve the future financial sustainability of pension systems*. Many European countries introduced parametric reforms, that have already been implemented or are scheduled to be implemented, such as: reducing or abolishing early retirement opportunities; cutting the value of first pensions; changing pension starting point from final salary to career average; increasing required contribution periods; changing indexation rules; or increasing retirement age (Casey, 2012). Amongst all these parametric measures, raising retirement age was universally on the agenda of European governments (Table 2).

Table 2. *Retirement age pre and post-reforms*

Country	Retirement age prior to reforms	Retirement age changes
Spain	65	67 (gradually until 2017)
France	60 (public), 65(private)	62, 67 (gradually by 2018)
UK	65	66 (accelerated, proposed 68 link to longevity risk)
Italy	60	66 (by 2018; longevity related increases from 2015)
Ireland	65	68 (by 2038)
Netherlands	65	66 (by 2020) and 67 (by 2025)
Hungary	62	65 (by 2012)
Poland	60 w / 65 m	67
Romania	59 w / 64 m	60 w / 65 m (by 2015) - 63 w (by 2030) – 65 (2038)

Source: Casey 2012 and Romania Draft Modification Law regarding Law nr. 263/2010.

The introduction of parametric reforms did not immediately affect the level of current public pension spending, but they are supposed to improve the future financial sustainability of the pension systems. Public pension expenditure growth maintained a constant growth rate, as governments did not cut current pension benefits and the effects of the parametric reforms will be visible in the long-run. Total average old age pension expenditure growth for EU 27 countries was around 2.5% and in 5.2% in 2009 and 2010, respectively (Figure 3), which is within the historical range for growth rates from 2000 until 2010. Of all countries included in the analysis, only four countries reduced their total public pension expenditure (Iceland, UK, Sweden and Hungary) in 2009 versus 2008, but not public pension benefits to their pensioners. Cutting current pensioners' benefits was attempted without success in Romania and Latvia, as constitutional courts ruled the measure unconstitutional. However, the Greek government was forced to cut current pensioners' benefits (IMF, 2013), as they were trying hard to meet conditions of the IMF stand-by agreement. Most governments, rather than cut current pension benefits, chose to moderate their increases by reviewing indexation procedures or removing additional benefits (Casey, 2012).



Source: European Commission, Eurostat Statistics.

Figure 3. *Total old age pension spending growth vs. GDP growth*

In some Western European countries, the public pension funds were used as a *counter-cyclical tool* for stimulating economic growth or aiding national companies in difficulty (Casey, 2012). For instance, public pension reserve funds were used in Finland for buying commercial paper in solid Finnish companies, while in Spain these funds were used to buy government bonds in order to reduce the public borrowing rate. The Dutch government *urged pension funds to invest in the financial sector in order to help with the economic recovery* (Casey, 2012). In Iceland, Denmark and Spain, rules and penalties for early pension withdrawals were relaxed in order to help the unemployed. In Germany and Sweden, the government failed to cut pension benefits, even though the calculation formula required it (i.e. in Germany pensions were tied to real wages that fell in 2009, in Sweden newly paid pensions were tied to the extent to which the system's liabilities exceed assets).

In Central and Eastern European countries, that had engaged in a transition process of their pensions systems prior to the economic crisis, governments *temporarily shifted all or part of the contributions going to the mandatory private schemes to the public schemes in order to cope with current pension payments*. As revenues to the pension budget dropped due to the economic crisis, some governments had to find solutions to help them meet current pension obligations (Table 3).

Table 3. *Pension contribution rate shifts after crisis*

Country	Total pension contributions (%)	Of which going to Pillar II (%)	Diverted to public schemes
Slovakia	18	9	5
Lithuania	18.5	5.5	2
Hungary	31	8	Scheme nationalized
Romania	19.5	2 (gradually raising to 6% until 2016)	Frozen at 2.0 in 2009
Poland	19.5	7.3	2.3

Source: Casey 2012 and www.reuters.com

Hungary, for instances, nationalized the mandatory private scheme altogether. As public pension schemes have a future sustainability problem, reversing some of the recent reforms will not help with this problem.

The fall of the financial markets in 2008 had implications for pension funds, especially for those pension fund members whose portfolio was heavily invested in stocks. On average, in OECD countries *pension funds lost over 20% in real terms in 2008* (OECD, 2013). This fall affected predominantly new pensioners, as they have seen their pension accumulations fall right before retiring. Pension plan members that had several years until retirement, will have more time to see their portfolio recover the losses, thus are less affected by the crash of the financial markets of 2008. In countries where occupational or private pension schemes provide an important share of pension benefits (UK, Netherlands, Denmark, Sweden) the crisis contributed to the decrease of public confidence in the private funds' capacity to meet their needs (OECD, 2009). Some governments of these countries proposed measures in order to provide better protection against financial market fluctuations, such as: adjusting asset allocations with age, or guaranteeing a minimum rate of return for mandatory saving plans. In CEE countries, were private schemes are small and new, the fall of equity markets did not affect pensions. In addition, these countries are strictly regulating pension funds and asset allocations are restricted in pre-retirement years, so they are better sheltered from future financial market fluctuations.

Conclusions

The economic crisis forced governments to accelerate the pace of long-needed reforms of the pension system, but also to adopt some immediate crisis coping measures. Many states introduced parametric reforms that will have an effect on pension spending in the long-run and are supposed to raise the public pension systems future sustainability. In addition to long-ranging measures, many European states responded to the financial and economic crisis of 2008 and 2009

with short-term coping measures: some countries in CEE decided to temporarily divert contributions to public schemes from private mandatory schemes in order to cope with current payments; in some Western European countries, public pension reserve funds were used as a countercyclical tool to stimulate ailing national companies or to help with the recovery of the financial markets.

While some unfortunate new pensioners that were heavily relying on private defined contribution pension funds for their pension income saw their accumulations drop, and thus their pension income dropped due to the financial crisis, this phenomenon was restricted in the few European countries where the private pension funds provide an important part of pension benefits. Overall, the economic crisis had welcomed effects on the European public pension systems, as the measures adopted in light of the crisis are going to help with the system's future sustainability.

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