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Pension reforms in the 1990s and during the financial crisis: More of the same?

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Abstract

Many EU countries have been carrying out substantial pension reforms since the mid-1990s. This article studies whether the reforms that were carried out in ten EU countries before and after the financial crisis of 2008 are different. This is done through an analysis of the different elements of these reforms and also by comparing entitlements of statutory pension systems after each set of reforms. The main conclusion is that the pre-crisis reforms were much stronger and had a more negative impact on women than the post-crisis reforms. It is harder to determine whether this represents a temporary break in the reform process or a permanent change in the orientation of pension reforms in these ten countries.

Keywords

Social Security and Public Pensions; Retirement; Poverty; Retirement Policies

JEL number: H55, I38, J26

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1 Introduction

Since the mid-1990s, governments across many EU countries embarked on very significant pension reforms. These reforms, though heavily contested and resisted, were legislated and implemented. In most cases, the focus was on reducing generosity, particularly by limiting the growth in the retirement period and changing benefit determination rules. Many reforms sought to change the incentives embedded in pension systems, particularly to ensure that there were clear financial advantages for individuals to contribute more.

The financial crisis of 2008 impacted EU countries very differently. The weakening of government finances led even more governments to carry out pension reforms. Countries that had up to then not modified their pension systems were not in a position to continue to delay reforms.

This article will however focus on those countries which enacted reforms before and after the crisis. The research question that will be posed is whether the financial crisis led to any major differences in pension reforms in these countries. To do this, we focus on ten EU countries that together make up 70% of the Union's population.[1] These countries have very different pension systems and carried quite varied reforms, which will be reviewed in the first part of this article. The second part will quantify the impact of these reforms on pension entitlements using OECD estimates of pension wealth.

Both the literature review and the quantification exercise show that there are very clear differences in the pre- and post-crisis reforms. The pre-crisis reforms were quite significant and tended to impact women more than men, whereas the post-crisis reforms are much milder and appear more gender-balanced. This seems to suggest that post-crisis reforms constitute a "second phase", where limited adjustments were made to the previous set of reforms, justified in view of the impact of the crisis. Policymakers, under this perspective, consider the pre-crisis reforms to have been relatively successful and want to retain them. However there are also some suggestions of a shift in the reform paradigm, especially for Eastern European countries. Whether this phase is a temporary break or whether it signifies a permanent change in the orientation of pension reforms in these ten countries is harder to ascertain at this stage.

[1] These countries are Austria, Finland, France, Germany, Hungary, Italy, Poland, Sweden, Slovakia and the UK.

2 An outline of pension reforms in the EU since the early 1990s

Though the popular press tends to characterise pension reform in the EU as slow and marginal, the reforms which have taken place since the 1990s are substantial. This section will give an outline of these reforms, showing how the pensions landscape in Europe, particularly for younger generations, has changed dramatically. It will try to distinguish between those reforms carried out before and after the financial crisis. In this section, while the focus will be on the ten countries mentioned previously, we will at times adopt a more general view of EU-wide developments.

At the start of the 1990s one pension model dominated Western Europe, with schemes run by the State, based on the pay-as-you-go (PAYG) funding principle and with an earnings-related defined benefit determination (DB) structure. Throughout most of the second half of the twentieth century, reforms in Europe tended to move countries closer to this single pension model, with even Beveridgean countries,[2] like the UK, introducing earnings-related features, and countries in Southern Europe moving away from traditional methods of family support during old-age and instead trying to adopt the state provision levels of their Northern neighbours.

The 1990s, however, saw a departure from this trend in Western Europe and also the accession into the EU of Eastern European states who nearly all had transformed their pension systems away from PAYG DB. Hering (2006) notes that "two-thirds of the 15 old EU countries reproduced their pension systems by enacting numerous marginal adjustment measures, focusing either on the refinancing or retrenchment of public pensions…but four countries—Sweden, Italy, Germany and Austria—restructured their pension systems by cutting public pensions and replacing these increasingly with private ones, and thus began a gradual shift from the dominant pillar model to the multi-pillar one" (pp. 7).

[2] See Bonoli (1997). A common categorisation of EU pension schemes is between Bismarkian systems, where pensions are related to employment and represent a deferred salary, and Beveridgean systems, where pensions are mainly seen as an age-related payment meant to alleviate poverty.

Table 1 Structural pension reform in Western Europe, 1995-2004

Institutional development	Dominant pillar systems	Multi-pillar systems
Reproduction by Adaptation	Luxembourg	Denmark
	Belgium	United Kingdom
	Finland	Ireland
	Spain	Netherlands
	Portugal	
	France	
	Greece	
Gradual Transformation	Sweden	
	Germany	
	Italy	
	Austria	

Source: Hering (2006)

Bonoli & Palier (2007) visualise four stages of reform. Until the late 1980s, there was no retrenchment and the main action was to increase payroll taxes to finance any shortfalls. Concern over the level of contributions then led to some moderate retrenchment; usually changes in indexation. While resulting in only minor effects, the first reforms tended to be important as they brought pension reform, population ageing and the future of social security into the public debate. More radical reforms were pushed for in the early 1990s, though reforms were usually still negotiated on the basis of a quid pro quo: benefits were intended progressively to decrease in exchange for some concession, e.g. non-contributory pensions being financed from general tax revenues instead of through the insurance schemes. The first moves towards funded private provision were also made at this stage. Finally, the second wave of reforms (during the late 1990s) brought more innovation, such as the development of voluntary private pension funds and moves to increase employment rates among the elderly and to stop early retirement. As can be seen in Table 2, the more substantial reforms tended to have substantially long phasing-in periods. The authors argue that in this way the large cohort of baby boomers would only be marginally affected. For instance, only about one in seven of the current electorate in Italy will be affected fully by the reforms made in the 1990s.

Table 2 Year of reform, full implementation and time lag for major pension reforms in France, Germany and Italy

	Year of reform	Full implementation	Time lag in years
France	1993	2004	11
	2003	2020	17
Germany	1989	2012	23
	1999	2025	26
	2001	2030	29
Italy	1992	2032	40
	1995	2035	40

Source: Adapted from Bonoli & Palier (2007).

While one might concede that reforms have tended to be gradual, heavily negotiated and with considerable time lags till full implementation, this should not be misconstrued as a claim that there was inertia in pension reform across Europe before the financial crisis. In its review of decades between 1990 and 2005, OECD (2007) finds that ten EU member states of the OECD made quite substantial reforms to their pension system. Grech (2013) notes that these countries are representative of the different pension system designs across the continent, include examples of the various type of reforms and also cover 70% of the EU's population.

Table 3 Reforms to statutory pension systems between 1990 and 2007, selected OECD countries

Country	Pension eligibility age	Adjusted retirement incentives	Change of years in benefit formula or qualifying conditions	Link to life expectancy and/or financial sustainability	Defined contribution scheme	Other
Austria	Early retirement age increased. Pension age for women aligned to	Benefit reduction and tighter access for early retirement.	Best 15 years to 40 years.	Introduction of sustainability factor under discussion.		Reduction in accrual rate. Less generous indexation for higher pensions
Finland		Increased accrual rate for people working age 63-67.	10 last years to lifetime average.	Life expectancy multiplier (from 2010).		Basic pension income-tested. Cuts in valorisation and indexation.
France		Changes in adjustment to benefits for early/late retirement.	Minimum contribution period increased. Earnings measure from best 10 to best 25 years.	Minimum contribution period to increase further with changes in life expectancy.		Targeted minimum income of 85% of minimum wage. Valorisation to prices.
Germany	Pension age increased to 67	Reduction in benefits for early retirement		Valorisation and indexation cut in line with ratio between contributions and pension.		Pension income tax treatment aligned to normal income by 2030.
Hungary	Increase in pension age 55 for women and 60 for men to 62 for both.	Accrual rates linear rather than higher for earlier years.		Through annuity calculation in DC scheme.	DC scheme: mandatory for new entrants, voluntary for existing workers.	Minimum pension to be abolished. Less generous indexation of pensions.

Continuation of Table 3

Country	Pension eligibility age	Adjusted retirement incentives	Change of years in benefit formula or qualifying conditions	Link to life expectancy and/or financial sustainability	Defined contribution scheme	Other
Italy	Pension age for men from 60 to 65 and women from 55 to 60.	Adjustment to early-retirement benefits through notional annuity calculation.		Through notional annuity calculation.		From DB to notional accounts. Less generous indexation of higher pensions.
Poland	Withdrawal of early retirement for certain groups of workers.		From best consecutive 10 in final 20 to lifetime average.	Through notional annuity calculation.	DC scheme mandatory for new entrants and workers under 30.	Abolition of basic pension. From DB to notional accounts.
Slovakia	Increase in pension ages to 62 for men and women.		From best 5 in final 10 to lifetime average earnings.		DC scheme mandatory for new entrants and voluntary for existing workers.	From DB to points system.
Sweden			Best 15 years to lifetime average (public, earnings-related scheme).	Through notional annuity and DC schemes. Sustainability adjustment in notional accounts.	DC scheme mandatory for nearly all workers.	From DB to notional accounts.
UK	Minimum and women's pension age up to male pension age (65). All ages to rise to 68.	Increment for deferring pension claim increased. Lump sum option added.				Higher basic and more progressive earnings related pension. More means-tested benefits.

Source: Adapted from OECD (2007) and OECD (2009).

Table 3 summarises these changes, focusing on changes in the eligibility age, adjustments in retirement incentives, changes in qualifying conditions or benefit determination, the introduction of links to life expectancy or financial sustainability and moves toward defined contribution (DC), including notional account systems. Reforms can be divided into two broad sets: parametric and systemic. The *parametric reforms* maintained unchanged the PAYG nature of pension systems but made substantial changes to their underlying rules – such as those on the accrual of pension entitlements, the age at which benefits are received, and required contribution periods. Other countries have opted instead for *systemic reforms* i.e. moving away from the PAYG DB structure and adopting DC type schemes.[3] Here one can discern two main types of reforms: World-Bank inspired multi-pillar reforms based on personal accounts (e.g. Slovakia and Hungary)[4] and the adoption of notional defined contribution (NDC) systems (e.g. Sweden, Italy and Poland).[5]

The distinction between parametric and systemic reforms has its shortcomings. For instance, while France, has not shifted totally to NDC (and thus it is categorised as a country with parametric reforms), it has introduced features that mimic the rules of an NDC model. France has introduced a link between the number of contribution years and life expectancy (Carone, 2005). In the same vein, Austria has also significantly modified its public pension plans and could be said to now have a personal notional defined benefit account system (Knell, 2005).

Zaidi & Grech (2007) notes that the main difference between parametric and systemic reform lies not in the financial impact on pensioners (or contributors) but in the sharing of risk between the current generation and future ones or the State (the custodian of future generations in this respect). Parametric reforms, in fact, do not change public pension systems from a DB to a DC set-up. This has several important implications, such as the fact that longevity risk is still borne by the pension provider rather than the pensioner. Moreover redistribution is still possible under a DB system, something that is not achievable under DC, unless one puts in place subsidies for non-contributory periods (such as care and unemployment) and/or minimum income guarantees. However, there is evidence that in many cases this was not prioritised. Thus, Fultz and Steinhilber (2003) report that in Hungary contributors to personal accounts contribute 6% of their child care benefit to the pension system

[3] A pension scheme where the pension benefits are related to the member's pensionable earnings (either at retirement or during earlier working life) and number of contributory or credited years is known as a DB scheme; and a pension scheme in which the pension benefits are linked to the fund value – this being dependent upon the contributions made into the fund, retirement age and also investment returns – is known as a DC scheme.

[4] For a review see Independent Evaluation Group (2006).

[5] See Palmer (2006) for a review of NDC systems.

(instead of having credits as under the old system) and their future pension benefits were be calculated as a simple return on this contribution.

Whereas the multi-pillar personal account systems are based on individual contributions being invested in financial markets, in an NDC system contributions are retained by the State and the financing structure remains essentially PAYG. However pension benefits are determined according to the DC formula, i.e. they are determined by the accumulated contributions at retirement.[6] The rate of return faced under an NDC is centrally determined and reflects the formula chosen (normally growth in the wage bill), whereas under personal accounts returns depend on the investment choices and the performance and stability of financial markets. This has significant implications in that all people face the same risks on return under the NDC scheme, and thus there is no income inequality resulting from individual choices. The notional return in NDC schemes can, however, differ substantially from the return under PAYG DB, as the NDC schemes, in fact, attempt to make the PAYG schemes automatically stabilising so that the 'assets' and 'liabilities' of the system balance out. For instance, in Sweden through the operation of an automatic balance mechanism, if there is a gap between projected revenues and forecast pension outlays the notional account interest and the indexing of annuities is reduced (see Capretta, 2006 and Franco & Sartor, 2006).

The financial crisis impacted negatively the image of private pensions being a stable source of long term income (see Yermo & Severinson, 2010 and Impavido & Tower, 2009). It also made the adoption of mandatory individual pensions much less sustainable (see Whitehouse, 2009). As a result, Hungary closed down its mandatory private system while Slovakia and Poland limited it greatly (see Hirose, 2011 and World Bank, 2013). Drahokoupil & Domonkos (2012) also point out that the crisis marked a change in the consensus on the benefits of pension privatisation.

On the other hand, reforms continued to push towards adopting stronger activation policies in welfare policies (Vis et al, 2011) with a strengthening of the contributory principle (see European Commission, 2012). It is somewhat strange that this happened at a time when jobs were very scarce and when there was an increasing use of atypical jobs, which typically are not covered well by the contribution system. Another element of continuation was a continued drive towards raising retirement ages, including a stronger push for automatic indexation to longevity, though one can also note several increases in minimum pensions or differential treatment of indexation for lower pensions (see Natali, 2011). On the other hand in some countries, such as Germany, changes implied by indexation and valorisation rules

[6] For an extensive explanation of how an NDC system operates, see Palmer (2006).

were delayed or modified[7] (see Hinrichs, 2013), while in stressed countries policymakers were put in a situation where they had to carry out previously delayed pension reforms in order to sustain their fiscal credibility in the short term (Bodor & Rutkowski, 2013). This paper will focus on just one example of stressed economy, namely Italy, mainly reforms in the other stressed economies, such as Greece, were imposed from the outside rather than being devised by domestic policymakers (see Matsaganis, 2012 for an extensive discussion of the Greek experience). That said, while the reforms in Italy may seem a bit less drastic than those in Portugal or Greece, there is evidence (see Sanchez, 2014) that through the introduction of adjustment factors meant to keep systems in financial balance, in future there will be considerable impacts on retirees' standard of living.

Table 4 summarises the reforms that have occurred after the financial crisis till the end of 2013. While at first glance, it may seem a shorter list of changes; in many cases the reforms are not marginal. Some appear to be knee-jerk reactions to the crisis – such as the limiting of indexation to just low pensions. In particular, reforms that were meant to address long-term challenges were tinkered with, in part as politicians argued that these short-term changes reflected current developments and would not have long term effects. However if they are maintained over time, they could turn into a clear breaks with the past philosophy of the pension system, especially in Bismarkian systems such as Austria and Italy. Natali & Stamati (2014) argue that the reforms were mostly conceived as cost containment measures, and in this sense they could put future adequacy at risk. In particular they point out that these reforms further accentuate the possibility of more inequality arising from risk individualisation and increased vulnerability to external shocks.

That said, there have been attempts to restrict the impact of changes on those on low incomes, and in some countries the post-crisis reforms resulted in the setting up of better – or more clearly defined - minimum pensions. On the other hand, pension ages have continued to rise while the link between benefits and labour market participation has been strengthened. It is thus unclear a priori whether the reforms carried out after the crisis in the ten European countries that had conducted significant reforms prior to the crisis were stronger or weaker than previous reforms. This will be the scope of the quantitative assessment made in the second section of this article.

[7] The “Rentengarantie” approved in Germany in mid-2009 prevents pensions from decreasing as wages go down. For more details see Börsch-Supan, Gasche & Wilke (2010). Similarly in Sweden the adjustment formula underpinning the NDC system was modified to spread out the required adjustment (see Sunden, 2009).

Table 4 Reforms to statutory pension systems between 2008 and 2013, selected OECD countries

Country	Pension eligibility age	Adjusted retirement incentives	Change of years in benefit formula or qualifying conditions	Link to life expectancy and/or financial sustainability	Defined contribution scheme	Other
Austria		Tighter access for disability retirement.				Less generous indexation for higher pensions.
Finland			New minimum pension supplements.	Life expectancy multiplier.		Indexation rule changed so not to go below zero.
France	Pension age to rise to 62 and full pension to 67.	Less generous early pension.	Minimum contribution period increased. Convergence of scheme formulae.	Minimum contribution period to increase further with changes in life expectancy.		Better credits for carers.
Germany						Change in pension indexation so that the formula does not lead to a decrease in the nominal value of pensions.
Hungary	Increase in pension age 65.		Abolition of extra month pension.		DC scheme abolished.	Less generous indexation of pensions.

Continuation of Table 4

Country	Pension eligibility age	Adjusted retirement incentives	Change of years in benefit formula or qualifying conditions	Link to life expectancy and/or financial sustainability	Defined contribution scheme	Other
Italy	Pension age linked to longevity.	Tightening of early-retirement benefits.	Qualification years for long-service pension indexed to longevity.	Age requirements indexed to longevity.		Less generous indexation of higher pensions.
Poland	Pension age to 67	Early pension reduced substantially	Withdrawal of bridging pensions.		DC scheme limited.	
Slovakia		Early retirement conditions tightened.		Minimum contribution up from 10 to 15 years.		
Sweden			Changes to automatic balancing mechanism.		DC scheme limited.	
UK	Faster rise in pension age and link to longevity.	Reductions in deferral rates.			Employees enrolled in own DC pension or state-run scheme.	Improvement in indexation so that never below 2.5%.

Source: Adapted from European Commission (2012) and OECD (2014).

3 Quantifying the impact of pension reforms in the EU since the early 1990s

The previous section showed that while there were important elements of continuity in the pension reform process in EU countries before and after the financial crisis, there were also significant differences. Keeping the focus on the ten countries where reforms have been going on since the early 1990s, this section will try to quantify the impact of these pension reforms with a particular focus on distributional effects. This will be done by comparing estimates of pension wealth computed by the OECD (see OECD, 2007 and OECD, 2014) for the mid-1990s, 2007 and 2013.[8]

Pension wealth is the total value of projected statutory pension payments to an individual throughout retirement (defined in terms of a multiple of the contemporary average wage). Amongst the key benefits of using this measure, rather than other measures of pension entitlements, there is the fact that this measure is affected by reforms which raise retirement age and those which change the way annual benefits change after retirement. These two particular reforms, as was shown in the previous section, were amongst the most frequently legislated changes in recent decades.

Table 5 shows the OECD estimates for men and women on different parts of the wage distribution, starting for someone on half the average wage up to someone on double the average wage. Typically those on half the average wage would be on the minimum pension, while those on double the average wage would be earning the maximum pension. Pension wealth estimates are shown as multiples of the contemporary average wage in that country, to help cross-country comparisons. They represent the total sum of annual benefits that the individual can expect if s/he has an average life expectancy, discounted so that future benefits are less valuable than current ones.[9] Thus for instance, in the mid-1990s the average French man could look forward to total pension transfers during his whole retirement equivalent in money terms to ten times the average wage in France. By 2007, this had fallen to eight times the average wage, and improved slightly by 2013.

The picture that emerges looking at Table 5 is that with very few exceptions, namely those on higher incomes in the UK, Poland and Slovakia, pension wealth declined substantially in the pre-financial crisis reforms. On average, the decline was close to 17% for men and 21% for women. However there was considerable heterogeneity across countries. The worst losers were lower-income women in Slovakia who lost

[8] The OECD computes these estimates using its APEX (Analysis of Pension Entitlements across countries) model, which codes detailed eligibility and benefit rules for mandatory pension schemes based on available public information that has been verified by country contacts. It is used in the OECD's biennial 'Pensions at a Glance' publication, in the World Bank's 'Pensions Panorama' and in European Commission reports.

[9] For more details on interpreting pension wealth indicators, see Grech (2013) or OECD (2014).

the equivalent of six years of average wages. Similarly Polish lower-income women lost transfers worth four years of the mean wage.

Table 5 Pension wealth for men across the wage distribution using mid-1990s, 2007 and 2013 pension rules (multiples of average wage)

	Mid-1990s system rules					2007 system rules					2013 system rules				
	0.5 mean wage	0.75 mean wage	Mean wage	1.5 mean wage	2 mean wage	0.5 mean wage	0.75 mean wage	Mean wage	1.5 mean wage	2 mean wage	0.5 mean wage	0.75 mean wage	Mean wage	1.5 mean wage	2 mean wage
Austria	11.9	10.8	10.3	9.3	7.0	11.0	9,8	9.0	7.7	5.7	9,8	8,7	8,3	7,4	5,5
Finland	10,1	8,6	8,1	7,5	7,0	9,6	8,6	8,1	7,2	6,6	10,	8,0	7,6	7,0	6,6
France	11,0	10,3	10,0	8,7	8,0	10,8	8,6	8,1	7,2	6,6	9,7	8,6	8,3	6,6	5,8
Germany	8,2	8,2	8,2	8,2	6,1	6,3	6,3	6,0	5,6	4,2	7,4	7,1	6,7	6,1	4,6
Hungary	13,3,	12,4	11,2	10,1	9,8	12,4	11,4	10,8	9,3	8,9	8,8	8,8	8,8	8,7	8,6
Italy	12,0	11,1	10,6	9,9	9,2	10,0	8,8	8,4	7,7	7,4	10,9	10,0	9,5	8,9	8,2
Poland	9,3	7,9	7,1	6,4	6,0	7,2	7,1	7,0	6,9	6,9	6,5	6,3	6,2	6,1	6,0
Slovakia	12,8	12,8	11,7	7,8	5,8	8,8	8,8	8,8	8,8	8,8	9,9	9,2	8,8	8,5	8,1
Sweden	9,8	9,1	8,7	8,1	7,4	9,5	7,8	7,2	7,2	6,8	9,8	8,0	7,4	8,6	8,5
UK	7,9	5,6	4,5	3,3	2,5	6,5	5,2	4,5	3,3	2,5	8,6	6,1	4,9	3,4	2,5

Source: OECD (2009) and OECD (2014)

Table 6 Pension wealth for women across the wage distribution using mid-1990s, 2007 and 2013 pension rules (multiples of average wage)

	Mid-1990s system rules					2007 system rules					2013 system rules				
	0.5 mean wage	0.75 mean wage	Mean wage	1.5 mean wage	2 mean wage	0.5 mean wage	0.75 mean wage	Mean wage	1.5 mean wage	2 mean wage	0.5 mean wage	0.75 mean wage	Mean wage	1.5 mean wage	2 mean wage
Austria	14,8	13,2	12,6	11,4	8,5	12,8	11,5	10,4	8,8	6,6	10,8	9,7	9,1	8,2	6,1
Finland	12,1	10,3	9,7	8,9	8,4	11,4	9,3	8,8	8,2	7,8	11,8	9,4	9,0	8,3	7,8
France	12,7	11,8	11,5	10,0	9,2	12,4	9,9	9,3	8,3	7,6	11,6	10,3	9,9	7,9	6,9
Germany	9,6	9,6	9,6	9,6	7,3	7,8	7,4	7,0	6,6	4,9	8,6	8,4	7,8	7,1	5,4
Hungary	18,0	16,7	15,1	13,7	13,2	15,3	14,1	13,4	11,4	11,0	10,5	10,5	10,5	10,3	10,2
Italy	15,1	13,8	13,2	12,3	11,5	10,7	10,0	9,4	8,7	8,2	12,1	11,4	10,8	10,1	9,4
Poland	12,4	10,3	9,3	8,2	7,7	7,9	7,4	7,3	7,2	7,1	7,7	7,4	7,3	7,2	7,1
Slovakia	16,7	16,7	16,1	10,7	8,0	10,7	10,7	10,7	10,7	10,7	11,7	10,8	10,4	10,0	9,5
Sweden	11,1	10,3	9,9	9,2	8,4	10,9	9,0	8,2	8,2	7,8	10,9	9,0	8,3	9,6	9,5
UK	9,1	6,4	5,2	3,8	2,8	7,4	6,0	5,2	3,8	2,8	9,4	6,7	5,4	3,7	2,8

Source: OECD (2009) and OECD (2014)

The pre-financial crisis pension reforms tended to affect women more than men. This was principally due to the fact that a key reform tended to be gender pension age equilisation which only reduced pension entitlements for women. Another reform that affected women disproportionately was the move towards weaker post-retirement benefit indexation. As women have longer lives than men, this change meant that their pension entitlements were reduced proportionately more than those of men. The move to link benefits more directly to contributions also impacted more on women, especially in Eastern European countries where the pre-crisis reforms tended to do away with progressive benefit formulae.

However it should be noted that with the exception of Poland and Slovakia, the pre-crisis reforms targeted those on high incomes more than those on low incomes. For instance whereas a man earning half the mean wage in Austria lost nearly 8% of his entitlements due to reforms, a man on double the mean wage lost nearly 19%. Similarly in France, those on the lowest income lost quite little whereas those on high incomes lost nearly 18% of their pension wealth. A closer look at the figures shows that in countries which adopted notionally defined contribution schemes, such as Italy and Sweden, the biggest losses were for those on the average wage, while reductions for those on the highest incomes were tapered.

The financial crisis appears to have changed significantly the pre-crisis trend. On average, across the ten countries under study the net impact of the reforms was of just a slight deceleration in pension wealth. In fact, the decline for those on the average wage was 2% for men and 1% for women. Whereas Austria, Hungary and Poland continued to cut entitlements, the other countries either maintained pension wealth stable or even increased it. Another key difference was that whereas the pre-crisis reforms had impacted more heavily on women, the more recent reforms have tended to more punishing on women. This could reflect the greater importance given to improving minimum pensions and putting in place crediting arrangement for those with career breaks. For instance, in Finland those on half mean wages saw an improvement of 4% in their pension wealth, whilst those on double mean wages did not register any gains.

That said, there are also some signs of policy continuity. Countries like Italy and Sweden, where reforms tended to favour those on high incomes rather than those on average wages continued to do so in the post-crisis reforms. Countries like France and Germany, which had reforms that were more progressive in nature seem to have continued down that path.

Looking beyond the ten countries under study, OECD (2014) indicates that in economies heavily affected by the financial crisis, such as Greece and Portugal, pension wealth declined considerably. In Greece the average person lost about 40%

of their pension wealth, whereas in Portugal the loss was of 25%. This very strong reform process needs to be compared to the limited reforms that had been enacted in the so-called stressed economies before the financial crisis. Thus while among the ten countries under study there was a slowdown in the pace of pension reform after the crisis, the economic downturn coincided with significant pension reforms in other EU countries. Incidentally the pressure on structural reforms made by creditor nations could reflect the fact that these same countries had gone through similar reforms in the previous decades. The end result would be that pension entitlements across Europe will have converged significantly as a result.

4 Conclusion

This paper has focused attention on ten EU countries which have legislated significant pension reforms both before and after the financial crisis. Both the literature review and the quantification exercise suggest that there were key differences between the two stages of reform, with the changes effected after the crisis being milder and attempting to make systems better suited to the needs of those more reliant on them. In particular, the strong gender differences of the pre-crisis set of reforms appear to be much less prominent in the post-crisis reforms, with the exception of Eastern European countries which seem to have consolidated some of their pre-crisis reforms.

It is harder to say at this stage whether the post-crisis reforms will be just a brief interruption in the long process of pension cuts observed since the mid-1990s or whether they mark a structural break and a clear change in reform orientation. It could be argued that if economic growth continues to falter, there will be pressures on governments to return to the previous reform paradigm of retrenchment. For instance, in Portugal even though before the crisis the sustainability of the pension system had been buttressed with the introduction of a number of automatic stabilisers, there still were significant cutbacks after the crisis weakened government finances. On the other hand, one could argue that the pre-crisis reductions in generosity were such that governments now need to focus more on pension adequacy. At all events, it seems likely that decisions on pension policy will continue to play a very important role in the socio-economic debate in the EU.

5 References

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