A call for more elaborate and transparent pension data to inform policy-making: A critical examination of World Bank data for Eastern Europe

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Abstract This article offers a critical analysis of the methods by means of which data relating to the performance of second pillar pension schemes are collated, compared and reported. This is done with regard to the performance of mandatory private second pillar pension funds in Eastern Europe. By critically examining data published in a number of World Bank studies, and through the identification of data problems and irregularities, the article argues that a much more elaborate and transparent approach to the collation, comparative analysis and reporting of data is needed. Required is the establishment of a consensus regarding what should represent a robust basis for making credible policy recommendations, not least with regard to pension re-reforms in the countries of Eastern Europe and elsewhere. In the absence of such a consensus, unresolved data problems and irregularities may potentially continue to influence the formulation of incomplete national policy conclusions regarding the performance of second pillar pension funds and, in turn, the ability of policymakers to evaluate appropriately the need for, and assess the...
feasibility of implementing in a sustainable manner, pension re-reform.

**Keywords** old age benefit, pension fund, social insurance, privatization, Eastern Europe

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**Introduction**

Since the late 1990s, many Eastern European countries have implemented radical “carve-out” pension privatization reforms, whereby existing public pay-as-you-go (PAYG) systems were partially terminated and replaced with mandatory private pension funds based on individual accounts and full funding, commonly referred to as the second pension pillar.1 The pension privatization trend was fuelled, among other factors, by the influential World Bank policy research report *Averting the old-age crisis* (World Bank, 1994), which highlighted pension funding in the form of mandatory private pension funds as one of the key prerequisites to address the predicted negative fiscal effects of demographic ageing. The study “*Averting*” provoked strong reactions in professional and academic circles, with authors such as Beattie and McGillivray (1995), Barr (2000), and Orszag and Stiglitz (2001), disputing and challenging many of the World Bank’s policy recommendations.2

As one consequence of the global economic and financial crisis that emerged in 2008, countries such as Latvia, Lithuania, Poland and Slovakia have since decided to significantly scale back the extent of mandatory pension contributions being allocated to private pension funds. Poland now prohibits its second pillar funds from investing their assets in Polish government bonds, while Hungary terminated the second pension pillar in 2011. The World Bank, in particular, has criticized these reform reversals as short-sighted, arguing that they address “the short-term problem at the cost of significantly worsening the long-term fiscal situation, reducing the future pensions of individuals, or a combination of both” (Schwarz and Arias, 2014, p. 145). In contrast, Fultz (2012) suggests that the reforms must be viewed in the context of the recent crisis, which has acted as a catalyst to highlight the structural deficiencies of privatized pension systems that had not been resolved prior to the crisis.

The focus of this article lies not with a detailed analysis or a comprehensive assessment of the recent second pillar reform reversals in Eastern Europe. Rather,

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1. Pension “privatizations” were first implemented in Hungary in 1998 and Poland in 1999; then Latvia in 2001; Bulgaria, Croatia and Estonia in 2002; Lithuania in 2004; Slovakia in 2005; FYR Macedonia in 2006; and Romania in 2008.
2. Professional and academic critique contributed to the “softening” of the World Bank pension reform recommendations a decade later in Holzmann and Hinz (2005).
our interest lies with the methods by means of which data relating to the performance of second pillar pension schemes are collated, compared and reported.

The results presented in this article suggest that a much more elaborate and transparent approach to the collation, comparative analysis and reporting of data is needed. The expectation is that this should help establish a consensus regarding what should be a robust basis for making credible policy recommendations regarding pension (re-)reforms, and not least so for the countries of Eastern Europe. An important purpose of this article, therefore, is to make a call as regards the necessity of developing such an approach. A key motivation for this article has been the identification of data problems. Specifically, the article argues that a number of important World Bank studies on Eastern Europe in recent years have been based on, at best, inconsistent and, at worst, incorrect pension data. These data problems are serious enough to potentially undermine some of the Bank’s policy conclusions regarding the feasibility of pension reform reversals in some countries of Eastern Europe. The article argues that the disappointing investment performance of some second pillar pension funds makes it possible, in contrast to the view of the World Bank, for reform reversals in some countries to improve the short-term fiscal position of pension systems without necessarily weakening their long-term sustainability.

The remainder of the article is organized as follows: we first review the relevant theoretical framework for analysing pension privatization performance and explain the practical difficulties in measuring the second pillar rate-of-return performance net of administrative fees and charges. Attention is then placed on showing that World Bank studies have been incorrectly asserting that the private pension funds of the countries of Eastern Europe were able to out-perform GDP growth before the global economic and financial crisis. Next, we address the contention that the second pillar rates of return data used in various World Bank studies are inconsistent and upwardly biased. The degree to which identified data problems can significantly impact relevant policy recommendations is examined, and possible remedies are suggested. Concluding remarks are then presented.

### Theoretical background

The Samuelson-Aaron theorem explains that in a (balanced) pay-as-you-go (PAYG) system, contributors earn a rate of return equal to GDP growth, $g$, while contributors in funded systems earn the rate of return, $r$, on accumulated pension assets (Samuelson, 1958; Aaron, 1966). Funded pension systems are thus more efficient and provide higher pension payments for the same amount of contributions.
made if, and only if, \( r > g \). Otherwise, PAYG financing dominates over funded pension schemes.\(^3\)

It should be noted that the Samuelson-Aaron theorem applies only in the case of a “blank pension landscape”, i.e. in countries without a public PAYG pension system. One of the few countries where the theorem can be applied directly is Australia, where “add-on” mandatory private pension funds were introduced on top of a modest tax-financed Beveridge-style public pension system in 1992. However, and in contrast, the theorem does not apply to the “carve-out” pension privatizations in Eastern Europe. These reforms are typified by significant transition costs, which are a result of the diversion of existing contributions from the traditional public (Bismarck-style) PAYG schemes to the new private mandatory pension funds.

In most European countries where PAYG pension systems have operated for decades, because of the accrued PAYG liabilities, it is impossible to implement a transition from a PAYG to a funded pension system in a Pareto improving manner. In other words, it is impossible for the welfare of some generations to be increased without decreasing the welfare of the others (Breyer, 1989; Geanakoplos, Mitchell and Zeldes, 1998). In such cases, the transition generations of existing workers and/or pensioners bear the financial burden of moving towards pre-funding in order for the (distant) future generations to benefit from pension funding efforts.\(^4,5\) Weil (2008) highlights that terminating existing PAYG systems and implementing pension privatization is challenging from a political economy point of view, given that most of the beneficiary generations are too young to vote or have not yet been born.

Empirical evidence seems to confirm that the \( r > g \) relationship holds in real-world economies (Abel et al., 1989). However, Orszag and Stiglitz (2001) and Barr (2000) stress that this fact cannot a priori justify pension privatization because of:

- the high operating costs of mandatory private funds, which can significantly reduce contributors’ net rates of return;
- appropriate risk adjustment for the increased uncertainty associated with capital returns; and

\(^3\) The original Samuelson-Aaron theorem refers to the growth rate of covered wages, which can be approximated with GDP growth for all practical purposes. As Settergren and Mikula (2005) stress, the Samuelson-Aaron theorem holds exactly only for populations in a steady state. Increasing life expectancy, present in most countries, actually makes the PAYG internal rate of return slightly larger than GDP growth. For the sake of simplicity, this issue is ignored in this article.

\(^4\) Public borrowing can be used to some extent to smooth transition costs across different generations. Nonetheless, most of the transition burden inevitably falls on existing generations.

\(^5\) A few authors have tried to identify Pareto transitions from PAYG to funded pension systems. In doing so, they have either relied on efficiency-driven tax reform (Kotlikoff, 1998; Breyer and Straub, 1993) or on positive externalities to capital accumulation (Belan, Michel and Pestieau, 1998). If such Pareto improvements would indeed be feasible in reality, they should be undertaken irrespective of pension reform efforts.
the need to honour accrued PAYG liabilities and finance the associated transition costs.
Pension privatization could nonetheless be justified if the \((r - g)\) spread is significant and social preferences of existing generations are such that the welfare of future generations is highly valued.\(^6\)

As a reform option, pension privatization is likely to look more attractive if one assumes a high spread between GDP growth, \(g\), and the rate of return on pension assets, \(r\). For example, as regards the United States, Feldstein and Samwick (1998) assume \(g = 2.5\) per cent and \(r = 9\) per cent per annum, and show that the path to pension privatization in that country could be placed in a favourable light – i.e. the financial benefits to future generations would be very significant and could easily dominate modest transition costs in net present value terms. However, few pension experts, including those of the World Bank, would consider such an enormous \((r - g)\) spread as realistic or sustainable in the long term. For instance, at the time when pension privatization was being implemented in Eastern Europe, most simulations assumed that mandatory private pension funds would outperform GDP growth by 1.5 to 2 percentage points in the long term (Price and Rudolph, 2013, p. 61). If this were to be the case, the dynamics of pension privatization, based on the most common reform parameters, might look similar to Figure 1a, if pension privatization had been initiated in 2010.\(^7\)

Transition costs would last for about 40 years after the introduction of pension privatization. Depending on the prescribed cut-off age for older participants remaining in the public PAYG system, the transition period could be somewhat shorter (\(~35\) years) or somewhat longer (\(~50\) years).\(^8\) Under the different reform scenarios, the total transition cost would be equal in net present value terms, since this cost is predetermined by the extent of accrued PAYG liabilities at the start of pension privatization. After 40 years of transition costs, pension privatization begins to strengthen the fiscal sustainability of the national pension system because annual pension payments from the second pillar become greater than the value of contributions paid into it. Around 70 to 80 years after the start of pension privatization, private funds fully mature and fully employ their potential in improving the long-term sustainability of the pension system.

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6. It should be noticed that the introduction of public PAYG systems in the early twentieth century seems to imply the opposite in social preferences – the welfare of existing generations had been given precedence over the welfare of future generations.
7. Figures 1a and 1b show the results of simulations based on Serbian demographic projections. Virtually identical dynamics would be obtained if demographic data for any other European country were to be used.
8. If the prescribed cut-off age at the start of pension privatization is higher, then more contributors will switch to the second pillar thus increasing the transition costs in early years and making the transition period shorter. Alternatively, if only young workers are allowed to participate in the second pillar, transition costs will be more modest in the early years, but the transition period will last longer.
If a hypothetical country, as depicted in Figure 1a, decided to implement a reform reversal and terminate the second pension pillar, say 10 or 15 years after the start of pension privatization – as Hungary did, for example – it would improve its short-term fiscal position by not having to finance the transition costs. However, this short-term improvement would come at the cost of deterioration in the long-term fiscal sustainability of the national pension system. This is the case highlighted by the World Bank (Schwarz and Arias, 2014, p. 145).

However, if the rates of return on second pillar assets are lower than GDP growth, as depicted in Figure 1b, then implementing a reform reversal improves the short-term fiscal position without any deterioration in the pension system’s long-term sustainability. This is a straightforward result from the Samuelson-Aaron theorem. Although it was assumed that the rates of return on second pillar assets would easily outperform GDP growth, early empirical evidence from Eastern Europe suggests the opposite – second pillar returns have been unexpectedly low, lower than GDP growth in most of the reforming countries; this was even so prior to the onset of the economic and financial crisis in 2008.

In analysing the recent reform reversals in Eastern Europe, a World Bank study (Schwarz and Arias, 2014) ignores the possibility of pension system dynamics as depicted in Figure 1b. Moreover, an earlier World Bank (2009) study incorrectly asserted that the rates of return of assets, $r$, of second pillar pensions mostly outperformed GDP growth prior to the global economic and financial crisis.

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**Figure 1a. Second pillar projected inflows and outflows, $r = g + 1.5\%$**

Note: Simulations assume that pension contributions equal to 7 per cent of wage are diverted from the public PAYG first pillar to a mandatory private second pension pillar. The assumed cut-off age for older participants remaining in the PAYG system is age 40.

Source: Altiparmakov (2011).
These incorrect assertions put into question the credibility of pension policy analyses in Eastern Europe, as will be elaborated in the remainder of this article.

Gross versus net rate-of-return data

The rate of return on pension assets, $r$, refers to the average net rate of return that contributors will earn over their working careers. However, calculating this net rate...

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**Figure 1b. Second pillar projected inflows and outflows, $r = g - 0.5\%$**

![Graph showing projected inflows and outflows for the second pillar with $r = g - 0.5\%$.]

Source: Altiparmakov (2011).

**Table 1. Original World Bank comparison of second pillar returns and real GDP growth**

<table>
<thead>
<tr>
<th>Year of inception</th>
<th>Real rate of return</th>
<th>RoR over GDP growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>2002</td>
<td>3.2</td>
</tr>
<tr>
<td>Estonia</td>
<td>2002</td>
<td>4.9</td>
</tr>
<tr>
<td>Hungary</td>
<td>1998</td>
<td>2.6</td>
</tr>
<tr>
<td>Latvia</td>
<td>2001</td>
<td>−3.5</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2004</td>
<td>5.7</td>
</tr>
<tr>
<td>Poland</td>
<td>1999</td>
<td>8.9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>2005</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Source: Excerpt copied from World Bank (2009, p. 7) and Holzmann (2009, slide 12).

(see Table 1). These incorrect assertions put into question the credibility of pension policy analyses in Eastern Europe, as will be elaborated in the remainder of this article.
of return can be challenging in practice because of conceptual ambiguities and the lack of comparable data on the many different fees charged by pension management companies and other financial intermediaries. Whitehouse explains that summarizing different management fees in a single number is a complex task (Whitehouse, 2001).

Three broad types of fees can be encountered in international practice:
• contribution-based fees, charged when workers pay contributions into a pension fund;
• asset-based fees, which are charged periodically (monthly, annually) and depend on the amount of accumulated pension assets; and
• a single annuity-purchase fee, charged at retirement to provide adequate longevity (and inflation) insurance to participants.

Whitehouse (2001) also shows that contribution-based and annuity-purchase fees linearly translate into reduced retirement income: a 1 per cent contribution fee reduces the ultimate retirement income by 1 per cent, as does a 1 per cent annuity-purchase fee. In contrast, asset-based fees reduce retirement savings exponentially, since they are charged repeatedly over the working career. Thus, under reasonable economic assumptions, a 1 per cent asset fee reduces individual retirement savings by about 20 per cent over a typical 40-year working career.

National supervisory authorities in nearly all Eastern European countries regularly provide second pillar performance data based on the “unit-value” concept, which measures the gross rates of return net of the asset-based fees such as management fees, performance fees, custodian fees and the like.9 This form of data hereinafter will be referred to as the “semi-net rate of return”.

The semi-net rate of return data is obviously an upwardly biased estimate of second pillar performance, given that it does not account for contribution fees and annuity-purchase fees. Fultz (2002) shows, for example, that if one takes into account contribution fees, the internal rate of return was negative in real terms for the first three years of operation of the second pillars in Hungary and Poland. However, one can argue that it is conceptually inappropriate to amortize contribution fees over short few-year horizons, given that these fees are heavily front-loaded and meant to be amortized over multi-decade working careers. Furthermore, annuity-purchase fees are currently unknown – not a single country in Eastern Europe has thus far been successful in adequately organizing the payout phase using private annuity markets. Thus, for the time being, it is not possible to

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9. A notable exception is Hungary, for which consistent and comparable data does not seem to be readily available over the 1998–2007 period. Bulgaria, Croatia, Estonia, Latvia and Lithuania regularly provide returns data for the entire second pillar industry, while FYR Macedonia, Poland, Romania and Slovakia provide returns data for individual second pillar funds which then need to be aggregated using weighted averaging.
credibly estimate second pillar rates of return net of all management fees and operational charges.

This article exclusively relies on the semi-net rate of return, as such data is conceptually unambiguous, comparable and available in all Eastern European countries. Furthermore, this data is also most often quoted in the publicly-available national reports and World Bank studies focused on Eastern Europe. One should of course bear in mind that the real performance of second pillar pensions is lower than the semi-net rate of return when consideration is given also to contribution fees and annuity-purchase fees. In particular, contribution fees in 2012 ranged from 0.8 per cent in Croatia, 1.0 per cent in Slovakia, 1.5 per cent in Lithuania, 2.5 per cent in Romania, 3.5 per cent in Poland, 4.0 per cent in FYR Macedonia to 5.0 per cent in Bulgaria. Importantly, the European Commission (Social Protection Committee, 2008) estimates that annuity-purchase fees might stand in the 5–10 per cent range when, or if, Eastern European countries develop annuity markets comparable to those in more developed economies. As a very rough approximation, amortizing the stated contribution fees and annuity-purchase fees over a 40-year working career would reduce the average semi-net rate of return by about 0.5 percentage points.

Finally, it should be firmly underlined that calculations of the (time-weighted) average rate of return over several years should not be based on simple arithmetic averaging, but on geometric averaging which will appropriately take into account the compounding effect that capital returns have on retirement savings. Given that arithmetic averages are always higher than geometric averages, an inappropriate use of arithmetic averaging creates a tangible upward bias in performance measurements. For instance, depending on the characteristics and volatility of underlying data, arithmetic averaging could overstate the true average rate of return by 0.5–1 per cent per annum, implying a 10–20 per cent overstatement of the ultimate saving accumulation at retirement age. To not mislead the general public, certain major public pension reserve funds, such as the Canada Pension Plan or Norway’s Government Pension Fund Global, present summary statistics of their long-term level of performance that are exclusively based on geometric averaging.

**Some misleading assertions**

When analysing the performance of mandatory private pension funds, World Bank data (World Bank, 2009, Table 2, p. 7; Holzmann, 2009, slide 12) for the period prior to the global financial crisis states that second pillar returns had been higher
than GDP growth in all Eastern European countries, except Latvia (Table 1). However, the results presented in these studies are questionable given that they seem to be based on significantly understated GDP growth statistics (which are not explicitly published).

Table 2 explicitly compares World Bank real rate-of-return estimates from Table 1 with official GDP growth statistics from the World Bank World Development Indicators (WDI) database. It is seen that the second pillar real rates of return are significantly lower, not higher, than GDP growth rates in all Eastern European countries, with the exception of Poland, until the end of 2007. This contrasts sharply with the results presented in World Bank (2009) and Holzmann (2009).

The World Bank assertions in Table 1, which are likely incorrect, may mislead relevant policy debates in Eastern Europe. Namely, if the results in Table 1 are taken at face value and used for policy analysis, one might conclude that reform reversals deteriorate the pension system’s long-term sustainability – which is the conclusion stressed by the World Bank (Schwarz and Arias, 2014). However, if one accepts that the results in Table 1 are flawed and that correct empirical data in Table 2 suggests $g > r$, then it is possible for reform reversals to improve the short-term fiscal position without necessarily deteriorating the long-term sustainability of the pension system.

Table 2. Second pillar rate of return since inception until end-2007 versus the real GDP growth in the same period, in per cent

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>2002</td>
<td>3.2</td>
<td>6.0</td>
<td>−2.8</td>
</tr>
<tr>
<td>Estonia</td>
<td>2002</td>
<td>4.9</td>
<td>8.0</td>
<td>−3.1</td>
</tr>
<tr>
<td>Hungary</td>
<td>1998</td>
<td>2.6</td>
<td>3.7</td>
<td>−1.1</td>
</tr>
<tr>
<td>Latvia</td>
<td>2001</td>
<td>−3.5</td>
<td>9.0</td>
<td>−12.5</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2004</td>
<td>5.7</td>
<td>8.2</td>
<td>−2.5</td>
</tr>
<tr>
<td>Poland</td>
<td>1999</td>
<td>8.9</td>
<td>4.1</td>
<td>4.8</td>
</tr>
<tr>
<td>Slovakia</td>
<td>2005</td>
<td>0.9</td>
<td>8.5</td>
<td>−7.6</td>
</tr>
</tbody>
</table>

Note: The real rate of return data is directly copied from the World Bank documents in Table 1. The author of this present article calculated the (geometric) average real GDP growth rates using the annual GDP data from the World Bank World Development Indicators database.

Sources: World Bank (2009); World Bank data compiled from national sources.

11. The WDI database <data.worldbank.org/data-catalog/world-development-indicators> (accessed in March 2015). It is noted that no tangible data revisions on GDP growth have occurred in recent years, which suggests that similar or identical GDP growth statistics were also available back in 2009 when the referenced World Bank studies were being produced.
A presentation by the then sector Director of the Social Protection and Labor Department at the World Bank, Robert Holzmann (Holzmann, 2009), was delivered at a high-level conference in Paris co-organized by the World Bank and European Commission that sought to evaluate pension reform experiences in Eastern Europe and propose future policy enhancements. It is of concern that the questionable assertions made at this conference and then published (World Bank, 2009) have not been corrected or explained in any subsequent World Bank publications. Many, if not most, of the relevant policy-makers in the countries of Eastern Europe are thus unaware of the data errors presented. Consequently, too much attention at the national level seems to have been devoted to the impacts of the global financial crisis on mandatory private pension funds, while little attention continues to be given to the inherent structural problems of pension systems that were present prior to the global crisis.

**Questionable World Bank pension data**

World Bank data problems go beyond the doubtful GDP growth comparisons discussed in the previous section. Table 3 shows that recent World Bank studies have been presenting significantly different second pillar rates of return for the same countries over identical time periods.

<table>
<thead>
<tr>
<th>Country</th>
<th>Since inception or 2002-2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>3.2 %</td>
</tr>
<tr>
<td>Croatia</td>
<td>n/a</td>
</tr>
<tr>
<td>Estonia</td>
<td>4.9 %</td>
</tr>
<tr>
<td>Hungary</td>
<td>n/a</td>
</tr>
<tr>
<td>Latvia</td>
<td>n/a</td>
</tr>
<tr>
<td>Lithuania</td>
<td>5.7 %</td>
</tr>
<tr>
<td>Macedonia, FYR</td>
<td>n/a</td>
</tr>
<tr>
<td>Poland</td>
<td>n/a</td>
</tr>
<tr>
<td>Slovakia</td>
<td>0.9 %</td>
</tr>
</tbody>
</table>

*Notes: The relevant reference period in Table 3 starts in 2002 or in the inception year in countries where the second pillar was introduced after 2002. World Bank (Price and Rudolph, 2013, Figure 3.15, p. 62) presents yet another, fourth, different source of data on realized returns that, for example, states that real returns in Estonia were 3.9 per cent in the 2002-07 period.*

*Sources: Compiled from World Bank (2009, Table 2, p. 7), Rudolph (2012, Slide 2) and Schwarz and Arias (2014, Table 4.4, p. 137).*
As shown in Table 3, when comparing the most recent World Bank study (Schwarz and Arias, 2014) and the results published in previous documents, second pillar real returns data differ significantly. Small differences of 0.1 or 0.2 percentage points could be explained with slightly different inflation data or minor methodology updates. However, the presence of more significant differences (e.g. Estonia and Lithuania) requires more detailed explanation.12

World Bank staff provided annual real returns data, as used in Schwarz and Arias, (2014) and in Rudolph (2012). These two data sets are shown in Appendix A and Appendix B. Comparing these two data sets reveals vastly different real return estimates for the same countries and for identical years. A more detailed analysis reveals the presence of significant upward biases stemming from several calculation and methodological errors that are briefly described below.

The World Bank (Schwarz and Arias, 2014) data set can be considered broadly in line with the semi-net returns data available from national supervisory authorities.13 These two data sources are not perfectly aligned, but minor differences between them are not nearly as serious as the data discrepancies in Table 3.14 Thus, one may conclude that the World Bank (Schwarz and Arias, 2014) study is based on (broadly) correct annual real returns data.

However, the summary results for the 2002–2007 and 2002–2012 periods published in World Bank (Schwarz and Arias, 2014, p. 137) are upwardly biased because they are based on arithmetic averaging instead of the appropriate geometric averaging. One can use the World Bank (Schwarz and Arias, 2014) annual real returns data presented in Appendix A to calculate the appropriate geometric averages and quantify the extent of overestimation. This exercise shows that the arithmetic averaging has overstated the true second pillar performance until end-2012 by 0.1 percentage points (pp) in Romania, 0.2 pp in Croatia, 0.3 pp in FYR Macedonia, 0.4 pp in Latvia, 0.5 pp in Poland, 0.6 pp in Bulgaria, 0.7 pp in Estonia, and 0.9 pp in Lithuania. Needless to say, these overstatements are not inconsequential.

12. In seeking to resolve these differences, the author of this present article contacted the principal authors of the referenced World Bank studies: Ms. Anita Schwarz, Mr. Heinz Rudolph and Mr. Robert Holzmann.


14. For example, the data from Polish authorities seems to indicate marginally lower returns than the World Bank (Schwarz and Arias, 2014) data. In contrast, World Bank (Schwarz and Arias, 2014) annual data seems to marginally understate annual returns in Bulgaria and the Baltic countries. However, these possible discrepancies are marginal. Overall, potential discrepancies mostly cancel each other out, and there does not seem to be any significant bias when comparing the World Bank (Schwarz and Arias, 2014) data with the annual data from national authorities.
As previously explained, overstating returns by 1 pp bolsters predicted pension accumulation during a working career significantly by roughly 20 per cent.15

It is important to state clearly that Rudolph (2012) has appropriately used geometric averaging in calculating average rate-of-return statistics. Nonetheless, the summary results until end-2007 published in Rudolph (2012) use doubtful, upwardly biased annual real returns data. Table 4 compares real returns data for Lithuania and Estonia, the two countries with the most significant discrepancies in Table 3. The (correct) World Bank (Schwarz and Arias, 2014) annual data in Appendix A is compared with the annual data used by Rudolph (2012) in Appendix B.

In Estonia, the second pillar funds offer four investment portfolios with differing levels of risk and exposure to equities. Going from the most conservative to the most aggressive portfolios, their performance is tracked with EPI-00, EPI-25, EPI-50 and EPI-75 indices.16 The overall second pillar performance is tracked with the aggregate EPI index. Appendix B shows that Rudolph (2012) used the EPI-50 index to measure the performance of the Estonian second pillar over the period 2002–2007. An explanation as to why the correct aggregate EPI index was not used is not provided. However, it is known that over the period 2002–2007 the EPI-50

<table>
<thead>
<tr>
<th>Country</th>
<th>Source of data</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>GEO. AVG</th>
<th>ART. AVG</th>
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<tr>
<td>Estonia</td>
<td>Rudolph (2012)</td>
<td>8.1</td>
<td>6.3</td>
<td>12.2</td>
<td>3.8</td>
<td>−2.3</td>
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<td></td>
<td>Schwarz and Arias (2014)</td>
<td>−1.4</td>
<td>6.5</td>
<td>5.0</td>
<td>9.6</td>
<td>2.1</td>
<td>−3.4</td>
<td>−</td>
<td>3.1</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Rudolph (2012)</td>
<td>10.5</td>
<td>10.4</td>
<td>3.2</td>
<td>0.8</td>
<td>4.0</td>
<td>5.7</td>
<td>−</td>
<td></td>
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<tr>
<td></td>
<td>Schwarz and Arias (2014)</td>
<td>7.8</td>
<td>7.6</td>
<td>0.8</td>
<td>−4.5</td>
<td>−</td>
<td>2.9</td>
<td>−</td>
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</tbody>
</table>

Note: Estonia introduced the second pillar in July 2002, but the inception year data was ignored in Rudolph (2012) calculations. Lithuania introduced the second pillar in June 2004, thus questioning the integrity of Rudolph (2012) data that assumes high second pillar returns in Lithuania in 2003. Multi-year average performance in Rudolph (2012) is calculated based on geometric averaging, while Schwarz and Arias (2014) results are based on arithmetic averaging.

Source: Data directly copied from the World Bank Excel Worksheets in Appendices A and B.

As previously explained, overstating returns by 1 pp bolsters predicted pension accumulation during a working career significantly by roughly 20 per cent.15

15. Results published in World Bank (Schwarz and Arias, 2014, p. 137) further overstate the second pillar performance due to, what appears to be, multiple copying errors. It is shown in Appendix C that the World Bank arithmetic averaging results in Appendix A are often lower than the corresponding results published in the World Bank study (Schwarz and Arias, 2014, p. 137). In particular, copying errors over the 2002–2007 period seem to have occurred in the case of Latvia (−2.0 per cent instead of −3.0 per cent), Lithuania (3.2 per cent instead of 2.9 per cent) and Slovakia (0.8 per cent instead of 0.7 per cent) and also over the 2002–2012 period in the case of Latvia (−1.3 per cent instead of −1.8 per cent), Croatia (3.2 per cent instead of 3.1 per cent) and FYR Macedonia (2.4 per cent instead of 2.0 per cent).

16. Initially there were three portfolio choices offered in Estonia; EPI-75 portfolios were introduced in 2010.
funds produced the highest returns of all EPI indices. This selective “cherry-picking” of the indices thus created tangible upward bias in the final results, which has not been disclosed or explained. Furthermore, negative real returns produced by EPI-50 funds in 2002 were ignored in Rudolph’s (2012) calculations. In total, these two sources of upward biases resulted in an overestimate of the average returns in Estonia by more than 2 percentage points.

Data for Lithuania, as used by Rudolph (2012), are also questionable and significantly upwardly biased when compared to the correct annual returns data used in a subsequent World Bank (Schwarz and Arias, 2014) report. The most obvious error in the Rudolph (2012) calculations is the inclusion of a purported second pillar real rate of return of 10.5 per cent in 2003. Of course, the second pillar in Lithuania did not exist in 2003, being introduced in 2004 (see Table 1). Consequently, the average rate of return in Lithuania was overestimated by almost 3 percentage points.17

It must be assumed that the calculation errors identified regarding Rudolph (2012) are also present in the World Bank (2009) study, because both present identical results for Lithuania and very similar results for Estonia. Given that the authors did not provide the annual input data used for compiling the World Bank (2009) results, it is not possible to explain more precisely the noted discrepancies.18

An important observation related to the stated objective of this article is that owing to a very low quality of disclosure standards it is especially difficult for most readers of these reports to identify the aforementioned data discrepancies and calculation errors. In particular, World Bank documents have been presenting average real rate-of-return estimates for 2002–2007 and 2002–2012 periods, without specifying whether summary results are based on geometric or arithmetic averaging, without disclosing input data on annual returns, and without explicitly stating whether the published results exclude all operating fees or only asset-based fees.

Providing a credible measurement of the rates of return on second pillar assets is a crucial precondition not only for an assessment of the past performance of pension privatization in Eastern Europe, but for informing decisions concerning possible future pension system developments. Several decades of operation are necessary for pension reforms to mature fully and to show their full impact.

17. A few other, less severe, errors can be found in Rudolph (2012) input data in Appendix B. For example, Latvian calculations ignore the second pillar returns in 2002 and 2003, thus producing a slightly lower average rate of return estimate than one would obtain from the official data for 2002–2007.

18. Comparisons with the data made available by the national authorities suggest that the World Bank (2009) has understated the real returns by the end of 2007 in Bulgaria and Latvia by about 1 percentage point. Despite this underestimation of the real returns, the final results on the performance of the second pillar in Bulgaria and Latvia vis-à-vis the real GDP growth are still upwardly biased – since World Bank (2009) calculations in Table 1 have understated the true GDP growth significantly more, as shown previously.
Credible long-term actuarial projections are thus one of the key inputs for developing informed and constructive pension policy debates. If the integrity of the World Bank basic data on the realized rates of return on second pillar assets can be questioned, this also puts into question the Bank’s long-term actuarial projections. This is especially so given that the technical details of the World Bank PROST model,19 which are used for making long-term pension projections, are not made publicly available for professional or public scrutiny.

**Implications for policy-making**

A number of Eastern European countries implemented partial or complete second pillar pension reform reversals over the period 2009–2013. Hungary’s reversal was the most radical, wherein the second pillar contributions and assets were prescribed to be returned to the PAYG system in 2011. Affiliates were permitted to stay in the second pillar, but at the cost of receiving significantly lower PAYG benefits from the first pillar – less than 3 per cent of affiliates opted to continue contributing to the Hungarian second pillar, which was effectively nationalized (Simonovits, 2011).

Poland implemented a similar, but less drastic, reform reversal in 2013. The second pillar contributions and assets were prescribed to be returned to the PAYG system by default. Affiliates, however, were allowed to voluntarily remain in the second pillar without having to incur any extraordinary reduction in future PAYG benefits from the first pillar. By the end of 2014, more than 80 per cent of members who had opted to return to the PAYG system. Furthermore, Poland reduced the second pillar contribution rate from 7.3 to 2.9 per cent of wages and now prohibits the second pillar funds from investing in domestic government bonds.

Slovakia also significantly scaled back the second pillar in 2012, by reducing the contribution rate from 9 per cent to 4 per cent of wages and allowing members to voluntarily opt out of the second pension pillar. Latvia and Lithuania maintained mandatory second pillar participation in 2009, but with significantly reduced contribution rates – dropping from 8 per cent to 2 per cent in Latvia and from 5.5 per cent to 2 per cent in Lithuania.20

The World Bank (Schwarz and Arias, 2014) has stated that reversing pension privatization deals with the short term at the cost of the long term, with likely

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20. Re-reforms in Latvia prescribe that the long-term second pillar contribution rate would be reduced from the initially planned 10 per cent to the revised 6 per cent of wages starting from 2016. The second pillar in Lithuania is quasi-mandatory, whereby workers can decide to opt in but cannot thereafter opt out. Besides lowering the level of contributions diverted from the PAYG system, Lithuanian re-reforms prescribe the government from matching the value of any additional voluntary contributions that second pillar affiliates make from their net take-home wages.
negative consequences for the fiscal balance and for future pension benefits. Furthermore, it concludes that the “asymmetry in the treatment of explicit and implicit debt is at the heart of the incentives for reversing pension reforms” (Schwarz and Arias, 2014, p. 146).21

From a political perspective, second pillar scaling-down no doubt represented an appealing option for Eastern European governments that were faced with the task of reducing budget deficits and complying with the European Union fiscal rules and the Stability and Growth Pact. However, it is professionally troublesome that the World Bank (Schwarz and Arias, 2014) study does not mention the existence of strong arguments in favour of the asymmetrical treatment of implicit pension debt and explicit public debt, such as presented in the seminal European Commission Economic Paper by Daniele Franco (Franco, 1995). The European Commission’s stance on the asymmetrical treatment of implicit and explicit debt is by no means an exception – this point of view is shared by many pension experts (for example, see Ortiz (2014) for the International Labour Office stance on this issue)22 who believe implicit pension debt represents a junior and more easily manageable claim on government compared to the explicit financial debt claims. Furthermore, Cuevas et al. (2008) present empirical evidence that rating agencies and financial practitioners also consider implicit pension debt less burdensome than explicit public debt when determining sovereign credit ratings and risk premiums. Even if the World Bank assessment of the reform reversal incentives were to be accepted, the professional public should nonetheless be aware of the existence of conflicting arguments in order to properly assess the causes and consequences of recent reform reversals.

From an economic perspective, the crucial issue is whether the recent reform reversals, most notably in Hungary and Poland, will weaken the pension system’s long-term sustainability. As shown in Table 3, the Hungarian second pillar was less efficient than PAYG financing during 13 years of its operation. If one assumes that a similar level of the second pillar performance would persist over the remainder of the twenty-first century, one may conclude that the closing down of the Hungarian second pillar will not negatively impact long-term sustainability. Of course,

21. Implicit pension debt statistics are meant to capture the net present value of accrued liabilities under the existing public pension system (Holzmann, Palacios and Zviniene, 2004). Calculating this estimate is challenging since it must be based on a number of assumptions, including the appropriate discount rate, whose (reasonably justified) changes can significantly change the final result. Furthermore, there are significant conceptual changes between implicit pension debt and explicit public debt statistics – one being the fact that, unlike explicit debt claims, public pension claims are not transferable and can be significantly reduced by the means of parametric reforms, without causing unrest in financial markets.

22. Due to the methodological shortcomings of the implicit pension debt statistics, the Canada Pension Plan uses a more elaborate open-group balance sheet approach in assessing long-term financial sustainability (OSFI, 2014).
it could be argued that the initial decade of operation is not representative of future potential second pillar performance, which could improve as the system matures. However, it should be pointed out that the second pillars in most of the reforming countries failed to fulfill the Samuelson-Aaron theorem of improved efficiency over PAYG financing.

Specifically, the real rate of return until end-2012 was negative in all Baltic States and Slovakia, and was barely positive in Bulgaria. In addition to their disappointing performance, the second pillar funds in most of these countries have been charging the highest management fees in Eastern Europe, which in 2012 stood at 1.5 per cent of assets in Latvia and Estonia and 1 per cent in Lithuania and Bulgaria (compared to 0.6 per cent of assets in FYR Macedonia and Romania, 0.45 per cent in Poland and Croatia and 0.3 per cent in Slovakia). Besides efficiency problems in the accumulation phase, implementing the payout phase using private market instruments is an open issue for all Eastern European countries. Presently, the first generations of second pillar pensioners are accessing lump-sum or programmed withdrawals, exposing themselves to the longevity risk of outliving their retirement saving. Lastly, pension privatization largely failed to provide the anticipated economic benefits for national economies, such as increased contributor coverage or improved rates of national saving. All these developments provide an economic basis for (re)considering the trade-off between maintaining second pillar pensions and considering partial or complete reform reversals.

The performance of the Polish second pillar would appear to be a major positive outlier. However, the high real rates of return observed in Poland have been predominantly driven by the fact that most of the second pillar assets (about 60 per cent) were invested in high yielding Polish government bonds – which were issued in the first instance to finance the transition costs created by the diversion of contributions from the PAYG system to the second pillar. One can argue that these circular transactions constitute “disguised PAYG financing” and that this is inferior to traditional PAYG financing because of the hefty management fees charged by private pension funds. Another drawback of disguised PAYG financing is the aforementioned increase in public debt, which could be treated less favourably by the financial markets than the corresponding decrease in the implicit pension debt.

Indeed, a potential weakness of disguised PAYG financing is seen most clearly in the case of Poland, which also operates a notional defined contribution (NDC)

23. Geometric averaging of World Bank (Schwarz and Arias, 2014) input data in Appendix C suggests a negative real rate of return of ~0.1 per cent for Bulgaria as well. However, official data from the Bulgarian authorities is slightly higher and suggests the average semi-net real return was +0.5 per cent until end-2012.

24. Diamond and Orszag (2005) identify longevity insurance as one of the main goals of national pension systems. The Polish partial reform reversal prescribes the payout phase to be organized by the government. A similar approach was being contemplated in Hungary before the second pillar was terminated in 2011.
first pension pillar.\textsuperscript{25} If contributions had not been initially diverted to the second pillar, but had remained in the PAYG system, Polish beneficiaries could have earned a notional rate of return on their first pillar NDC accounts that was about 0.5 percentage points higher than that which they have been earning on their second pillar defined contribution accounts.\textsuperscript{26} The Polish reform reversal in 2013 was thus aimed squarely at eliminating the use of disguised PAYG financing and replacing it with (NDC) PAYG financing.

It is difficult to see how the Polish example of reform reversal might deteriorate long-term pension sustainability. Replacing the disguised PAYG financing with traditional PAYG financing eliminates the burden of second pillar fees, thus allowing an increase in beneficiaries pensions (if the NDC rate of return is appropriately increased), an improvement in the tax wedge\textsuperscript{27} on labour (if the pension contribution rate is appropriately decreased), or an improvement in the long-term sustainability of the pension system (if neither benefits are increased nor the contribution rate decreased). Thus, even if one were to accept the World Bank (Schwarz and Arias, 2014) argument that implicit pension debt and explicit public debt should be treated symmetrically, the Polish reform reversal can still be presented as a welfare improving change that should not negatively impact the long-term sustainability of the pension system.

Disguised PAYG financing is a salient feature of pension privatization in many Eastern European countries, given that domestic government bonds account for about 60 per cent of second pillar assets in Croatia, FYR Macedonia, Romania and Slovakia. It should be noted that disguised PAYG financing is potentially suboptimal not only in countries running an NDC first pension pillar, but applies to all instances of carve-out pension privatizations. This is deemed to be so because NDC systems, point systems and traditional defined benefit systems are basically equivalent forms of PAYG financing (Whitehouse, 2006). When disguised PAYG financing is predominant in second pillar operations, the fulfilment of the Samuelson-Aaron theorem does not necessarily imply the improved performance of the entire pension system.

For example, second pillar funds in both Hungary and Poland had been investing about 60 per cent of their assets in domestic government bonds. Impavido and Rocha (2006) show that the returns in Hungary were lower predominantly due to lower sovereign spreads and lower real yields on its government bonds; for instance, 3.9 per cent real yield on its government bonds compared to 8.1 per cent

\textsuperscript{25} An NDC scheme is a type of PAYG scheme that mirrors the functioning of private fully-funded defined contribution pension funds.
\textsuperscript{26} Asset-based second pillar fees in Poland averaged close to 0.5 per cent in the first decade of operation.
\textsuperscript{27} The tax wedge refers to the difference between before-tax and after-tax wages and thus measures government income as a result of taxing labour.
on Polish government bonds. However, one could hardly argue that the pension privatization in Poland was more successful than in Hungary solely based on lower credit ratings and correspondingly higher yields on Polish government bonds. Similarly, we could compare the apparently high second pillar returns in Romania since 2008 (due to its low credit rating and correspondingly high yield on its government bonds) with the low real rate of return in Slovakia (owing to the relatively low yield on its government bonds).

One may argue that differences in real rates of return steaming from different yields on domestic government bonds do not constitute improved pension performance, but merely a different form of PAYG financing whereby current workers are paying relatively higher/lower taxes to finance correspondingly higher/lower returns paid into their second pillar accounts. It is thus important to devote greater research effort to determine clearly the welfare and long-term consequences of, for example, the Polish reform reversal, since such findings – and the accompanying data set – could inform policy-making in other countries in the region.

**Possible remedies**

The World Bank has a professional and public responsibility to provide credible pension data, not least because many researchers use its data as inputs into their own research and because, in Eastern Europe particularly, it was heavily involved in the pension privatization process from the outset. To this end, the World Bank’s Social Protection and Labor Department should fully disclose the relevant information required to help explain the data problems identified in this article. Corrected and appropriate data has the power to significantly influence the policy assessments of recent reform reversals in some Eastern European countries.

Moreover, it would be desirable for the disclosure standards of future World Bank publications to be significantly improved, in line with best professional practices. In particular, the professional public should be unambiguously informed as regards whether published results are based on geometric averaging or arithmetic averaging, and an explanation provided concerning the distinction between the two approaches. When stating that results “exclude fees charged by pension fund management companies” (Schwarz and Arias, 2014, Table 4.4, p. 137), it should be made clear that World Bank calculations exclude only asset-based fees, but do not account for contribution fees, which are quite sizeable in some countries (for example, 5 per cent in Bulgaria and 4 per cent in FYR Macedonia). When debating

28. Government bonds have represented a crucial investment asset for private pension funds in more developed economies for decades. However, it should be noted that the context of mandatory carve-out pension privatization in Eastern Europe is significantly different from the development of voluntary private pension funds to supplement public pension incomes in more developed economies.
topics that often incite opposing positions, such as the treatment of implicit pension debt, it would be useful if World Bank studies provided at least basic references to alternative professional points of view in order for readers and policymakers to be made aware of possible conflicting arguments.

It would also be helpful if the World Bank’s Social Protection and Labor Department could publish original input data and introduce more elaborate verification procedures to ensure the integrity of published results. Of course, errors or oversights can always occur, but the multiple data problems identified in this article indicate a rather low level of data integrity and a lack of adherence to actuarial standards. For example, actuarial practices require the disclosure of any major methodological revisions – something that was not observed when the entire input data set on annual returns was changed during the compilation of World Bank (Schwarz and Arias, 2014) results.

Lastly, the fact that an obvious error – such as the understated GDP growth data – went unnoticed for a number of years, testifies to the pronounced lack of adequate pension research and policy debate in Eastern Europe. Drahokoupil and Domonkos (2012) state that “myths” regarding the virtues of pension privatization dominated the public policy discussion at the time of initial reforms and that the potential drawbacks, including the need to finance significant multi-decade transition costs, were not properly analysed or discussed.29 Such mistakes need not be repeated. Much more research effort and professional debate, both at the national and European level, should thus be undertaken in order to properly analyse the consequences of the recent reform reversals and identify the most feasible reform steps in the coming period.

Concluding remarks

This article has argued the need for a more elaborate and transparent approach to the collation, comparative analysis and reporting of data for second pillar pension systems. Such an improved approach would help establish a consensus regarding what should be a robust basis for making credible policy recommendations. A key motivation for this argument can be traced to the identification of data errors and inconsistencies, which have the potential to influence important policy decisions regarding national pension systems.

As a first step, the doubtful and inconsistent data issues identified in this article should be clearly explained and corrected. The underlying reasons for second pillar systems in many countries failing to fulfil the Samuelson-Aaron theorem (that returns should be tangibly higher than the GDP growth), even before the global

29. In contrast, much more elaborate analyses seem to have been present in Western Europe where arguments against mandatory pension privatization prevailed, despite the fact that Bismarck-style public PAYG systems were prevalent in both parts of the continent.
financial crisis, should be thoroughly investigated and analysed. The low real returns achieved in the Baltic States, Bulgaria and Slovakia are particularly challenging. In contrast to that which was anticipated at the time of pension privatization, these returns cannot possibly provide an adequate accumulation of savings for retirement. If future enhancements of the second pillar operations are unlikely to enable them to tangibly outperform GDP growth then a complete reform reversal, as undertaken in Hungary, or a partial second pillar scaling-down as seen in Slovakia and Latvia, can act to improve the short-term fiscal balance without weakening the long-term sustainability of the pension system.

A salient feature of pension privatization in Eastern Europe is the fact that the second pillars in Croatia, FYR Macedonia, Poland, Romania and Slovakia have been investing a significant share of their assets in domestic government bonds – which were issued in the first instance to finance pension privatization transition costs. These circular transactions constitute a disguised PAYG financing mechanism that increases the public debt and potentially reduces participants’ welfare due to significantly higher second pillar operating costs compared to traditional PAYG financing. A careful analysis is thus called for in the case of the Polish reform reversal in order to determine whether eliminating disguised PAYG financing and replacing it with (NDC) PAYG financing deteriorates or improves pension system sustainability.

The economic, social and political viability of second pillar pensions in Eastern Europe, and possibly elsewhere, will crucially depend on successfully addressing the aforementioned inefficiencies and drawbacks. The ability to do so is linked tightly to developing a more elaborate and transparent approach to the collation, comparative analysis and reporting of second pillar pension data. More generally, more robust data will contribute to policy-maker efforts to avoid suboptimal pension system design.

Bibliography


A call for more elaborate and transparent pension data to inform policy-making


A call for more elaborate and transparent pension data to inform policy-making


Appendix

Appendix A. Annual real returns, Excel input data used in Schwarz and Arias (2014)

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Note: The data presented in Appendix A has been copied directly from the World Bank Excel Worksheets, without any editing.

Appendix B. Annual real returns, Excel input data used in Rudolph (2012)

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<td>5.37</td>
<td>−3.5</td>
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<tr>
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<td>10.4</td>
<td>3.2</td>
<td>0.8</td>
<td>4.0</td>
<td>−26.5</td>
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<tr>
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<td>1.95</td>
<td>−12.91</td>
<td>13.26</td>
<td>1.12</td>
<td>2.5</td>
<td></td>
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<td></td>
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<tr>
<td>Romania</td>
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<tr>
<td>Slovakia</td>
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<td>1.02</td>
<td>−15.33</td>
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<tr>
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<td>−0.88</td>
<td>3.75</td>
<td>2.6</td>
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</tbody>
</table>

Note: The data in Appendix B has been copied directly from the World Bank Excel Worksheets, without any editing.
Appendix C. Differentiating between two sources of upward bias in World Bank results, the arithmetic averaging and “copying errors”

<table>
<thead>
<tr>
<th>Country</th>
<th>Since inception or 2002 to 2007</th>
<th>Since inception or 2002 to 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Results published in World Bank</td>
<td>Arithmetic averages in World Bank Excel file (Appendix A)</td>
</tr>
<tr>
<td>Estonia</td>
<td>3.1</td>
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</tr>
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<tr>
<td>Lithuania</td>
<td>3.2</td>
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</tr>
<tr>
<td>Poland</td>
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<td>10.8</td>
</tr>
<tr>
<td>Slovakia</td>
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<td>0.7</td>
</tr>
<tr>
<td>Hungary</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td>Romania</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>4.0</td>
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<tr>
<td>Croatia</td>
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<td>5.0</td>
</tr>
<tr>
<td>Macedonia (FYR)</td>
<td>2.6</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Notes: Relevant reference period in Appendix C starts in 2002 or in the inception year in countries where second pillar has been introduced after 2002. Arithmetic average rates of return are copied from Table 4.4 of Schwarz and Arias (2014, p. 137) and the corresponding World Bank internal Excel Worksheet provided by Heinz Rudolph. The geometric average rates of return have been calculated by the author of this present article based on the real returns data in Appendix A. Geometric averaging does not correct for cases where the second pillar inception occurred in mid-year since these corrections were not included in the original World Bank arithmetic averaging calculations.
Longevity insurance annuities: 
China adopts a benefit 
innovation from the past

Tianhong Chen and John A. Turner

Wuhan University, Wuhan, China; Pension Policy Center, 
Washington, DC, United States

Abstract  Longevity insurance annuities are deferred annui-
ties that begin payment at advanced older ages, such as at age 80. Such annuities would benefit some older retirees who have drawn down their savings, but the private sector has problems in providing them. Originally, social insurance old-age benefits programmes in some countries were structured as longevity insurance programmes, with 50 per cent or less of those entering the workforce surviving to receive the benefits. Over time, however, as life expectancy has improved, the benefits these programmes provide have slowly transformed into benefits that most people entering the workforce ultimately receive. This article argues that the reintroduction of longevity insurance benefits as part of social insurance old-age benefit programmes could be an important policy innovation, in particular because this benefit is generally not provided by the private sector. China has introduced longevity insurance benefits as part of its social insurance system, offering a model for other countries, particularly those providing modest social insurance old-age benefits.

Keywords  annuity, old age risk, old age benefit, China

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Introduction

Longevity insurance is one way to address the income needs of older people who have lived longer than they expected and have depleted their retirement savings other than their social insurance old-age benefit. While all annuities provide retirees with a degree of longevity insurance, in recent years the term longevity insurance has been used to refer to a particular type of deferred annuity. Longevity insurance is a deferred annuity that starts at an advanced age, such as at age 80. Longevity insurance annuities, an idea advanced by Milevsky (2005), provide insurance against outliving one’s assets, but only when that risk becomes substantial at an advanced age.

Given that longevity insurance annuities provide insurance against the depletion of savings at advanced ages, they have attracted interest recently as an important innovation in the way retirement income is provided. For example, President Obama of the United States, in his proposals for the 2014 budget included a type of longevity insurance benefit for the public old-age pension programme (Social Security) that would be designed to offset at older ages some of the benefit reductions caused by introducing a less generous method of indexing (a chained Consumer Price Index) for adjusting Social Security benefits in payment (Sullivan, 2013). This proposed benefit would start at age 76, would be phased in for each recipient over a 10-year period, and when phased in would provide a benefit equal to about a 5 per cent increase in Social Security benefits.

The United Kingdom has experience with the private-sector provision of longevity insurance annuities. The United Kingdom lifetime annuity market accounts for more than half of the global annuity market. Around 500,000 annuities have been purchased annually at a cost of GBP 12 billion (approx. USD 18.2 billion in January 2015), mainly as a result of the previously effective requirement to buy life annuities as part of defined contribution pension plans’ provision of annuities (Blake, Boardman and Cairns, 2013); the effective requirement to buy annuities has recently ended (Thurley, 2014). While longevity insurance annuities were once offered, currently no life insurance company in the United Kingdom provides longevity insurance annuities to individuals.

Elderly well-being is framed not only by pension income, but also by social services and other income sources (public and private). This wider framing is relevant when considering the design and scope of necessary reforms of national social security systems. For example, to some extent longevity insurance annuities and long-term care insurance may be substitutes, in that both are targeted toward people at advanced ages, though with different criteria for receipt. Within this wider framework, we argue that annuities provided through social insurance programmes that begin payment at advanced ages, such as at age 80 or older, are a cost
efficient, targeted way of improving the income protection provided by those programmes.

This article begins by explaining how longevity insurance annuities work and investigates their role in the early history of social insurance in different countries. The reasons why longevity insurance annuities would be desirable for some retirees is discussed. The article considers factors affecting the supply of longevity insurance annuities through the private sector, discussing reasons why the private sector has difficulties providing this type of benefit. Given the failure generally of the market to provide these annuities, it then discusses the advantages that government has over the private sector in providing longevity insurance annuities. Attention is then directed to the longevity insurance programme in China. A concluding section offers a brief summary of the reasons why longevity insurance benefits are generally not provided through the private sector and why it is desirable for social insurance old-age benefits programmes to provide them, as is done in China.

The role of longevity insurance in the early history of social insurance old-age benefits programmes

While all annuities provide insurance against outliving ones resources, longevity insurance annuities differ from most annuities in that they are deferred annuities that begin payment at an advanced age. Longevity insurance annuities currently begin payment at age 80 or older, compared to the annuities of most social insurance programmes that begin payment when people are aged in their early or middle 60s. In earlier time periods, however, with people having shorter life expectancies, the start age for a benefit to be considered to be a longevity insurance benefit would be younger than now. Generally, a longevity insurance benefit can be defined as a benefit that is payable to a population cohort who entered the workforce in the same year and that starts to be paid out when the cohort reaches an advanced age and a substantial proportion of the cohort would be expected to have died.

Longevity insurance benefits can be provided in two main ways: through government-run social insurance programmes or, at least in principle, through the private sector. Access can be voluntary, means tested or they can be made available to all older persons. The financing mechanism can be contributory or non-contributory and benefits can be flat-rate or related to earnings or contributions.

Social insurance old-age benefit programmes in a number of countries were initially designed as longevity insurance programmes. By this we mean that the benefits they provided were not paid to most insured workers, as is commonly thought of today for old-age social insurance programmes, but only paid at relatively advanced ages, with relatively few workers surviving to those ages to receive them. A likely motivation for this requirement for benefit receipt was to keep down
the cost of these programmes. Thus, while social insurance old-age benefit programmes now are generally considered as providing income replacement at older ages for most people who enter the workforce, originally social insurance old-age benefit programmes were designed with a different purpose. They were designed to provide benefits to a relatively small part of the workforce who survived to advanced older ages.

Over subsequent decades and owing to the increase in life expectancy and decreases in benefit eligibility ages, these programmes have gradually shifted to become social insurance retirement benefit programmes in the modern sense. Thus, using modern terminology, it appears that the meaning of social insurance programmes has also shifted: from referring to longevity insurance programmes to referring to broad-based social insurance or income replacement programmes.

Longevity insurance benefits are not designed primarily as wage replacement benefits or for the purpose of income redistribution, but rather as a form of insurance against the depletion of savings in advanced old age. Thus, we argue that the common perception of pioneering pension system legislation, starting in Germany, as being designed to “emphasize wage replacement for each worker in his or her retirement, rather than income redistribution among workers” (Capretta, 2007, for example) is historically inaccurate. We would argue that the German legislation was designed primarily as a longevity insurance programme for those at advanced older ages, albeit with benefit levels based on previous wages.

We now present a convenience sample (i.e. nonrandom sample) survey of countries that began their old-age social insurance programmes as programmes that we would now call longevity insurance programmes. This survey is not meant to be representative of any group of countries, but seeks rather to provide examples to illustrate the role of longevity insurance annuities in the early history of social insurance old-age benefits. Table 1 summarizes some the main findings of this section.

Convenience sample of countries

Germany. The original concept of social insurance used in Chancellor Bismarck’s Germany was a longevity insurance benefit that provided benefits related to prior earnings. Introduced in 1889, the benefit was made available at age 70. While life tables are not available for the cohort reaching age 70 that year, less than half the population entering the workforce survived to that age.

Ireland and the United Kingdom. When the means-tested old-age pension was introduced in Great Britain and Ireland in 1908, the retirement age was 70. In 1911, the life expectancy at birth for males was about age 50 (Office for National Statistics, 2012). When the Basic State Pension was introduced in the United
Kingdom of Great Britain and Northern Ireland in 1946, the benefit eligibility age was age 65 for men (age 60 for women) (Capretta, 2007). When a social insurance Old Age (Contributory) Pension was introduced in the Republic of Ireland in 1961, the retirement age was set at 70 and it remained unchanged until the 1970s.

Sweden. When a universal old-age pension was established in Sweden in 1913, the benefit eligibility age was 67 (Harrysson and Edebalk, 2010).

Canada. Canada first enacted a public means-tested pension in 1927, with eligibility for benefit set at age 70. Life expectancy at birth in 1920 for males was 59 years (Statistics Canada, 2012). The means test was eliminated in 1951, but the eligibility age remained age 70 until 1965, when it was reduced to age 65 (Capretta, 2007).

Norway. In 1936, the Norwegian benefit eligibility age was 70.

United States. In 1940, when benefits were first provided in the United States, benefit eligibility was set at age 65. Taking into account that people entered the workforce at earlier ages than currently, from United States life tables for 1910 for the population aged 18 that year, 54 per cent of the population would still be alive at age 65 (Glover, 1921).

Over time, three changes have fundamentally altered the nature of the old-age benefits provided in many countries. First, initial benefit eligibility ages have been lowered, for example to age 62 in the United States. Second, life expectancy has increased. Third, the average age at which workers enter the labour force has increased. With these three changes, for instance, the United States Social Security programme has transitioned from a longevity insurance programme to one

<table>
<thead>
<tr>
<th>Country</th>
<th>Year programme established</th>
<th>Eligibility age</th>
<th>Life expectancy at birth, males, circa 1900*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1889</td>
<td>70</td>
<td>43.8</td>
</tr>
<tr>
<td>Great Britain and Ireland</td>
<td>1908</td>
<td>70</td>
<td>46.4</td>
</tr>
<tr>
<td>Sweden</td>
<td>1913</td>
<td>67</td>
<td>52.8</td>
</tr>
<tr>
<td>Canada</td>
<td>1927</td>
<td>70</td>
<td>Life expectancy at birth, 59 years for males; in 1920</td>
</tr>
<tr>
<td>Norway</td>
<td>1936</td>
<td>70</td>
<td>52.3</td>
</tr>
<tr>
<td>United States</td>
<td>1940</td>
<td>65</td>
<td>48.3</td>
</tr>
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</table>

Sources: See text. For *, see Kinsella and Velkoff (2001).
providing old-age benefits for a substantial proportion of the population that entered the workforce in their youth. Now, 87.8 per cent of those aged 20 survive to age 62. In turn, to separate out the effect of an earlier start age into the workforce, the percentage of those aged 18 who survive to age 65 is 81.1 per cent (Arias, 2014). This suggests that most of the difference in survivorship to retirement is due to improvements in life expectancy.

Thus, in a number of countries, social insurance old-age benefits were first structured as longevity insurance benefits – more than half of the population who entered the workforce at the time of the programme’s implementation would have died before reaching the age of entitlement to benefits. In all the countries considered here, social insurance “old-age” benefits programmes have become a “retirement” benefit in that roughly 90 per cent or more of people entering the workforce survive to reach the qualifying age to receive the benefit.

The more recent movement in a number of countries to raise the age of eligibility for social insurance old-age benefits (Turner, 2007) has occurred in part because of improvements in life expectancy, though more broadly these have been made necessary by the effect of increased life expectancy on the old-age dependency ratio. Increases in the age of eligibility, however, have not been sufficient to alter the nature of these programmes – most workers still survive to receive benefits.

Factors affecting the demand by workers and the supply by private-sector insurance companies of longevity insurance annuities

This section first analyzes the factors affecting the demand for longevity insurance annuities. It then examines the reasons to explain why there is only limited private-sector provision of longevity insurance annuities.

Factors affecting the demand by workers for longevity insurance annuities

Unless they choose some type of annuity, retirees may face the difficult challenge of managing the drawdown of their assets over a retirement period of uncertain length. With a longevity insurance annuity, the planning problem is greatly simplified. Instead of planning for an uncertain period, participants can plan for a fixed period – from the date of their retirement to the date at which they start receiving the longevity insurance benefit (should they survive to that age). Longevity insurance changes the planning problem from one with an uncertain end point (date of death) to one with a certain end point (the date at which longevity insurance begins providing benefits).
Webb, Gong and Sun (2010) estimate that for a relatively small amount – 15 per cent of pension wealth – retirees could maintain level income throughout retirement by purchasing, at age 60, longevity insurance providing for payments beginning at age 85. Longevity insurance annuities allow individuals to purchase an annuity without giving up a relatively large sum of money, which many retirees are reluctant to do. Scott, Watson and Hu (2007), using a multi-period model of utility maximization, find that an annuity budget of 6 per cent of retiree wealth invested in a deferred annuity improves a retiree’s welfare by as much as a budget of 39 per cent invested in an immediate annuity.

Factors affecting the supply by the private sector of longevity insurance

This section considers the provision of longevity insurance annuities by private-sector life insurance companies in various countries and indicates problems the sector faces in providing longevity insurance. The ensuing section presents, by comparison, reasons why it is desirable that longevity insurance be provided through a government programme.

United Kingdom. More than half the annuities sold worldwide in recent years have been sold in the United Kingdom (Singleton, Thomsen and Yiasoumi, 2010). However, recent changes in law are expected to greatly reduce the number sold in future. Nonetheless, though annuities are sold in the United States and in other countries, the United Kingdom is home to the world’s best developed annuity market. At one time, longevity insurance annuities, referred to as deferred annuities, were sold in the United Kingdom, but this is no longer the case. Currently, no life insurance company in the United Kingdom offers this type of annuity to individuals (Blake and Turner, 2014).

In the European Union, a new regulatory regime affecting life insurance companies, Solvency II, is due to be introduced in 2016, but may already be affecting the provision of annuities. The current Solvency II proposals, if adopted, will require insurers to hold significant additional capital to back their annuity liabilities if longevity risk cannot be hedged effectively.

Providers of annuities face the problem that no assets currently available have returns that are correlated with aggregate or systemic longevity risk, which is the risk that, on average, the older population will live longer than expected. For this reason, Solvency II requires that life insurers providing deferred annuities hold reserves substantially in excess of expected costs to back these annuities. This requirement is to ensure that the insurers will have adequate resources to provide the promised benefits if life expectancy improves more than expected (i.e. by more than the best estimate) in the future. This requirement has raised the cost of
providing deferred annuities to the point that life insurance companies no longer offer them to individuals in the United Kingdom. Presumably, they believe demand would be insufficient at the prices they must charge to cover their reserve costs (Blake and Turner, 2014).

**United States.** Most United States life insurance companies do not offer longevity insurance annuities. As stated, longevity insurance annuities are a type of deferred annuity. Examples of companies that do are Symetra, which began selling longevity insurance annuities in 2008, and Northwestern Mutual, which began in 2011 (Tergesen, 2012). Recently, however, an increasing number of companies have started offering deferred annuities. Five companies began offering deferred annuities in 2013, and by midyear 2014 an additional three companies began offering them (LIMRA, 2014). New York Life is the largest seller of this type of annuity in the United States. In 2011, it launched its Guaranteed Future Income Annuity (New York Life, 2011). This annuity product provides deferred annuities that start at retirement ages, such as age 62, but it can also be used to provide a longevity insurance annuity starting, for example, at age 85. However, only 4 per cent of the people making purchases outside of pension plans of these annuities through New York Life purchase an annuity that is solely a longevity insurance annuity. Most purchase such annuities that also provide death benefits (New York Life, 2012).

A private-sector, consumer-oriented organization and publication, *Consumer Reports*, surveyed five life insurance companies in the United States and found that the longevity insurance benefits for a hypothetical man aged 65, collecting benefits at age 85, varied considerably (Fichera, 2013). For a purchase of USD 100,000, the benefits ranged from USD 36,305 to USD 62,950; with the most generous benefit being 74 per cent higher than the lowest. This large range suggests that the market for longevity insurance annuities is not functioning well.

Annuities provided through employer-provided retirement plans in the United States and the European Union must calculate benefits on a unisex basis. Owing to the longer longevity of women than men, annuities provided outside of pension plans are generally provided on a gender-specific basis in the United States. Thus, employer-sponsored pension plans are required to use the same mortality rates for men and women, despite the fact that women at typical retirement ages, on average, live about three years longer than men (in the United States) (Arias, 2014).

The gender difference in life expectancy is considerably greater at older ages. The United States life tables for 2009 show that women age 62 are 35 per cent more likely than men of the same age to survive to age 85 (Arias, 2014). At age 85, women’s life expectancy is 17 per cent longer than that of men. Thus, when priced using gender-based mortality rates, women’s single life longevity insurance annuities purchased at age 62 and beginning payments at age 85 would cost considerably
more than those for men, perhaps as much as 50 per cent more. Thus unisex longevity insurance annuities provided by pension plans would not be a good deal for men (Turner and McCarthy, 2013).

Problems with the provision of longevity insurance annuities by the private sector, when compared to universal provision through social insurance old-age benefit programmes, also include the issue of adverse selection, in that longevity insurance annuities, presumably, would only be purchased by people with really long life expectancies. Also, potential purchasers may be concerned with the risk of life insurance company insolvency over a long time period, with government reinsurance not providing adequate protection; a concern, however, that may be overstated by potential purchasers. New York Life (2012) in the United States expressed the opinion that pure longevity insurance annuities would have limited appeal, but that those annuities combined with another benefit payment feature, in particular a death benefit, would be marketable. While such a benefit would reduce the annuity income provided by the annuity, it would nonetheless provide some longevity insurance benefits.

**Longevity insurance annuities provided by government**

From an economics perspective, the argument that the government should provide a benefit must be based in part on the conclusion that the private sector cannot provide such a benefit on equally favourable terms. The government has several advantages over the private sector in providing longevity insurance annuities.

First, it is able to limit its liability against the possibility of an unexpected improvement in life expectancy by indexing to life-expectancy improvements the age of eligibility for benefit receipt or the amount of benefits received at fixed ages. Such indexing is done, for example, in Sweden with its Notional Defined Contribution plan. While the private sector could do this prospectively for new clients, the government is able to do this for people nearing the age of entitlement for the benefit. For example, adjustments to benefit generosity are made at retirement age in Sweden for immediate annuities received at traditional retirement ages. Since this adjustment is known in advance, and it is made in small increments, it involves little risk or uncertainty for participants. The private sector could hedge against improvements in life expectancy by providing annuities whose generosity depended in part on changes in life expectancy.

Second, the government has a hedge against the liability stemming from unexpectedly large improvements in life expectancy to the extent that people work longer (and pay more taxes) due to improvements in health at older ages or as a
result of the raising of the eligibility age for social insurance old-age benefits. Currently, there is no asset for the private sector to invest in that provides a full hedge against unexpected improvements in life expectancy. The government would also have increased liabilities for traditional social insurance old-age benefits because of improvements in life expectancy, but those could also be dealt with, in principle, by raising the early retirement age and the normal retirement age.

Third, the government does not have to deal with adverse selection because it provides the benefit to a pre-selected group. In the private sector, insurance companies would provide longevity insurance to people who self-select, in part based on their subjective expectation of long life expectancy.

Longevity insurance benefits are provided by governments in a few countries. Ireland pays an additional benefit of EUR 10 a month (approx. USD 140 a year, based on January 2015 exchange rates) at age 80 (the Age 80 Allowance), which is automatically received by persons receiving Irish social insurance old-age pensions once they turn age 80. Italy has a special supplement for low-income persons aged 75 or older (MISSOC, 2001). The Riester pensions in Germany are voluntary defined contribution plans that were enabled by a 2001 reform, taking effect in 2002. They require that at retirement the participant purchases an annuity that begins payment by age 85 (Börsch-Supan and Wilke, 2005). Thus, the Riester pension can be used as a longevity insurance annuity, but it is not specifically designed that way because benefits can start at considerably earlier ages. The Isle of Man provides an Old Person’s Pension that begins at age 80. The pension is “pension-tested,” meaning that qualification is based on receiving less than 60 per cent of the basic state pension (SSA, 2014). The Ukraine provides an old-age caregiving allowance for people that are caring for someone aged 80 or older, thus providing government assistance to benefit the older population. Some countries offer tax-financed solidarity allowances, such as Portugal, that are paid at a higher rate for the elderly.

In some countries in Europe, such as the Netherlands, most people receive old-age benefits that are generous by international standards. In these countries, people can expect to receive adequate income in advanced older ages. A longevity insurance annuity is primarily desirable in countries, such as the United States and Ireland, where social insurance old-age benefits are relatively modest, and people risk running out of other sources of retirement income at advanced older ages.

Longevity insurance annuities in China

This section discusses the provision of longevity insurance benefits for older persons through government programmes in China. These programmes provide a possible model for other countries.
Background

In China, life expectancy has improved dramatically. According to United Nations’ data, for the period 1950 to 1955, life expectancy at birth for males and females was 39.3 and 42.3 years, respectively. In the period from 2010 to 2015, life expectancy at birth for males and females is estimated to be 74.0 and 76.6, respectively (ESA, 2012). By the end of the period 2030 to 2035, life expectancy for males and females is predicted to increase to 76.8 and 79.4 years, respectively (ESA, 2012).

An old-age allowance first formally provided in China in Ningxia Province

Though in some cities in China an old-age allowance has been provided for those aged 90 or 100, Ningxia Province has taken the lead in providing an old-age allowance in the whole province and provides monthly benefits for those aged 80 or older. In May 2009, Ningxia first started to provide the old-age allowance for those aged 80 or older in rural areas and for those aged 80 or older with low income in urban areas. Thus, in urban areas, the old-age allowance is a means-tested programme; only those aged 80 or older in a family with per capita income lower than 150 per cent of the minimum living standard are qualified for an old-age allowance. By the end of 2013, about 33,000 people received the old-age allowance in Ningxia. Provincial, municipal and county governments share the financial expenditures for old-age allowance benefits.

Old-age allowance benefits have been increased in Ningxia several times and are paid at different rates in rural and urban areas. In 2009, the level of the old-age allowance was related to the local area minimum living standard, with the benefit for those aged 80 to 89 equal to the local minimum living standard; and the benefit for those aged 90 to 99 equal to 130 per cent of the local minimum living standard. The average benefit level of the old-age allowance for beneficiaries aged 80 to 89 was CNY 182 (approx. USD 29.30 in January 2015) per month in urban areas and CNY 59 (USD 9.50) per month in rural areas (Xinhuanet, 2009). For those aged 100 or older, the benefit level of the old-age allowance was CNY 300 (USD 48.30) per month in rural and urban areas. In 2011 and 2013, the old-age allowance benefit levels were increased (Table 2). The benefit levels are regulated by the provincial government, but the county or district government can increase the benefit level according to the financial ability of those governments to do so.
Since 2009, more cities in China have started to establish old-age allowance programmes. In 2006, only 2.34 million people were receiving the old-age allowance, but by the end of 2010, 5.76 million people were in receipt. From 2006 to 2010, the percentage of the population aged 80 or older receiving old-age allowance benefits increased from 12.93 per cent to 27.04 per cent (Table 3). In 2011, 14 provinces started to provide the old-age allowance.

After Ningxia Province provided the old-age allowance in 2009, the Chinese Ministry of Civil Affairs adopted the goal to provide a nationally unified monthly old-age allowance for those aged 80 or older, but thus far no uniform regulation has been established. Variations in benefit level are common.

### Table 2. Old-age allowance benefit level in Ningxia Province, by age range, years 2009, 2011 and 2013 (monthly amounts in CNY)

<table>
<thead>
<tr>
<th>Age</th>
<th>2009</th>
<th>2011</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>80–89</td>
<td>Local minimum living standard</td>
<td>255 in urban areas; 110 in rural areas</td>
<td>300 in urban areas; 150 in rural areas</td>
</tr>
<tr>
<td>90–99</td>
<td>130% of local minimum living standard</td>
<td>300 in urban areas; 150 in rural areas</td>
<td>350 in urban and rural areas</td>
</tr>
<tr>
<td>100+</td>
<td>300</td>
<td>350 in urban and rural areas</td>
<td>350 in urban and rural areas</td>
</tr>
</tbody>
</table>


### Table 3. Beneficiaries of the old-age allowance in China, 2006–2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Old-age allowance beneficiaries (million)</th>
<th>Population aged 80 or older (million)</th>
<th>Population aged 80 or older who are beneficiaries (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2.34</td>
<td>18.06</td>
<td>12.93</td>
</tr>
<tr>
<td>2007</td>
<td>2.47</td>
<td>19.06</td>
<td>12.96</td>
</tr>
<tr>
<td>2008</td>
<td>3.49</td>
<td>20.22</td>
<td>17.27</td>
</tr>
<tr>
<td>2009</td>
<td>4.31</td>
<td>20.69</td>
<td>20.83</td>
</tr>
<tr>
<td>2010</td>
<td>5.76</td>
<td>21.32</td>
<td>27.04</td>
</tr>
</tbody>
</table>

Note: Before 2009, some cities provided an old-age allowance for those aged 90 or older or aged 100 or older. Accordingly, data from 2006 to 2008 are mainly about these groups.

Variations in the eligibility age for the old-age allowance. When old-age allowance programmes were established, the eligibility age for benefits differed among cities. In some cities, only those aged 90 or older or aged 100 or older were eligible. For instance, in 2009, when the old-age allowance programme was established in Beijing, only those aged 90 or older were eligible for benefits. However, currently in most counties and cities, the old-age allowance is provided for residents aged 80 or older who have registration for the area in which they live.

Means-tested or universal programme. In most cities, the old-age allowance is means tested and provides benefits to those with low income. In Heilongjiang Province and Jilin Province, those aged 80 to 89 with income lower than the minimum living standard are eligible for the old-age allowance (People News, 2012). For those aged 90 or older, no means test is required. All eligible elderly persons can receive CYN 100 (USD 16) per month. Thus, the old-age allowance programmes in these two provinces are means-tested for those aged 80 to 89, but universal for those aged 90 or older (People News, 2012). In Shenzhen City, the old-age allowance is not means-tested and is universal for those satisfying the age requirement.

Variations in benefit level. As stated, variations in benefit level of the old-age allowance are common, as no uniform national regulation has been established. Given that each city and even each county can decide whether to provide the old-age allowance, each one can also set the eligibility requirements and the benefit level. For poorer areas in China, the old-age allowance poses financial pressure for local governments. Besides, the old-age allowance programme varies in rural and urban areas and differs by age range and other qualifying conditions. In Shanghai City, the old-age allowance for disabled elders is slightly higher than that for those who are not disabled (People News, 2012). Table 4 presents the

Table 4. Old-age allowance benefit variations in cities or provinces in China (CYN per month)

<table>
<thead>
<tr>
<th>Age</th>
<th>Jilin</th>
<th>Xinjiang</th>
<th>Shanxi</th>
<th>Wuhan</th>
<th>Shenzhen</th>
</tr>
</thead>
<tbody>
<tr>
<td>80–89</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>90–99</td>
<td>100</td>
<td>120</td>
<td>100</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>100+</td>
<td>300</td>
<td>200</td>
<td>200</td>
<td>500</td>
<td>500</td>
</tr>
</tbody>
</table>

Note: Jilin, Xinjiang and Shanxi are provinces, and Wuhan and Shenzhen are cities.

old-age allowance benefit levels of three provinces and two cities. Shenzhen City is one of most developed cities in China and currently provides the highest benefit level.

Conclusions

Longevity insurance annuities are deferred annuities that begin payment at advanced older ages. While the United Kingdom has by far the world’s largest annuity market, and some insurance companies used to provide longevity insurance annuities, currently no companies provide these annuities. The main reason this change has occurred appears to be that proposed European Union regulations will require insurance companies to increase their reserves for these annuities in recognition that there is no asset available to effectively hedge the risk of unexpectedly large improvements in life expectancy. The recently enacted unisex requirement may also have been a factor.

As a provider, government has several advantages over private-sector actors in providing longevity insurance annuities. First, it is able to limit its liability against the possibility of an unexpected improvement in life expectancy by indexing the age of eligibility for benefit receipt. While the private sector could do this prospectively for new clients, the government is able to do this for people nearing the age of entitlement for the benefit. For example, this is done at retirement age in Sweden for immediate annuities received at traditional retirement ages. Second, the government has a hedge against the liability to the extent that people work longer (and pay more taxes) due to improvements in health at older ages or from its ability to raise the eligibility age for social insurance old-age benefits. Currently, no assets exist for the private sector to invest in to provide a hedge against unexpected improvements in life expectancy. Third, the government does not face adverse selection because it provides the benefit to a pre-selected group. In the private sector, insurance companies would provide longevity insurance to people who self-select, in part based on their subjective expectation of long life expectancy.

China is one of the few countries where the government provides longevity insurance benefits. The population coverage and benefit level of the old-age allowance programme has been extended in China since 2009. In the absence of a unified old-age allowance programme in China, variations exist among provinces, and even among counties and cities. The regional variations in scheme design in China provide examples of ways that longevity insurance benefits could be provided. Longevity insurance benefits are a way to provide economic security to the oldest citizens in a country. This type of benefit would be particularly desirable as a benefit supplement in countries that provide modest levels of old-age benefits.
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Convergence or divergence?  
How the financial crisis affected European pensioners

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Abstract  The Member States of the European Union entered the financial crisis with very different pension systems. Although the use of standard adequacy measures suggest small impacts from the crisis, alternative measures based on pension wealth estimates indicate stronger effects. While the largest continental systems were left relatively unscathed by the crisis, Mediterranean systems were cut back significantly. This should lead to considerable convergence in system generosity across countries. Despite the cuts, state pensions in the stressed economies should still be generous enough to keep the majority of pensioners out of relative poverty, but this depends on a relatively quick turnaround in labour market performance in these countries.

Keywords  old age benefit, retirement, poverty, economic recession, European Union

Introduction  
In recent years, the economic and social debate in most Member States of the European Union (EU) has been dominated by the financial crisis. The latter has
led to a number of very important changes in economic and social policies, as Member States seek ways of reforming their way out of the crisis and bringing their economies back to the path of steady growth. The variety in the changes made partly reflects the different impact of the crisis in each country, but the underlying heterogeneity in social welfare systems also plays a large role.

In pensions, major reforms, to some extent, predate the onset of the financial crisis. However, as shall be shown in this article, the crisis has led to very significant changes – especially in those countries which prior to 2008 had left their pension systems relatively unchanged. The Member States of the European Union entered the crisis with very different pension systems, for instance in terms of generosity or reliance on the state. This article will argue that the crisis led to a greater degree of convergence, at least in two aspects. Eastern European countries which had prior to the crisis sought to lessen the role of the state ended up unwinding many of their reforms. Meanwhile, Southern European countries which traditionally had relatively generous pension schemes cut back generosity substantially. The focus of this article will be to try to understand whether the crisis has impacted on pension system generosity, and in particular whether there was a pronounced difference in the pace of pension reform after the crisis in countries where macroeconomic performance remained very weak. The main conclusion is that while there has been considerable convergence in pension system generosity across countries, the negative impact of the crisis on employment in some countries may raise adequacy concerns in Southern European countries. For the financial incentives newly embedded in these pension systems to have an impact, labour markets in these countries need to be less dysfunctional.

**Review of literature on the impact of the financial crisis on European pensioners**

Pension systems in the EU differ greatly. In fact a number of typologies of welfare states put different European systems in quite separate categories. For instance, Liebfried (1992) divided Europe into Anglo-Saxon countries (with a residual welfare state), Bismarkian systems (where the welfare state maintains income differentials), the Scandinavian block (with a progressive welfare state focused on moderating inequalities) and the Latin rim (where the welfare state is a semi-institutionalized promise with in-built differences in generosity towards certain groups). Similarly Bonoli (1997) and Soede et al. (2004), using data on a number of traits of welfare regimes, categorize Western European welfare states into these four blocks, with the Eastern European countries falling into a distinct group. The latter group is quite a hybrid mix, as a number of these countries traditionally had a very progressive pension system, which is changing rapidly for new contributors into arrangements with a much tighter link between benefits and contributions.
Alternatively, Ferrera (1996) and Katrougalos and Lazaridis (2008) describe the main elements of the so-called Southern European (or Latin rim) welfare state as being a low degree of institutionalism (and related political clientelism), high fragmentation of policies and the grafting of universalist schemes onto occupational systems but with little emphasis on work incentives, leading to excessive spending and endemic early retirement.

Prior to the crisis, there were very substantial changes in EU pension systems (for details, see EC, 2010; and Grech, 2014). There are those who argue (e.g. Pierson, 2002) that Western welfare states have been in a state of permanent austerity since the 1970s, but this does not necessarily mean that they will be scaled down considerably, due to the electoral incentives associated with programmes that retain broad popular support and the institutional stickiness that constrains possibilities for reform (see van Gerven, 2008; Taylor-Gooby, 2001). Nearly everyone can expect to receive a state pension at some point, and the proportion of the electorate actually receiving one has been rising steadily over time. Natali (2011) argues that state pensions were largely immune to the short-term impact of the crisis and acted as an automatic stabilizer. In some cases, rules were suspended or modified to ensure that benefits did not decline. This may have longer-term implications for the development of certain schemes, such as notional defined contribution systems (see Barr, 2013). Institutional stickiness may also have even increased due to the financial crisis and its impact on the perceived appropriateness of shifting towards funded systems.

Early in their transition to becoming market economies, many Eastern European countries introduced mandatory individual private schemes as the main mandatory pension provision (see Fultz and Steinhilber, 2003). The crisis, of course, had a major impact on the image of private pensions being a stable source of long-term income (see Yermo and Severinson, 2010; Impavido and Tower, 2009). Orszag (2013) nevertheless argues that while the downturn threw new light on certain issues, such as an over reliance on defined contribution pensions, the structure of pension provision may not change much, as pensions are a difficult long-term issue that induces avoidance behaviour amongst policy-makers.

The financial crisis, however, exacerbated the impact on government finances of the adoption of mandatory individual pensions (see Whitehouse, 2009). Hirose (2011) and Price and Rudolph (2013) document the major changes effected in many Central and Eastern European states, with countries such as Hungary nationalizing their mandatory private provision while others such as Slovakia and Poland unwinding most pension reforms and shifting back contributors to the previous state system. While tight finances undoubtedly played a role, Drahokoupil and Domonkos (2012) argue that another important cause was the change in the consensus on the benefits of pension individualization and privatization. They argue that the International Monetary Fund, for instance, provided tacit support
to decisions to scale down mandatory private systems, while the World Bank’s previous advocacy of these schemes became much more muted.\textsuperscript{1} The fact that governments nationalized these schemes without encountering major public resistance disproved one of the supposed advantages of privatization – namely that it suffers from less political risk compared to a pay-as-you-go public system.\textsuperscript{2} Schwarz and Arias (2014) argue that the reforms that were carried out were quick fixes focusing on short-term fiscal sustainability and, aside from those countries that legislated for higher pension ages, the post-financial crisis reforms are unlikely to result in social goals being met in the long term.

Natali (2011) notes in many EU countries two common responses to the crisis have been to increase minimum pensions and to raise retirement ages (in a way, a return to first principles). In Western European countries, another strong driver of pension reform appeared to be the continued move towards adopting stronger activation policies in welfare policies (Vis, van Kersbergen and Hylands, 2011). Pensions in most countries already had a strong contributory principle embedded in them, but recent reforms sought to strengthen this even further (see EC, 2012). This process predated the crisis and has also affected countries (e.g. in Scandinavia) that traditionally had a more universalist focus (Bosco and Chassard, 1999). This common reaction possibly could have been an attempt to get people to seek to re-enter labour markets quickly.

On the face of it, the downturn should not have impacted some pension systems, such as that of Germany. Yet, Hinrichs (2013) notes contribution rates were lowered and projected cuts in benefits (due to the sustainability factor embedded in the German system)\textsuperscript{3} were delayed. The author argues that the crisis’ impact on employment careers has to be taken into account, as pension reforms have tightened significantly the link between contributions and entitlements. The increase in atypical jobs, particularly part-time and temporary contracts, means that in the long term individuals will accumulate lower pensions and moreover, Hinrichs notes, that in most cases these jobs would not result in individuals getting contribution credits.

Bodor and Rutkowski (2013) argue that the crisis changed the political context and framing of pension reform decisions. Policy-makers in stressed countries could have arrived at the conclusion that a stance supporting pension reform driven by fiscal pressure could be the lesser evil between resistance to reform and the price of avoiding a default. Systemic reforms need a longer period for design development and therefore crisis times could be more conducive to parametric

\textsuperscript{1} Schwarz et al. (2009) however argue that governments should not make long-term policy changes to address short-term fiscal concerns.

\textsuperscript{2} This argument made in World Bank (1994) has been dismissed as a policy myth by Barr (2000).

\textsuperscript{3} This factor takes into account the changing worker to pensioner ratio and tries to ensure that the contribution rate required to finance pension expenditure remains stable.
reforms. An in-depth review of reforms in countries most affected by the crisis can be found in Social Justice Ireland (2013) and Petmesidou and Guillen (2014). In cases where radical reforms have been put in place, these seem to have been imposed from the outside (see Matsaganis, 2012, for an extensive discussion of the Greek experience), though even in such cases policy-makers have found it hard to tackle the entitlements of the more privileged groups (Venieris, 2013).

Even countries, such as Portugal, which came to the crisis with reformed systems that were supposed to have tackled long-term increases in spending through complex design features, such as sustainability factors and longevity indexes, were not spared further changes. Pedroso (2014) indicates that amongst the first actions to be taken was a reduction of current benefits, particularly by stopping indexation. A lot of these measures have been deemed unconstitutional in Portugal. Zartaloudis (2014) argues that reforms have been more dramatic in Greece and Portugal than in Italy and Spain due to their having less economic and political power to resist reform. He observes that retrenchment raises the issue that these countries have not yet converged to their richer neighbours’ income standards. That said, other studies (for instance, Sanchez, 2014) argue that even in Italy and Spain, while changes may not be immediate, through the introduction of adjustment factors meant to reduce indexation to keep the system in financial balance, some cohorts will bear a disproportionate share of the costs and current retirees may face sharply decreasing relative pensions during retirement.

Symeonidis (2013) argues that while in other countries the crisis brought down the social security system, in Greece the system was already on its knees due to the political actions of the preceding 30 years. Among the most pressing issues was the system’s excessive fragmentation, with 133 funds all with their particular rules. Indexation was arbitrary and most of the time subject to political pressure. He argues that politicians tended to make the system more generous in order to reduce pensioner poverty, but failed to understand that the inherent problem was inadequate coverage and not low pensions as such. To make things worse, the crisis directly affected the 133 pension funds directly as they mostly held Greek government bonds and their assets’ value plummeted.

In view of the large changes in Greece, it makes sense to dwell a while on particular elements of the reforms enacted there. The troika, a tripartite committee composed of the European Commission, European Central Bank and the International Monetary Fund, included explicit references to pension reform in their Memorandum of Understanding with the Greek Government. They introduced a basic pension to serve as a safety net, but halved the accrual rates of the general pension regime. The effective retirement age was increased and linked to life expectancy after 2021. The contribution period required was lengthened to 40 years, benefit calculation was moved to career earnings and the indexation of benefits cannot exceed inflation. Moreover if expenditure increases by more than...
2.5 per cent of gross domestic product (GDP) by 2060, system parameters need to change (similar to a notional defined contribution system). Individuals who had retired earlier were made to return part of their pensions to a Government fund. According to Symeonidis (2013), pensions were cut by 20 per cent for normal retirees and by 40 per cent for early retirees, though those on lower incomes were spared. All of these measures are projected to lower the growth in public pension spending by 2060 from 12 per cent of GDP under the old regime to virtually zero under the new one (EC, 2012).

Greece may present an extreme case. Looking also at Spain, Italy and Portugal, Matsaganis and Leventi (2014) present evidence that pension cuts had a mixed distributional impact, as some of the changes were progressive. In contrast, Natali and Stamati (2014) argue that cost containment measures put future adequacy at risk and give rise to new problems of inequality, risk individualization and increasing vulnerability to external shocks.

Quantifying the difference in the impact of pension reforms

The financial crisis impacted EU countries very differently. Real GDP fell in all countries during 2009, with the exception of Poland. The drops ranged from between 14–15 per cent in the Baltic countries to just 2 per cent in Cyprus. Most countries gradually recovered and, by 2013, the EU’s GDP was down by 1.1 per cent from its 2008 level, compared to the initial decline of 4.4 per cent. However in some countries, the first drop was complemented by a second downturn in 2011 and 2012 – the sovereign debt crisis. As a result, by 2013, in Greece real GDP was a quarter less than it was in 2008, while the country that initially had been the second-best performer in the EU, Cyprus, had real GDP down by 8 per cent from five years earlier.

One of the main questions posed in this article is whether pension reforms were affected by the size of the economic downturn affecting the country. To study this we utilize estimates of pension entitlements derived using the OECD’s APEX cross-country pension entitlement model. This model enables one to compute estimates of replacement rates and of pension wealth (the discounted total pension flows during retirement) for individuals at different levels of income and with different career lengths. These estimates can be made using pension rules prevalent

4. The APEX (Analysis of Pension Entitlements across countries) model was originally developed by Axia Economics, with funding from the OECD and the World Bank. The model codes detailed eligibility and benefit rules for mandatory pension schemes based on available public information that has been verified by country contacts. It provides most of the results reviewed in the OECD’s Pensions at a glance series <www.oecd.org/els/public-pensions>, the World Bank’s Pensions panorama (Whitehouse, 2007) and the European Commission’s Pension adequacy in the European Union 2010–2050 (EC, 2012).
before and after the crisis in 19 EU countries (comprising 92 per cent of the total population of the Union). Since state pensions are of key importance to those with low-to-average incomes, in this article we focus just on estimates for individuals in the bottom half of the wage distribution.

Rather than focusing the analysis on a country by country basis, the article will try to group countries. Instead of adopting the standard pension system typologies described in the preceding section, two classifications based on macroeconomic performance after the crisis will be used to distinguish groups. In the first, the 19 countries are divided into a group where the relative difference in the GDP level for 2013 compared to that in 2008 is higher than the EU average and another where economic recovery is more pronounced. The first group titled “countries with underperforming economies” (CUPE) includes the Czech Republic, Denmark, Finland, Greece, Hungary, Ireland, Italy, the Netherlands, Portugal and Spain. This group represents 39 per cent of the EU’s total population. In order to get a better understanding of the possible influence of economic considerations in driving reforms, we also divided the 19 countries into a group with countries heavily affected by the sovereign debt crisis, i.e. Greece, Ireland, Italy, Portugal and Spain, and the rest. The first group, denoted henceforth as the “stressed countries”, comprises 29 per cent of the EU’s total population. Note that while the CUPE group includes countries with very different pension systems, stressed countries are nearly all members of the so-called Latin Rim or Southern European welfare model.

Table 1 presents estimates of replacement rates and pension wealth for men and women in the bottom half of the wage distributions. The pre-crisis figures reflect pension rules as at 2007, while the post-crisis estimates incorporate those enacted in 2013. Estimates are calculated assuming a 40-year uninterrupted career, as was also used by the European Commission (EC, 2012).

Apparently, it appears that the financial crisis did not result in a substantial weakening of pension entitlements. Even in stressed countries, pension wealth appears to be higher, while replacement rates for women improved. Pension entitlements fell in just seven countries, with the largest falls in Greece and Luxembourg. Meanwhile, five of the most populous nations boosted pension generosity. One of the interesting facts emerging from Table 1 is that when one assumes full careers, the generosity of pensions is substantially higher in the countries that faced large economic downturns, including the stressed countries. Women also appear to have higher pension wealth, as they have longer life expectancy at retirement and in some countries are still allowed to retire earlier than men. The

5. The choice of 19 countries reflected data availability, as estimates for the remaining ten EU countries pre and post crisis were not available. The countries under study are representative of all the different pension systems found in the EU, which have adopted a variety of reforms and cover most of the EU’s elderly population.
Table 1. Pension wealth and replacement rates for men and women in the bottom half of the wage distribution – pre and post crisis

<table>
<thead>
<tr>
<th>Country</th>
<th>Men Pre</th>
<th>Men Post</th>
<th>Women Pre</th>
<th>Women Post</th>
<th>Men Pre</th>
<th>Men Post</th>
<th>Women Pre</th>
<th>Women Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>7.7</td>
<td>7.0</td>
<td>90.8</td>
<td>90.2</td>
<td>9.0</td>
<td>7.7</td>
<td>90.7</td>
<td>90.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>5.0</td>
<td>5.4</td>
<td>65.2</td>
<td>67.7</td>
<td>5.8</td>
<td>6.2</td>
<td>66.4</td>
<td>67.7</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>7.5</td>
<td>6.7</td>
<td>74.8</td>
<td>80.4</td>
<td>8.8</td>
<td>7.8</td>
<td>85.5</td>
<td>80.4</td>
</tr>
<tr>
<td>Denmark</td>
<td>5.2</td>
<td>5.8</td>
<td>61.3</td>
<td>62.0</td>
<td>5.5</td>
<td>6.2</td>
<td>64.6</td>
<td>68.0</td>
</tr>
<tr>
<td>Finland</td>
<td>6.5</td>
<td>6.6</td>
<td>70.2</td>
<td>63.3</td>
<td>7.7</td>
<td>7.8</td>
<td>70.1</td>
<td>63.3</td>
</tr>
<tr>
<td>France</td>
<td>6.8</td>
<td>6.8</td>
<td>65.5</td>
<td>73.3</td>
<td>7.8</td>
<td>8.1</td>
<td>66.4</td>
<td>73.3</td>
</tr>
<tr>
<td>Germany</td>
<td>4.9</td>
<td>5.5</td>
<td>56.9</td>
<td>57.1</td>
<td>5.7</td>
<td>6.4</td>
<td>56.4</td>
<td>57.1</td>
</tr>
<tr>
<td>Greece</td>
<td>10.3</td>
<td>7.2</td>
<td>110.9</td>
<td>80.8</td>
<td>11.9</td>
<td>8.0</td>
<td>111.8</td>
<td>80.8</td>
</tr>
<tr>
<td>Hungary</td>
<td>8.2</td>
<td>6.3</td>
<td>99.3</td>
<td>94.4</td>
<td>10.1</td>
<td>7.4</td>
<td>96.6</td>
<td>94.4</td>
</tr>
<tr>
<td>Ireland</td>
<td>5.8</td>
<td>6.9</td>
<td>43.1</td>
<td>59.8</td>
<td>6.9</td>
<td>7.9</td>
<td>47.6</td>
<td>59.8</td>
</tr>
<tr>
<td>Italy</td>
<td>7.2</td>
<td>8.1</td>
<td>78.5</td>
<td>82.8</td>
<td>8.0</td>
<td>9.2</td>
<td>63.8</td>
<td>82.8</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>13.3</td>
<td>11.0</td>
<td>98.0</td>
<td>73.3</td>
<td>14.2</td>
<td>12.6</td>
<td>99.9</td>
<td>73.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4.6</td>
<td>4.7</td>
<td>43.6</td>
<td>47.8</td>
<td>5.4</td>
<td>5.4</td>
<td>44.9</td>
<td>47.8</td>
</tr>
<tr>
<td>Poland</td>
<td>5.3</td>
<td>4.7</td>
<td>74.8</td>
<td>60.3</td>
<td>5.6</td>
<td>5.6</td>
<td>55.9</td>
<td>60.3</td>
</tr>
<tr>
<td>Portugal</td>
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<td>5.8</td>
<td>72.7</td>
<td>69.5</td>
<td>7.3</td>
<td>6.7</td>
<td>71.1</td>
<td>69.5</td>
</tr>
<tr>
<td>Slovakia</td>
<td>7.1</td>
<td>7.3</td>
<td>72.0</td>
<td>86.6</td>
<td>8.6</td>
<td>8.6</td>
<td>70.8</td>
<td>86.6</td>
</tr>
<tr>
<td>Spain</td>
<td>8.0</td>
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Notes:
* Pension wealth is a (discounted) measure of all projected pension flows in retirement. Its unit of measurement is the contemporary average wage (e.g. 6.4 years’ equivalent of the current average wage). The estimates assume that an individual has a 40-year uninterrupted career. Changes in pension wealth are mostly driven by changes in generosity or the pension age, though there may be some impact due to rising longevity between 2007 and 2013. ** The replacement rate compares the initial pension accruing to an individual retiring after a 40-year uninterrupted career with their previous wage.
estimates in Table 1 suggest that in most countries replacement rates are quite high and should more than allow people to retire with an income higher than the relative poverty threshold. In fact, the replacement rates in all groups of countries, but particularly the ones facing most economic turmoil, exceed the 60 per cent replacement rate benchmark that the World Bank deems as unaffordable (see Holzmann and Hinz, 2005) and the 45 per cent replacement rate that the International Labour Office deems as providing a decent standard of living (see Humblet and Silva, 2002).

These results differ significantly from the situation shown by Eurostat data on the proportion of elderly people living in relative poverty. For instance, while Table 1 suggests no difference in outcomes between genders, the elderly poverty rate for women stands at 16.5 per cent across the EU, as against 12.2 per cent for men. The elderly poverty rate in stressed economies stands at 13.7 per cent for men and 17.4 per cent for women, as against 11 per cent and 14.8 per cent in the non-stressed economies. Yet, Table 1 implies that pension generosity is significantly lower in the latter group. This paradox is easily explained. Replacement rate and pension wealth measures, estimated using the full-career assumption, – as is standard in most international institutions’ publications (such as EC, 2012) – are not that representative of actual generosity, and also need to be considered in conjunction with data on the effective coverage of the pension system. Grech (2013) shows how the European Commission’s measures of theoretical net replacement rates show very little correlation with at-risk-of-poverty rates. The main issue is that, especially for women and those on low incomes, career lengths are much shorter than 40 years while labour participation tends to be low. Eurostat data on the duration of working lives suggests that, in 2013, only in Denmark, the Netherlands, Sweden and the United Kingdom did men work 40 years or more. In Hungary the average man worked 32.5 years, while the average Greek and Italian man worked 35 years, or an eighth less than the full career assumption taken by the European Commission to assess pension generosity. Amongst women, careers tend to be even shorter, standing at about 32 years on average across the EU. In the Mediterranean countries, the difference is even starker, with the average woman in Italy having a 25-year career while those in Greece work, on average, for 28 years.

Since recent reforms have tightened the link between entitlements and career length, estimates such as those in Table 1 can be deceptive. Another issue is that, increasingly, replacement rates are becoming less useful measures of overall generosity. Rising longevity combined with weakening post-retirement indexation of pensions means that the initial level of generosity bears little resemblance to the pension received mid-retirement. For instance, Grech (2013) reports that

European Commission estimates of net replacement rates for a person ten years after retirement are a fifth lower than their initial value in Poland and Greece. By the final year of retirement, relative pension generosity in these countries is about 40 per cent less than at the start of retirement. In fact, Eurostat data suggest that across the EU, elderly poverty rates tend to be higher for those aged 75 or older than for those aged 65 to 74.

To address these issues, we focus attention on pension wealth, as this measure incorporates the declining relative value of pensions over time, while it is also affected by changes in the pension age, another common reform in recent years. Furthermore rather than looking at the estimates made in Table 1, we compute alternative projections using Eurostat data on current working lives, boosted by European Commission (EC, 2012) projections of labour participation between 2010 and 2060 (see Appendix). These estimates indicate that average career length differs greatly across countries, particularly when looking at women. Yet, we could not simply assume that these shorter careers would end up as gaps in contributory records. In most cases, individuals fail to contribute because they are either unemployed or taking up care responsibilities. The latter cases tend to command credits, though most of the time at a much reduced rate than when one is working. To account for this, we assumed that only half of the gaps would earn no pension entitlements, with the rest being covered by unemployment and childcare credits.7

Table 2 presents the estimates of our “actual-careers” assumption against those for the “full-careers” case. These suggest that while pension generosity still appears to be higher in the stressed and CUPE countries than in those less affected by the crisis, the gap is much narrower. In particular, the gap in generosity for women is significantly smaller. The actual-careers estimates of pension wealth for women are about 15 per cent less than the full-careers estimates, while those for men are 6 per cent less. In a few countries, those with very high labour participation rates and limited gender gaps (for example, Sweden), the actual-careers assumption leads to very limited changes in perceived generosity. Conversely in Italy, Poland and the Slovakia the gender gap in pension generosity becomes quite stark.

Evaluating the possible impact of the reforms on elderly poverty

After having tried to derive more realistic estimates of pension wealth, the next step is to assess them against a benchmark. The obvious one, given our interest in

7. If this assumption is incorrect, generosity would be lower. Also note that here we are modelling entitlements for single individuals. In most countries, entitlements – particularly for minimum pensions – depend on household income, which means that entitlements may be lower as partners’ incomes would be taken into account. Modelling household entitlements requires more advanced modelling than that presented here.
Table 2. A comparison of pension wealth* for men and women in the bottom half of the wage distribution, estimated using actual- and full-careers

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Notes:
* Pension wealth is a (discounted) measure of all projected pension flows in retirement. Its unit of measurement is the contemporary average wage. The full-career estimates assume an individual has a 40-year uninterrupted career, while the actual careers take current duration of working life data from Eurostat and augment it with forecasts of future participation rates. Changes in pension wealth are mostly driven by changes in generosity or the pension age, though there is also an increase due to rising longevity and participation rates.

the impact of reforms on elderly poverty, is the relative poverty threshold adopted by EU countries. This is currently set at 60 per cent of the national median equivalized disposable income. After redefining this threshold in terms of the average wage in each country, we calculate a pension wealth requirement, defined as that discounted flow of income which would enable one to remain out of poverty, on average, throughout retirement. These pension wealth requirements differ across countries due to variations in the relative value of the poverty threshold compared with the average wage, and differences in pension ages and in longevity post-pension age. As might be expected, given that stressed countries tend to have lower pension ages combined with higher longevity, their pension wealth requirements are currently significantly larger (34 per cent and 28 per cent larger for men and women, respectively, than those in the other EU countries). However as a result of increasing pension ages, this difference should more than halve in the coming decades.

Table 3 presents our estimate of average annual pension benefits as a proportion of median income for men and women in the bottom half of the wage distribution, estimated using our actual-careers assumption, in 2013 and in 2053. This measure is calculated by comparing the actual-careers pension wealth estimate with the pension requirement in that country (for more details on the approach, see Grech, 2013). These estimates suggest that whereas presently pension entitlements are sufficient to sustain, on average across these countries, a relative poverty threshold of 70 per cent throughout retirement for men, this will fall over the next four decades to 67 per cent. The bulk of the drop occurs in the stressed countries and in the CUPE. Though pensioners in these countries will still remain relatively better off than those in the other groups, this result is somewhat different from that in Table 1. Just looking at replacement rates and pension wealth had, in fact, suggested that there was no effective deterioration in pension generosity in stressed countries and in the CUPE. The estimates in Table 3 instead show that the reforms will lead to a decline in the effectiveness of the poverty alleviation function of pensions in these countries, particularly in Portugal and Greece.

This development is somewhat less pronounced when looking at women. However, one needs to consider here that in the non-stressed countries, system generosity towards women is projected to improve on account of higher labour market participation. Though women in the stressed and CUPE groups of countries are also projected to have less broken careers than they have at present, this effect is more offset by the impact of the reforms. Again, the most negative changes are in Portugal and Greece, where many elderly women could end up in poverty.

Table 3 shows that the difference in pension generosity between stressed and non-stressed economies, and between the better-performing and underperforming economies, is much less pronounced than that observed when analysing the standard measures used by international institutions. Pension wealth and replacement
Table 3. Average annual pension benefits as a proportion of median income* for men and women in the bottom half of the wage distribution, estimated using actual-careers assumption, 2013 and 2053 – percentage of the national median equivalized disposable income

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Notes:
* This indicator calculates the percentage of median disposable income that pension wealth at point of retirement would be able to finance on average throughout retirement.
rate measures considered in isolation can sometimes be misleading. A country may appear to have a very generous replacement rate, but this could be very different from the actual replacement rate benefitting most retirees, on account of the extent of career breaks in that economy. Similarly a system could award high starting pensions, but if post-retirement indexation is weak and the retirement period is long enough, individuals will eventually end up in an at-risk-of-poverty situation. The indicators presented in Table 3 try to account for these factors to give a more precise assessment of the poverty alleviation function of mandatory pensions.

The picture that emerges is that while it is true that Mediterranean countries tend to have, on paper, quite generous systems, in practice – as a result of limited labour force participation – future actual outcomes do not tend to be that substantially different. The continental systems, by contrast, were left relatively unscathed by the financial crisis. As a result, for instance, while currently the Greek, Italian and Portuguese systems are more generous than those of France and Germany, over the next decades the situation will be reversed. Moreover while pension system outcomes for women should improve in some of the larger EU countries, notably in Germany, France and the United Kingdom, in most countries recent reforms have dented the effect of rising female labour participation on future pension entitlements.

The financial crisis appears to have led to increased convergence amongst EU countries in terms of pension system generosity, with the gap between the most generous and least generous system more than halving. However, at the same time, the crisis has led to increasingly different labour market outcomes. Before the crisis the gap in unemployment rates between the country with the least unemployment and that with the highest stood at 8 percentage points (3.1 per cent in the Netherlands and 11.3 per cent in Spain). By 2013 it stood at an unprecedented 23 percentage points (4.9 per cent in Austria and 27.5 per cent in Greece). The gap is even more worrying when looking at youth unemployment rates, 58.3 per cent in Greece against 7.8 per cent in Germany. It is rather unfortunate that these negative labour market developments occurred just after pension reforms tightened so strongly the link between pension entitlements and contributory records. While the introduction of better crediting systems and minimum pensions may have helped to dampen the long-term impact of the financial crisis on future pension entitlements, unless governments act quickly to improve the labour market prospects of young Europeans, the current financial crisis will heighten the risk that over the coming decades elderly poverty rates could increase.

Conclusion

European Union countries entered the financial crisis with relatively different pension systems and most theories, such as the path dependence paradigm or
electoral incentives considerations, would suggest that this would remain broadly unchanged. Yet, as a result of the crisis, either through direct external intervention or internal domestic political decisions, there appears to now be a greater degree of convergence amongst systems. This is not immediately apparent when looking at the standard pension generosity indicators adopted by international institutions. However when taking into account more realistic estimates of career lengths, projected pension system outcomes in terms of poverty alleviation effectiveness appear to have moved closer. This has occurred mainly as underperforming economies have cut their system generosity, in the cases of Portugal and Greece quite significantly. Conversely, better-performing economies appear to have strengthened their systems slightly, through the provision of better crediting systems for career breaks, such as for periods of unemployment or childcare, and also by improving minimum pensions.

Pension reforms have been broadly in line with the EU agenda on pensions; namely, that of securing adequate and sustainable pensions. The reforms reinforced the trend towards the greater use of activation measures embedded in welfare systems, by introducing more financial incentives for individuals to contribute. In the stressed countries this underlying principle was accompanied by the need to retrench the system and focus on the core function of the pension system.

Our projections suggest that despite the cuts, pension systems in the stressed economies should remain generous enough to keep the broad majority of pensioners out of relative poverty. However, this depends on a relatively quick turnaround in labour market performance in these countries. The crisis, in fact, has resulted in a very pronounced rise in youth unemployment rates, particularly in Mediterranean economies. This development, combined with the tightening of the link between pension entitlements and contributory records introduced by the recent reforms, could pose serious risks for current young generations in terms of their future retirement income. This enhances the importance of policies, such as the youth guarantee, intended to increase employability and ease access to the labour market and promote social inclusiveness. In particular, Southern European countries need to sustain the recently introduced pension reforms by aligning their labour market policies much more with those of their northern neighbours. Now, more than ever before, European policy-makers have to ensure a properly functioning labour market that provides easy access and opportunities to young Europeans.

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Appendix

Assumptions made to derive pension wealth estimates

To estimate pension wealth, a number of assumptions were taken in line with those of the European Commission (EC, 2012). Data on current contribution years is based on Eurostat’s duration of working life estimates, in turn derived from Labour Force Survey results. Data on future contribution years is based on labour participation rate projections by age provided by the European Commission (EC, 2012), which reflect the improvement in cohort participation rates – especially for women – and also estimates of the possible impact of labour market and pension policy reforms. Life expectancy projections are made at the age of retirement and are from Eurostat’s Europop2013 population projections. Table A.1 shows these assumptions.
Table A.1. Main assumptions

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Little cash to large households: Cash transfers and children’s care in disadvantaged families in Ghana

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Abstract Social protection is widely considered to have a positive effect on children, including supporting improvements in nutritional, educational and health outcomes. Much less is known, however, about the impact of interventions on children’s care. This article considers the impact of a social cash transfer targeted at poor households – Ghana’s Livelihood Empowerment Against Poverty (LEAP) programme – on child well-being, quality of care and preventing children’s separation from their parents as perceived by programme and non-programme beneficiaries in a context of vulnerability, large households and widespread informal kinship care. Findings suggest that cash transfers can improve both material and non-material aspects of well-being and contribute to the quality of care and have the potential to prevent children’s separation from their parents. At the same time, not all children appear to benefit equally, with non-biological children being disadvantaged. The combination of large household sizes with programme design and implementation challenges, including low transfer amounts, a cap on the maximum number of eligible household members and poor sensitization and follow-up, undermine the positive role that cash transfers can play.

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Introduction

Social protection has become part and parcel of the response to poverty (Devereux, McGregor and Sabates-Wheeler, 2011) and is considered key in improving outcomes for children (Roelen and Sabates-Wheeler, 2012). There is now a strong evidence base indicating that social protection programmes – and cash transfers in particular – can indeed reduce poverty, increase consumption, facilitate access to services and improve nutritional, educational and health outcomes (Hanlon, Barrientos and Hulme, 2010; Barrientos and Hulme, 2008). Nevertheless, much less is known about the interaction between social protection and child well-being outcomes for children beyond basic needs (Barrientos et al., 2013; Sanfilippo, De Neubourg and Martorano, 2012) and little guidance is available on how to ensure that social protection leads to better care for children. This holds particularly true in contexts where various factors might mitigate the positive impact of social protection, including large household size and combined care provided by parents for their own children (biological) and the children of others (non-biological) in one household.

Ghana has made considerable progress towards poverty reduction in the last two decades. In 2006, it had successfully lowered extreme poverty rates by 50 per cent, making it the first sub-Saharan African country to reach the first Millennium Development Goal to eradicate extreme hunger and poverty (UN Stats, 2014). Nevertheless, poverty remains endemic. In 2013, the poverty headcount was 24 per cent (GSS, 2014). Children make up at least half of the country’s poor, as almost half of Ghana’s population is younger than age 18 (GSS, 2012). The widespread occurrence of poverty has particular repercussions for children and their care, both in terms of who provides care to them and what kind of care they receive.

In rural Ghana, poverty causes many children to drop out of school and engage in work from an early age in response to resource constraints at the family level, leaving them to live on their own or fend for themselves (Apt, Agbényiga and Ame, 2011). In an urban study on childcare practices in Ghana’s capital, Accra, women indicated that poverty presents a barrier to good feeding and childcare practices, because of a lack of food and the stress caused by living in poverty (Ruel, Armar-Klemesu and Arimond, 2001). More generally, poverty is known to cause depression among caregivers, undermining the quality of care for children and affecting children’s behaviour (Henninger and Luze, 2012). Poverty is also one of the factors playing into traditional kinship fostering, i.e. children living with extended family members (Apt, Agbényiga and Ame, 2011). Widespread migration...
by parents in search of better income-generating opportunities has led to many children being left in the care of extended family members (Apt, Agbényiga and Ame, 2011). A result is that Ghana has high rates of informal kinship care (MOESW and UNICEF, 2010). Figure 1 presents trends in living arrangements for children over time, indicating that although the proportion of children living within a nuclear family (with their biological parents) has grown, proportions of children living in other forms of extended families (with one or more non-biological caregiver) has equally increased1 (Annim, Awusabo-Asare and Amo-Adjei, 2013).

Global evidence suggests that while many children in extended family care receive love and support from carers, children can be discriminated against and receive less support than the biological children of household heads, especially if living with more distant relatives (EveryChild and HelpAge International, 2012). A qualitative study in Tamale, the capital town of Ghana’s Northern Region, corroborates these findings with many children expressing satisfaction at living in foster care, but at the same time indicating that they had experienced abuse and intimidation (Kuyini et al., 2009). Indeed, in the absence of legislation and a well-functioning social work service, children in traditional foster care may not receive the best care (Kuyini et al., 2009).

1. Categories of living arrangements are defined as follows: core-nuclear = living with both biological parents; semi-nuclear = living with either the father or mother; extended I = living with both biological parents and a third generation household member (grandparent); extended II = living with either the father or mother and a third generation household member; other extended = other forms of living arrangement (Annim, Awusabo-Asare and Amo-Adjei, 2013).
Households in Ghana are also large with relatively few able-bodied members supporting dependants. In 2005, women in Ghana’s rural and urban areas had an average of 5.6 and 4.7 children respectively (Apt, Agbényiga and Ame, 2011). Despite a “fertility transition” having led to a decline in fertility rates in the late 1990s and early 2000s, factors such as decreasing infant mortality rates and the relatively low use of contraceptives stall further decline (Agyei-Mensah, 2006). Notwithstanding a process of “physical nucleation” with household living arrangements moving from “from highly extended with its associated socioeconomic system of production and reproduction, social behaviour and values, toward single-family households” (Annim, Awusabo-Asare and Amo-Adjei, 2013, p. 5), the national dependency ratio is 73.9, indicating that 100 persons of working age are supporting 73.9 dependants, including elderly persons, children and people living with disabilities (World Bank, 2014). Large household size and the presence of many dependant members is commonly associated with a higher risk to poverty, as also evidenced in the case of Ghana by Novignon et al. (2012), and can compromise well-being and quality of care for children. Pooled family resources are spread more thinly across household members (Annim, Awusabo-Asare and Amo-Adjei, 2013), which can prove particularly challenging for caregivers looking after many children, especially when households include biological and non-biological children (Dako-Gyeke and Oduro, 2013).

This article addresses the role of the most common type of social protection intervention – a cash transfer programme – in supporting well-being and quality of care for children with particular emphasis on preventing children’s unnecessary separation from their parents in a context of widespread poverty. Given the widespread practice of traditional fostering and a context of large households with high dependency rates, it particularly considers differences between biological and non-biological children and the role of household size. It does so by focusing on a cash transfer programme targeted at the extreme poor – Ghana’s Livelihood Empowerment Against Poverty (LEAP) programme – and adults’ and children’s experiences and perceptions of the programme and its impact.

The remainder of this article is structured as follows. First, we discuss the data and methodology of this study. Second, the situation of child well-being and care is explored in more detail, followed by a discussion of how poverty and family size may compromise well-being and quality of care. Next, we describe the LEAP programme and discuss its impact on child well-being, quality of care and the prevention of children’s separation from their parents. We conclude by summarizing main findings and considering policy implications.

2. The dependency ratio is calculated by dividing the total number of household members aged 15–64 by the total number of younger and older household members and multiplying that by 100.
This research is based on primary qualitative data reporting on the experiences and perceptions of adults and children in households participating in LEAP and of those in households not participating in LEAP, as well as of those of LEAP programme staff and social workers. Fieldwork took place in two different districts – Gomoa West and Asikuma-Odoben-Brakwa (AOB) – in Ghana’s Central Region in November 2013. The selection of districts was informed by conceptual and practical considerations. Both districts face challenges with respect to child labour issues; Gomoa West is a source area for child labour for the fishing industry on Lake Volta and AOB has high levels of child labour in the cocoa sector (Bøås and Huser, 2006). In practical terms, the local non-governmental organization (NGO) leading the data collection process – Challenging Heights – has good relations with local authorities in Gomoa West and strong community relationships in AOB following its own programming on child trafficking and child labour in these districts.

Within each district, fieldwork was undertaken in multiple communities, which was necessary due to the small numbers of LEAP beneficiaries per community. Fieldwork was undertaken in Mprumaem, Apam, Mumford, Assin and Ajumako villages in Gomoa West; and in Awiamu, Fosu Ansah, Jamrah and Baako villages in AOB. The choice of villages was primarily informed by pragmatic considerations. Only those villages accessible as a day trip (including the drive from Winneba in Central Region and then walking from the nearest traversable road to the village) were considered and small villages with only two or three households were excluded. Of the remaining villages, villages where the local NGO Challenging Heights had good working relationships were prioritized. One village was excluded because the village leaders were unwilling to facilitate introductions to the residents.

Multi-stage sampling was a three-stage process. Districts provided the first line of stratification. Within each district, the sample was then stratified by programme participation (LEAP participants, non-LEAP participants). The sample was subsequently sub-divided by age (adults, young carers and children), gender and carer-child relationships (in parental care/biological children and in kinship care/non-biological children). The total sample consisted of 100 adults and 98 children, with the number of respondents equally distributed across both districts. The existing ties of the NGO Challenging Heights at district level facilitated the

3. In this research, we denote kinship care to include kinship care by blood relatives as well as informal foster care by non-blood relatives. The term foster care is used to denote formal foster care only, which is very uncommon in Ghana. The term “biological children” is used to denote children living with their parents; the term “non-biological children” can include blood and non-blood relatives not living with their parents.
selection of villages as well as community entry. LEAP participants were selected on the basis of the LEAP beneficiary lists that were made available by the district Department of Social Welfare offices. Non-LEAP participants were selected through village chiefs, aiming to include respondents with living conditions similar to those of LEAP participants. The research did not include respondents who received direct support from the NGO Challenging Heights, in order to avoid response bias.

Three main qualitative techniques were used in the fieldwork: (i) in-depth interviews, including case studies and key informant interviews; (ii) focus group interviews and discussions; (iii) participatory techniques. An overview of methods and the respective respondent groups is presented in Table 1.

The combination of methods aimed to obtain information about people’s living arrangements and participation in LEAP as well as to elicit experiences and perceptions about child well-being and care in relation to LEAP and cash transfer programmes more generally. This type of data collection was deemed most appropriate for gaining insight into the complex and sensitive situations around children’s care and well-being and for developing an understanding of how these can or may be affected by a cash transfer programme such as LEAP. While respondents were asked about perceptions and opinions following their own situation and experiences, this was not always possible due to the sensitive nature of questions related to living in poverty and care arrangements. Adults’ and children’s responses therefore also refer to perceptions about specific other households in the community or other groups in general. Given the process of “othering” – whereby respondents may distinguish themselves in relation to others through projecting undesirable traits onto others or demarcating their belonging to particular groups (Krummer-Nevo and Sidi, 2012) – analysis and interpretation of responses referring to the situation of others is undertaken with caution.

Data analysis was a multi-stage and inductive process. The first step involved reading and re-reading transcripts, leading into the second step of identifying response categories for the three overarching research questions. Next, responses were coded and categorized, allowing for the identification of patterns and trends within and across lines of stratification, including adults versus children, male versus female, and biological versus non-biological children.

**Child well-being and care: Material and non-material needs and existing inequalities**

An analysis of the impact of LEAP on children’s well-being and care necessitates a shared understanding of what denotes child well-being and care. This research sought not to impose a fixed conceptual framework, but asked respondents to frame their own understandings of child well-being and care. It did so by asking...
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Source: Authors.
respondents what it means for a child to have good care and well-being, and be “happy, healthy and well cared for”, and what a child needs in order to be “happy, healthy and well cared for”.

Responses to these questions can be divided into two main categories: (i) material basic needs, and (ii) non-material basic needs. Material basic needs identified by respondents included food, healthcare, clothes, money, education, shelter and sanitation. Both adults and children referred to the importance of meeting these needs in order to promote child well-being. A female LEAP recipient from AOB said: “The things needed in place in order to ensure that children are happy, healthy and well cared for are money, food, clothes, advice, education and housing.”

Many respondents also pointed towards aspects of well-being and care that can be referred to as non-material basic needs, including love, affection, security, peaceful family life and guidance. Some respondents clearly delinked these aspects of child well-being from the household’s material situation, as voiced by a male LEAP recipient from AOB: “Parents must show some kind of love and affection and even if they don’t have money, they have to learn how to talk to their children to understand them.”

Although having taken a primarily inductive approach to defining the notion of child well-being, adults’ and children’s responses mirror dimensions within theoretical frameworks of well-being and child development. Minkkinen’s structural model of child well-being, for example, identifies material, physical, mental and social dimensions, while Bronfenbrenner’s biological theory of child development emphasizes that children do not exist and develop in isolation, but within a wider exosystem and macrosystem, reflecting the importance of their relationships with caregivers, siblings, peers, adults and wider society (Minkkinen, 2013; Bronfenbrenner and Morris, 1998). The references to elements of both material and non-material needs, and the role of caregivers in meeting those needs, also reflects the rights of the child and parental duty as stipulated in the Ghana’s Children’s Act (Government of Ghana, 1998).

The investigation into what constitutes child well-being and care also revealed that levels of well-being and care can differ substantially between groups of children. Both adult and child respondents point towards differences between children depending on their age, sex and whether the children were biological or non-biological family members.

Responses in terms of age and sex convey mixed opinions. While some respondents indicated that younger children generally receive more attention due to the belief that older children can look after themselves, other respondents suggested that older children receive better care due to their ability to work and owing to the expectation that they will take on the role of supporting the family in the near future. Better care for these children could include greater access to education or
better food, thereby improving their material well-being. Responses from two boys in households receiving LEAP in AOB illustrate these mixed opinions: “The care differs based on age because the younger ones get more attention than the older ones.”; “The older child is well taken care of first so he/she can grow and get a job and then take care of the younger ones.”

Responses from adults and children also suggest that there were mixed opinions as to whether girls or boys were treated more favourably and experienced differential levels of well-being. Some respondents suggested that girls receive better care to avoid issues such as teenage pregnancy and because girls are more “helpful” in the household. Other respondents believed that boys receive better care and experience greater well-being as they will provide for the family in the future, which is in line with findings regarding better care for older children in the household.

Analysis of responses regarding differential levels of well-being and care for children within the same household indicates that differences between biological versus non-biological children are most pronounced. Adults as well as children indicated that biological children generally have greater levels of both material and non-material well-being and receive better care than non-biological children do. Examples included non-biological children having less access to education, doing more household chores and receiving less affection and love, as illustrated by a response from a male LEAP beneficiary in Gomoa West: “A biological child gets more love and affection than a non-biological child. The non-biological child does more chores than the biological child and all this makes the non-biological child feel less cared for and less happy.”

These differences not only lead to strained relationships between the non-biological child and caregivers but can also cause tensions between biological and non-biological children in the same household, as indicated by a boy living in a household receiving LEAP in AOB: “The biological child goes to school and the non-biological doesn’t and when they both go to school, the biological child’s tuition is paid while the non-biological child’s fee is left unpaid. Parents buy gifts for their own children and do not buy for the non-biological and it leads to quarrels between both children.”

A few respondents pointed towards the reverse situation and suggested that non-biological children are sometimes given better care than biological children. A boy in a household receiving LEAP in AOB mentioned that parents are eager to prove to others that the non-biological children are well cared for and therefore give them better care: “Some parents care more for the non-biological child because they don’t want people to think such a child is being maltreated.”

Another respondent stated that better care is offered when non-biological children behave better than biological children.
Poverty and family size: Barriers to child well-being and care

Respondents were also asked about challenges in, or barriers to, providing good care and child well-being for their children. The most frequently mentioned challenge in ensuring that children are happy, healthy and well cared for was poverty. Lack of resources was considered a major constraint in meeting both the material and non-material needs of children, confirming existing evidence regarding the constraining role of poverty in providing care (see Henninger and Luze, 2012). A female non-LEAP participant from Gomoa West indicated: “The biggest challenges parents face are all about money, because money is the only thing you can use to provide all the things needed by the child.”

Other challenges in ensuring child well-being and care as mentioned by respondents pertain to (changes in) household composition and living situation, including divorce or separation, single parenthood and death of family members. Household size was mentioned frequently as a barrier to well-being and high-quality care, as indicated by a female LEAP beneficiary from AOB: “The children’s well-being dropped when the number of children increased. It meant more mouths to feed and the room we shared became too small for us.” This mirrors findings by Annim, Awusabo-Asare and Amo-Adjei (2013) about the presence of many household members depleting resources for young children. Large family size was also considered to be a confounding factor playing into differences between biological and non-biological children within the household, as it requires further prioritization in the allocation of household resources.

Respondents were also asked about reasons for family separation and loss of parental care. Many of these reasons are closely linked to barriers to ensuring well-being and care and refer to a lack of resources within the family. The most commonly mentioned reasons for children’s separation from parents (i.e. living with caregivers other than one or both biological parents) are poverty and inadequate shelter (i.e. not enough rooms to accommodate all children), as illustrated by answers from two girls living in households receiving LEAP in AOB in response to the question why children do not live with their own parents: “When parents do not have money to cater for their children, such a child might have to live with someone.” And “I don’t live with my mother because she owed a debt she couldn’t repay so she left home and I had to live with my uncle.”

Changes in household composition, due to death, migration or divorce, were also mentioned as a cause for separation. In the event of the death of parents, this often leads to extended family members caring for orphaned children, as indicated by the LEAP programme manager in AOB: “It is regular for children to stay with other parents. This usually happens when parents of those children die. We have all
(a lot) of grandparents for instance who are taking care of their grandchildren of which most of them have lost their parents.”

These responses reflect the well-documented traditional fostering practice in Ghana, underpinned by the notion that the family includes all close and distant relatives, wherein it is the responsibility of the family as a whole to raise and care for a child (Kuyini et al., 2009). In most ethnic groups in Ghana such kinship care arrangements are embedded within patrilineage and are considered an important safety net for children in case of extreme poverty and the inability to meet their needs (Laird, 2011). Large family size appears to compound patterns of children’s separation from their parents and of children living with extended family members. Some adult respondents specifically mentioned the challenges posed by having many children in the household, as illustrated by a response from a male LEAP beneficiary in Gomoa West: “The reason why children are separated from their parents is because their rooms are not enough for the children to live with them.” Child respondents referred to the interplay of large family sizes with lack of resources and inadequate shelter and how this causes children’s separation from their parents. As expressed by a boy LEAP beneficiary in Gomoa West in response to the question about reasons for separation: “Large family size: Some have six or ten children and can’t afford to take care of them all, so they give some out to relatives to cater for them.”

Responses also point towards the importance of household relations in avoiding parental and family separation. Adults and children also indicated that disrespectful or stubborn behaviour may also lead to children being sent to live elsewhere or choosing to leave home. Similarly, family tensions and conflicts may lead to parents or children initiating separation. A number of respondents – primarily so, adults – also attributed children leaving home to issues of internal trafficking and child labour. These include children being separated from their families on the premise of receiving better education, going to work for the fishing industry on Lake Volta or being engaged in sex work.

Livelihood Empowerment Against Poverty Programme

The Livelihood Empowerment Against Poverty Programme (LEAP) was established by the Government of Ghana in 2008 and is the flagship programme of Ghana’s National Social Protection Strategy (NSPS). The programme aims to reduce extreme poverty among vulnerable groups, stimulate access to social services such as health and education, and break the intergenerational cycle of poverty through the provision of cash transfers (MOESW, 2012). As of June 2013, the LEAP programme reached over 70,000 households and provided benefits to 177,500 beneficiaries across the ten regions of Ghana (FAO, 2013).
Eligibility is based on two criteria; namely, (i) the household being considered poor, and (ii) the household having a household member in one or more of three demographic categories: (a) orphans or vulnerable children (OVC), (b) elderly, or (c) persons with disability and unable to work. The transfer is awarded to the household rather than the individual, but the transfer amount is dependent on the number of “eligible beneficiaries” per household. As such, the programme targets caregivers of OVC, elderly and other dependants. The selection of households is undertaken at the community level by Community LEAP Implementation Committees (CLICs) and verified centrally by a proxy-means test (Handa et al., 2013).

Participating households receive a bi-monthly payment, the amount of which is based on the number of eligible beneficiaries encompassing one of the three demographic categories within the household. The maximum number of eligible beneficiaries is capped at four people per household. Transfer amounts increase on a sliding scale: a household with one eligible member receives 24 Ghana Cedis (GHS) while a household with four eligible members receives GHS 45 (in 2015, GHS 100 = USD 28 approx.). Although the amounts were tripled in 2012, LEAP constitutes only 11 per cent as a share of average household consumption (Handa et al., 2013). In addition to the cash transfer, LEAP households receive free enrolment in the National Health Insurance Scheme (NHIS), meaning that all household members receive NHIS cards and are to be exempt from paying premiums and registration fees.

Officially, LEAP is a conditional cash transfer (CCT) programme. The implementation manual stipulates that programme participants have to comply with “co-responsibilities” in order to receive their transfers, including enrolment and retention of school-age children in school, birth registration of new born babies and their attendance at postnatal clinics, full vaccination of children up to age 5, and non-trafficking of children and their non-involvement in the “worst forms of child labour” for OVC caregivers (MOESW, 2012). Elderly programme participants and persons with disabilities are exempt from these conditions. The CLICs are to monitor the adherence to conditions (FAO, 2013). However, these “co-responsibilities” or conditions are not enforced or implemented in practice (Handa et al., 2013). This was confirmed by programme staff (a social worker in AOB) in this research: “There are no conditions but we educate them on what they should use the money for and so far the business education we give them has been effective.” The large majority of LEAP beneficiaries are not aware of any co-responsibilities or rules that they need to abide by to receive transfers (Handa et al., 2013).

The implementation of LEAP suffers from a number of challenges that compromise its potential impact. These include payment delays and arrears, lack of knowledge about the programme and limited use of opportunities for programme complementarities and sensitization. Although payments are to be paid on a
bi-monthly basis, this has proved unfeasible. In an evaluation spanning a period of 24 months, Handa et al. (2013) found that households received only 20 months’ worth of payments at very irregular intervals. Long gaps between payments in 2011 were followed by a triple payment in February 2012 to settle arrears (FAO, 2013). Moreover, despite the community-based selection process, approximately a third of respondents who were not receiving LEAP were unaware of the programme. Those who had heard of LEAP, including some participants, were unclear of the eligibility criteria and were generally able to identify only one of three criteria. Handa et al. (2013) found that 10 per cent of LEAP participants had never actually heard of LEAP. Respondents in our research also identified these issues as a challenge, as expressed by a male LEAP beneficiary from Gomoa West: “We face a lot of difficulties with the LEAP programme in terms of payment, and little information about the programme. The payments are always late . . .”

A final challenge pertains to the limited use of opportunities for the provision of complementary services and sensitization. The manual payments of the cash transfers ensure regular interactions between programme staff and beneficiaries, allowing for the provision of advice or support regarding the health, nutrition and other well-being aspects of OVC and other eligible beneficiaries. If enforced, the element of “co-responsibilities” constitutes a further opportunity for facilitating discussions and sensitizing programme participants about child protection and care (UNICEF and ODI, 2009). The 2012 budget for AOB district did indicate that funding was allocated for sensitization and awareness activities to accompany LEAP (MOFEP, 2012b). However, discussions with respondents suggest that the extent to which CLICs and social workers use the opportunities for such discussions and sensitizations is erratic and differs from community to community.

The impact of LEAP on well-being and quality of care

The impact of LEAP on well-being and care was assessed in this research by asking respondents about how to improve child well-being and care (as identified previously) and about how LEAP contributes to this. Responses suggest that LEAP improves carers’ abilities to provide for children’s basic needs and has a positive impact on child well-being and care, both from a material and non-material perspective. Respondents – both adults and children – indicated how participation in LEAP improves children’s diets, helps children to go to school, increases family health and happiness and supports general development of household livelihoods. These qualitative findings mirror those of other quantitative and qualitative evaluations of LEAP, which suggest that LEAP improved food security, schooling outcomes and self-reported happiness (FAO, 2013; Handa et al., 2014), as well as research regarding the linkages between poverty and children’s outcomes (Duncan and Brooks-Gunn, 1997).
These positive effects appear largely attributable to having more cash available in the household following the receipt of transfers. Many respondents particularly noted how LEAP transfers helped towards meeting educational costs, including school fees, meals, books and uniforms. When asked about the impact of LEAP in his household, one male LEAP beneficiary from Gomoa West responded: “It has had a lot of impact on my life in my household because I couldn’t feed myself and my children as well. I am now able to pay my hospital bills and my children’s fees and provide them with their basic school needs.” LEAP evaluations indicate that the automatic enrolment in the National Health Insurance Scheme (NHIS) has also been imperative in improving access to and the utilization of health services. As indicated by Handa et al. (2013), the NHIS component in LEAP has been successful in expanding health insurance coverage to the poorest households. In 2012, 90 per cent of all LEAP households had at least one family member enrolled in the scheme, constituting a significant increase in comparison to those not participating in LEAP (Handa et al., 2013).

Discussions with adults and children indicated that the greater ability of caregivers to provide for children’s material needs has improved household relations and facilitated better relationships between caregivers and children. This was particularly noted by adult respondents. As indicated by a female recipient of LEAP in AOB district: “[The children] no longer go hungry and all their needs are met so the relationship between us is good.” The role of LEAP in promoting non-material well-being corroborates findings in the recent qualitative programme evaluation, which suggests that LEAP beneficiaries have a greater sense of hope, confidence and aspirations for the future (FAO, 2013).

A number of programme staff from district Department of Social Welfare offices mentioned the role that sensitization activities as part of LEAP (such as education on how cash should be spent to support further income generation) play in improving households’ livelihoods. One social worker from AOB indicated: “We educate them on what they should use the money for and so far the business education we give them has been effective. The only challenge is that some of the beneficiaries sometimes spend the money on other things rather than venturing into a small scale business. We also ensure to ask what the money is being used for at any point in time.” Such sensitization activities were rarely mentioned by respondents, however, and if they were, it was in relation to the use of money for investments in livelihoods and income generating activities as opposed to, for example, children’s care or nutrition. The apparent lack of such conversations is pertinent as misuse of money was considered one of the challenges for LEAP having a positive impact. A number of respondents – adults and children – highlighted that the cash may not be used for its intended purpose. Respondents alluded to the “good use of money” and how not everyone used the money well, with some suggesting that it was spent on alcohol.
Responses with respect to the effect of LEAP beyond beneficiary households and the existence of any spill-over effects were mixed. A number of respondents suggested that LEAP can have positive impacts for children in households not participating in the programme as a result of food or money being given to other households, as indicated by a female LEAP recipient: “When my children bring their friends home, they join my children to eat, so in a way they have benefited.” Respondents who indicated that there were no spill-over effects of LEAP commented that the size of the transfer is not large enough, as illustrated by a male LEAP recipient: “The money is not enough to cater for our household so it is difficult to help other children.”

LEAP’s low transfer amount in conjunction with the cap on the maximum number of beneficiaries and large family sizes appears to present one of the key challenges in the programme’s potential impact on children’s well-being and care. Although the programme accounts for household size by increasing the total transfer amount with additional members, it does so only for eligible household members at a sliding scale and with a cap of a maximum of four members per household. As a result, larger households and households with many non-eligible members are placed at a disadvantage. The pooling of resources at the household level and the allocation thereof across all its members means that support for individual members becomes inadequate and unreliable and dilutes LEAP’s positive effect (FAO, 2013). Research by Dako-Gyeke and Oduro (2013) found that caregivers who care for beneficiary children (i.e. OVC) and non-beneficiary children (i.e. biological children) struggled with the programme requirement to isolate transfers for beneficiary children when all children require support.

Some respondents in this research explicitly voiced their discontent with respect to the cap on the maximum number of eligible beneficiaries per household, pointing out that this leads to differential impacts for smaller and larger households. As noted by a girl in a household receiving LEAP in AOB: “Some people benefit more than others because some families have many children, so the money is not enough for them, and some families do not have many children, so the money is enough for them.”

Analysis of respondents’ experiences and perspectives also suggest that although the LEAP programme does not cause inequalities between different groups of children, and most notably between biological and non-biological children, it may play a compounding role as the additional resources available within the household may be spent in favour of biological rather than non-biological children, thereby widening the existing divide in terms of well-being and quality of care. Particularly children indicated that the spending of transfers may reinforce

4. Non-eligible members are household members that do not belong to any of the three demographic categories eligible for LEAP benefits.
children’s relative advantaged and disadvantaged positions within the household, as illustrated by the views of children in households receiving LEAP benefits. One girl recipient of LEAP in AOB district expressed: “The money given to the non-biological child is less than that given to the biological child.” Similarly, a boy recipient of LEAP in Gomoa West asserted: “Yes, the biological child gets more benefits because he is the person’s child.”

**LEAP and the prevention of family separation**

Respondents were asked about what could prevent unnecessary parental and family separation, with the expectation that their answers would offer insight into the potential impact of LEAP in this regard. Answers were in line with previously identified causes of separation. Respondents pointed towards the importance of alleviating poverty, having appropriate housing and better job prospects for parents, in combination with more relational aspects such as reducing family conflict and improving communication within the family. These issues were mentioned by both children and adults – as illustrated by the response of a girl from AOB: “[Separation can be prevented] when parents have jobs and sources of income. Love between parents and unity in the house can prevent separation”; and by an adult female LEAP beneficiary from Gomoa West in a household with biological children: “... rooms should be many so that children are able to live with their parents, to avoid bad treatment. It can also be solved if the parents have money. I think it can also be solved if the children take their parents’ advice.” A number of adult respondents also indicated that sensitization programmes would be beneficial in terms of preventing separation, as indicated by the response from a woman from Gomoa West to the question what could help prevent family separation: “Help from the government to train parents and children on the implications of separation”.

Analysis of adults’ and children’s responses suggests that LEAP has the potential to impact on these reasons for parental and family separation in various ways, both positively and negatively. Answers indicate that the provision of cash transfers directly reduces poverty and the improved ability to provide for children’s basic material needs may reduce the need for placing children in the care of others, as illustrated by a quote from a female LEAP beneficiary from Gomoa West: “People give out their children due to poverty, so when they get LEAP, they will keep their children.” Many respondents also referred to the role of LEAP in improving housing conditions and particularly in terms of building more rooms. To provide accommodation for all children in the family appears to have direct consequences for the ability of children to remain with their parents, as indicated by a male LEAP beneficiary from AOB: “[Separation] can be prevented if there is enough money and more rooms for the children. It can also be prevented with
enough help from the LEAP programme” and by a girl living in a household receiving LEAP in AOB: “Some of the parents are able to build up some rooms to prevent children being separated from their parents.”

A potential negative effect of LEAP in terms of family separation and loss of parental care is the issue of the misuse of transfers received through the programme, as discussed above. LEAP staff and children raised concerns about adults not using the money for the benefit of children within the household, but being spent on alcohol instead. In such cases, at best, the transfer fails to improve children’s well-being and quality of care and, at worst, can increase domestic conflict and tensions, playing into causes for parental and family separation.

Other research has given rise to concerns over certain social protection interventions potentially inducing family separation in reference to perverse incentives following the provision of a cash transfer to kinship carers. With respect to the OVC programme in Botswana, for example, it was found that some family members were primarily motivated by financial reasons to take care of orphaned children (Roelen et al., 2011). In this research, the provision of a cash transfer to carers of non-biological children was generally considered to be positive as it would support resource-constrained households to afford the care for these children when they are primarily motivated by feelings of affection and family ties. This was indicated by a female LEAP beneficiary from Gomoa West: “It is a good thing. If a person loves a child and takes care of the child and then gets an incentive, it will help them to better care for the child.”

By the same token, concerns were also raised over the extent to which caregivers use the cash for their own purposes, or for biological children, rather than for the benefit of the non-biological children, particularly in households that have primarily economic motives for providing kinship care. A male respondent from Gomoa West pointed towards both the potentially positive and adverse effects of the provision of cash to kinship carers: “The provision of a cash transfer can be good and bad, good in the way that most of the children need help from the Government to achieve their aim, and it can be bad in that most of the parents will use the money to do their own thing. In most cases, parents use the money to buy expensive things for themselves and for their own children.”

This mixed view regarding the potential role of cash in supporting kinship foster care mirrors findings by Kuyini et al. (2009) regarding the motivations for kinship fostering, which indicates that they include providing alternative care when existing care arrangements dissolve, but also in forging bonds with kin helping in the home of the caregiver. Research by Laird (2011) with social workers in Ghana describes how the traditional practice of transferring predominantly girl children from their biological parents to extended family members to strengthen family ties or to work as domestic servants led some social workers to perceive kinship fostering as generally exploitative. Although the scale of such exploitation
cannot be asserted through qualitative research, ambivalence about the cultural imperatives of traditional kinship care is more widely shared among stakeholders in Ghana (Laird, 2011). While LEAP was not explicitly mentioned as a mechanism through which cash would be provided to kinship carers, these findings are relevant to the programme, on the one hand, given that OVC are one category of eligible beneficiary within LEAP and, on the other hand, in the wider context of non-biological children being disadvantaged in comparison to biological children.

**Conclusion**

Findings from this study corroborate findings from the existing literature regarding the links between poverty and quality of care as well as the expanding evidence base on cash transfer programmes about their positive impacts on a wide range of outcomes, including both material and non-material aspects of well-being and care for children. Transfers support caregivers in purchasing food, clothing and other basic needs as well as providing non-material psychosocial needs. They are also often used to cover educational expenses, including school fees, meals, uniforms and books. In Ghana, the link to the NHIS has helped meeting costs related to health care, particularly for children. The findings suggest that cash transfers can counteract some of the reasons for children being separated from their parents and being cared for outside of their nuclear or semi-nuclear family; namely, poverty, household tensions and pressure on resources due to large family size. LEAP was indicated to play a particularly important role in keeping children with their parents by ensuring that the house had enough rooms to accommodate all children.

Findings also point towards factors that mitigate the impact of LEAP, particularly in contexts of large household sizes and existing inequalities in households with combined care for biological and non-biological children. Non-biological children were found to have lower levels of well-being than biological children in the same family and that they are at risk of receiving lower quality care. These existing inequalities are compounded by larger family sizes and may limit the extent to which these children benefit from LEAP. Mitigating factors include low transfer amounts, transfers only being available for eligible household members and a cap on the maximum number of beneficiaries per household. Although transfer amounts have tripled in recent years and the total amount per household increases for each eligible member on a sliding scale, transfers constitute a relatively small proportion of average household consumption and therefore present a limited contribution to household resources. Particularly in large households, this reduces the per capita value of the transfer to a tokenistic amount. Not only are these factors likely to undermine the overall impact of transfers on children’s well-being and care, there is also a risk that they compound existing differences between
biological and non-biological children as they reinforce the need to prioritize resource allocation to individual household members.

Implementation is a considerable challenge in LEAP and dampens its potential impact. The lack of regularity and consistency of payments and subsequent payment delays and arrears make it difficult for beneficiaries to invest or plan for the future. The current limited use of opportunities for sensitization regarding the spending of cash for the benefit of children or for promoting children’s care is a missed opportunity in terms of supporting the conducive spending of cash transfers and creating greater awareness about the differential treatment of biological and non-biological children.

In moving forward, it is clear that there is significant potential for cash transfers to improve the well-being and quality of care for children and to help prevent parental or family separation. To make LEAP in Ghana more effective in doing so, it will be crucial to address the various implementation challenges. Payments being made on time and in full as entitled will contribute to the positive impacts of LEAP by instilling confidence and helping beneficiaries to plan and invest in the future. Bringing the transfer amount more in line with average household spending and removing or relaxing the cap on the maximum number of beneficiaries will also contribute to greater impacts and the potential for positive spill-over effects to non-beneficiaries, particularly in light of large family sizes. Finally, a more strategic use of opportunities for raising awareness and sensitization regarding the spending of cash transfers on nutrition, education and health, and concerning existing inequalities between biological and non-biological children and the positive elements of children’s care could reinforce LEAP’s positive impacts. It could also work towards counteracting unintended adverse effects such as compounding inequalities between biological and non-biological children and the misuse of cash. These elements merit further detailed and in-depth investigation and should be the focus of future research.

Bibliography


Little cash to large households: Cash transfers and children's care in disadvantaged families in Ghana


Reforming against all odds: Multi-pillar pension systems in the Czech Republic and Romania

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Abstract
Attempts to replace pay-as-you-go pension schemes with private funded systems came to a halt in Central and Eastern Europe after 2005. However, more recently, the region has witnessed two belated reformers: the Czech Republic and Romania. Both countries decided to partially privatize pensions despite the rising tide of evidence concerning the challenges associated with the policy. We argue that while part of the domestic political elite remained supportive of private funded pensions, the difficulties experienced by earlier reformers and reduced support from International Financial Institutions led to the adoption of small funded pension pillars. Such cautious attempts at privatization might become more common in the future as large reforms have proven politically unsustainable.

Keywords pension scheme, privatization, social security reform, Czech Republic, Romania

Introduction
The international spread of mandatory funded pension schemes allowing an opt-out from public pay-as-you-go (PAYG) systems began in the mid-1990s, when the...
trendsetting Chilean experience with pension privatization\(^1\) began receiving increased attention among policy-makers in the former socialist countries of Eastern Europe and Central Asia (Brooks, 2005). The success of the Chilean economy, which was partially associated with the country’s pension system reforms (e.g. Williamson and Hochman, 1995), stood in sharp contrast to the economic turmoil that Latin America experienced throughout the 1980s. Thus, between 1990 and 2000, reforms inspired by the Chilean policy model spread beyond the borders of South America, especially into Central and Eastern European countries (CEECs), where such schemes became known as the second pillar of old-age social security.\(^2\) The first post-socialist nations to introduce a second pillar were Hungary and Kazakhstan in 1998 and they were quickly followed by others (see Table 1).

The Chilean model was in tune with the reform disposition of the time, which sought to replace state-managed redistributive pension schemes and advocated using the market for organizing social security. The diffusion of pension privatization received considerable support from the World Bank which highlighted a number of expected positive features of the reform: higher rates of domestic savings, the development of national capital markets and, ultimately, higher rates of economic growth (World Bank, 1994). These were desirable ends for governments in CEECs as they muddled through their domestic economic and debt crises. In this context, pension privatization came with a promise to solve some of the most severe structural problems these countries were facing at the time.

Notwithstanding the similarity in the economic difficulties facing post-socialist CEECs in the 1990s, the adoption of pension privatization as part of the solution to the challenge of sluggish growth was not universally accepted. An attempt to introduce a multi-pillar system with mandatory private accounts collapsed in Slovenia in 1998, and has not been seriously reconsidered in the country again (Guardiancich, 2013). Furthermore, while the Czech Republic and Romania both adopted reforms leading to the partial replacement of public old-age social security with private provision, they did so much later than their peer nations and to a comparably much more limited extent.

However, unlike early privatizers, who embarked on reforms either due to their beliefs that privatization would help their failing economies or because of pressures emanating from international lenders, none of these factors were present in the Czech Republic and Romania. By the time the two countries adopted their own versions of the second pillar, their economies had largely recovered from their

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1. In line with Orenstein (2011), we use “pension privatization” to denote the replacement of public pension insurance with individual pension savings accounts managed by the financial industry.

2. For an overview, see Holzmann (2013, p. 2). It should be noted that these schemes differ significantly from the occupational “second pillars” of Western Europe, which have no equivalent in most post-socialist nations.
Table 1. Pension privatization reforms and subsequent reversals in Central and Eastern European countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Year adopted; implemented</th>
<th>Size of contributions</th>
<th>Coverage rules by age in the year of reform introduction</th>
<th>Year of reversal</th>
<th>Type of reversal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hungary</td>
<td>1997; 1998</td>
<td>Initial 6%; 8% by 2000</td>
<td>New labour market entrants since 1998; All others</td>
<td>2010</td>
<td>Complete reversal</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>1997; 1998</td>
<td>10%</td>
<td>All age groups</td>
<td>2013</td>
<td>Complete reversal</td>
</tr>
<tr>
<td>Poland</td>
<td>1997; 1999</td>
<td>7.3%</td>
<td>&lt;31; 31-50; &gt;50</td>
<td>2011; 2013</td>
<td>Contributions decreased to 2.3%; 2013: contributions 2.92%; membership made voluntary; assets partially nationalized</td>
</tr>
<tr>
<td>Latvia</td>
<td>2000; 2001</td>
<td>Initial 2%; 10% by 2010</td>
<td>&lt;30; 30-49; &gt;49</td>
<td>2009</td>
<td>Contributions decreased to 2%; increase to 6% planned by 2016</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1999; 2002</td>
<td>Initial 2%; 5% by 2007</td>
<td>&lt;43; All others</td>
<td>–</td>
<td>Ongoing discussion about prospective reversals</td>
</tr>
<tr>
<td>Croatia</td>
<td>1998–1999; 2002</td>
<td>5%</td>
<td>&lt;40; 40-60; &gt;60</td>
<td>2011</td>
<td>Older workers may fully return to the public system, if 2nd-pillar membership lowered their pension</td>
</tr>
<tr>
<td>Estonia</td>
<td>2001; 2002</td>
<td>6%a</td>
<td>&lt;19; All others</td>
<td>2009</td>
<td>Temporary freeze of contributions until 2011</td>
</tr>
<tr>
<td>Russia</td>
<td>2001; 2002</td>
<td>6%</td>
<td>&lt;36; All others</td>
<td>2013</td>
<td>Decreased contribution to 2%; National Bank to supervise pension funds</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2003; 2004</td>
<td>Initial 2.5%; 5.5% by 2007</td>
<td>All age groups</td>
<td>2009; 2012</td>
<td>2009: contributions decreased to 2%; 2012: further decrease to 1.5%; increase planned in the future</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>2003; 2005</td>
<td>9%</td>
<td>New labour market entrants since 2005; All others</td>
<td>2008; 2012</td>
<td>2008, mandatory membership abolished; 2012: contributions decreased to 4%</td>
</tr>
<tr>
<td>Macedonia</td>
<td>2002; 2007</td>
<td>7.42%</td>
<td>New labour market entrants since 2003; All others</td>
<td>2008; 2011</td>
<td>Contributions gradually decreased to 5.25%</td>
</tr>
<tr>
<td>Romania</td>
<td>2004; 2008</td>
<td>Initial 2%; annual increase of 0.5% to 6% by 2016</td>
<td>&lt;35; 35-45; &gt;45</td>
<td>2009</td>
<td>Temporary freeze of increases in 2nd-pillar contributions in 2009; increases resumed since 2010</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2011–2012; 2013</td>
<td>5%b</td>
<td>All age groups</td>
<td>2016</td>
<td>Complete reversal planned by 2016</td>
</tr>
</tbody>
</table>

Notes: a 4% from initial statutory contributions + 2% additional contributions by savers; b 3% from initial statutory contributions + 2% additional contributions by savers; c decrease in 2nd-pillar contribution rates combined with a concomitant increase in 1st-pillar contribution rates; d as of May 2015, Government decision to reverse is carried out according to plans.

transitional depressions, while the international community had become more critical of this form of pension privatization. Therefore, we ask: what explains the reforms in these two countries?

We argue that different domestic political configurations can account for the choice to privatize pensions in these two states. Whereas in the Czech Republic the coming to power of a centre-right coalition supportive of the reform explains its timing, the privatization process in Romania was continuously renegotiated between successive governments. Nevertheless, the Czech and Romanian reforms also include significant similarities. Most importantly, in comparison with earlier reformers, both countries adopted much smaller second pillars, in order to avoid the difficulties their predecessors had experienced as a result of the heavy fiscal burden created by the “double-payment” problem; i.e. paying in full for current public pensions while a portion of current contributions are diverted to finance the future pension instalments from newly-instituted private pension funds.

Private pension schemes in CEECs: From panacea to costly experiment

The literature on welfare state reform has linked the spread of pension privatization to both international and domestic political and economic factors. Building on Drazen and Grilli’s (1993) idea of “beneficial crisis”, Müller (2001 and 2003) argues that large-scale crises of the existing pension system increase the chances of paradigmatic shifts. However, domestic and international political factors also play an important role. The deteriorating financial situation of public pension schemes strengthens the position of ministries of finance and International Financial Institutions (IFIs) in the debate over the future of pensions (Müller, 2001). The growing weight of these actors in the pension policy arena increases the probability that a paradigmatic pension reform will be adopted (Müller, 2001 and 2002).

This paradigmatic shift in one of the main social policies of the modern state has also been linked to domestic actors’ motivations to resolve crises other than those of the pension system. Madrid (2005), for instance, emphasizes that the second pillar has often been seen as a way of boosting the domestic savings rate, and thus an important potential source of domestic capital. The introduction of the second pillar might also be favoured by those concerned about low inflows of foreign direct investments (FDI). Reece and Sam (2012) find a positive link between pension privatization and FDI inflow to the national economy, arguing that investors perceive the introduction of a second pillar as a strong policy signal of commitment to free-market liberalism.

Yet, the task of recalibrating public pension systems remains essentially a political issue that depends, to a large extent, on the positions held by domestic and international actors who give their own interpretation to various crises and, at
least partly, decide on the set of feasible solutions. An important strand in the literature has therefore concentrated on the role of political parties and their coalitions. Armeanu (2010) finds that partisan ideology impacts political support for privatization, but that the impact of ideology is mediated by institutional factors such as the organizational coherence of a party or the composition of a governing coalition. In the case of left-wing parties in the post-socialist context, support for privatization also depends on whether the respective party has undergone a process of modernization. The non-modernized, post-socialist Left is likely to oppose pension privatization, while left-wing parties aiming to distance themselves from the communist past will be more willing to accept it (see Tavits and Letki, 2009). By comparison, nationalist parties tend to refute privatization because of the involvement of IFIs in promoting the policy. These parties are also closely linked to privileged pensioner groups that may lose out as a consequence of the creation of the second pillar and the downsizing of the traditional public pillar, which further contributes to their hostility towards the reform (Armeanu, 2010). Armeanu’s (2010) findings are in accord with the more general literature emphasizing the link between the degree of party institutionalization and reforms in post-socialist Europe (e.g. O’Dwyer and Kovalcık, 2007). A more institutionalized party system fosters party accountability in the eyes of the electorate. Where such a relationship between well-established political elites and their voters is missing, large welfare state reforms occur more often.

While the domestic politics literature makes reference to IFI involvement in favour of pension privatization, this is not perceived as a decisive factor behind the adoption of mandatory private pension accounts (e.g. Brooks, 2004; Armeanu, 2010; Guardiancich, 2013). In contrast, part of the recent literature (Orenstein, 2008 and 2011; Béland and Orenstein, 2013) ascribes a prominent role to IFIs in the spread of mandatory funded pensions. Orenstein (2008) has shown that IFIs have supported the spread of pension privatization around the world as part of a transnational policy campaign guided by the World Bank. However, the World Bank rethought its position as regards pension privatization in the mid-2000s, as the dominant ideational landscape within its ranks shifted towards more critical, or even opposing, views concerning the policy (Orenstein, 2013). Unfulfilled expectations concerning the beneficial effect of the second pillar on the domestic economy, and the budgetary pressure it generated due to extremely high transition costs, could no longer be overlooked. Béland and Orenstein (2013), in turn, argue that this fluctuation in the views of the World Bank is the root cause of the globally-declining image of pension privatization.

Importantly, the evolving attitude towards pension privatization amongst IFIs has not necessarily decreased the interest that governments show towards the policy. Rather, a rebirth of the privatization paradigm took place after 2005 (Orenstein, 2011), led by countries that did not take part in the first wave of
privatization. Building on the experiences of their peer countries, the late privatizers were motivated by their distrust in the effectiveness of state-managed welfare. Still, as the political systems in CEECs became more institutionalized and the opponents of privatization grew stronger as a consequence of the region’s reform failures, the proponents of privatization compromised on many aspects of the policy, and opted for promoting a gradual implementation of the second pillar.

When considering the current literature on this topic, the two late privatizers in the region, the Czech Republic and Romania, represent a puzzle. Both nations have adopted a multi-pillar system at a time when the policy had lost much of its appeal across the region and within IFIs. Also, neither of the two countries was in acute need either of boosting domestic savings or of sending out costly signals to attract FDI. Furthermore, both countries’ party systems included well-established, strong left-wing parties, a factor that should have hindered large-scale social policy reforms (O’Dwyer and Kovalčík, 2007; Tavits and Letki, 2009). Thus, it appears that neither explanations concentrating on domestic and foreign political factors nor the literature focusing on economic determinants of pension-policy pathways can fully account for the reform trajectories observed.

Building on the literature that employs domestic variables to explain the introduction of second pillars in CEECs, we argue that there are different pathways towards privatization that depend on the political configurations in each country. The introduction of the second pillar in each of the two countries was ultimately an ideological decision undertaken by their centre-right governments. Furthermore, we show that the two late privatizers differed from those before in one important aspect: they paid more attention to the fiscal impact of the reform, which resulted in the adoption of a small second pillar.

Czech Republic

Pension privatization in the Czech Republic has been the subject of fairly intense domestic debate since the mid-1990s (e.g. Müller, 2002). Nevertheless, the Czech welfare system proved to be more resistant to reform than was the case in other CEECs. First, the country’s party system has not been particularly conducive to large welfare-state reforms, such as the introduction of a mandatory funded scheme. Compared to many other Eastern European nations, where parties on the left had a significant state-socialist past, the Czech Social Democratic Party (Česká strana sociálně demokratická – ČSSD) could rely on a distinct pre-war tradition. This meant that Czech social democracy was under less pressure to prove its legitimacy in the new multiparty democracy. Thus, there was no reason for the ČSSD to abandon its traditional leaning towards Bismarckian or Beveridgean pension systems (see Müller, 2002).
Second, the right wing was dominated by Václav Klaus’s free-market liberal Civic Democratic Party (Občanská demokratická strana – ODS) whose ideological inclination towards the free market ran counter to the notion of “mandatory” pension savings. Instead, Klaus supported a small, egalitarian, state-run scheme and considered old-age social security essentially as a private issue for workers (Klaus, 2002a). Moreover, as a professionally trained economist, Klaus remained sceptical that the full funding of pensions offered a possible solution to demographic ageing (Klaus, 2002b). Thus, opposition to pension privatization in the 1990s and mid-2000s was present to some extent at both ends of the Czech political spectrum.

Several pension reforms were implemented in the mid-1990s. Their key objective was the sustainability of the state-run PAYG system and the introduction of a voluntary pension savings scheme, comparable to the third pillar in the World Bank’s multi-pillar model (Král, 2011). In 1995, during the incumbency of a centre-right coalition government led by Klaus, the public system was complemented by a voluntary pension savings scheme. The structure of this private scheme reflected rather closely the libertarian ideological stance of the ODS, as membership was kept voluntary, although the state provided significant tax incentives for savers. Nevertheless, this system has not become a genuine means of asset accumulation for retirement. Rather, savers have been using it as part of their tax-optimization strategy, whereby money is withdrawn as soon as the minimum saving period is reached (Vostatek, 2012; see also Batty and Hailichova, 2012). Therefore, the Czech third pillar has never served as a significant contribution to old-age social security. The inefficient legal regulation of voluntary pension savings, as well as an impending demographic crisis and the financial imbalance of the public PAYG system, provided the justification to launch a new wave of efforts to reform the pension system in the 2000s.

In 2004, Vladimír Špidla’s Social Democratic government initiated the creation of a pension committee (the Bezdeˇk Committee) whose task was to evaluate the pension reform proposals of the main Czech political parties (Rudolfová et al., 2014). The party proposals submitted for evaluation show that there were considerable differences concerning the pension issue, not only between the political Left and Right, but also among parties that occupied roughly the same position on the left-right axis. Unsurprisingly, left-of-centre parties did not propose an increase in the weight of the private component in old-age pensions. The Communist Party of Bohemia and Moravia (KSCˇM) proposed parametric changes only, specifically a

3. The Bezdeˇk Committee, named after its head Vladimír Bezdeˇk, was created in order to provide a calculation of the costs of each pension reform scenario put forward by parliamentary parties. Its core membership consisted of five economists-mathematicians who did not propose reforms themselves. In Bezdeˇk’s own words, they served as a sophisticated calculator, while the proposals as such were developed by the parties (see also Rudolfová et al., 2014).
gradual increase in contribution rates. The ČSSD went further, by putting forward a plan to introduce a notional defined contribution (NDC) system. Instead of reflecting upon the weight of private provision in the pension system, the ODS appeared to be more concerned about the overall compulsory payment wedge of workers. Its minimum pension proposal included a decrease in the total old-age social security contribution rate from 20 to 12 percentage points. At the same time, the reform plans of the ODS did not include an organized replacement of public provision with a private scheme. This was in line with Klaus’s critique of state involvement in old-age social security. Klaus constantly emphasized throughout his political career that preparation for retirement was each individual’s private affair (see, for example, Aktuálné.cz, 2011). Individualism, and not the state-mandated “financialization” of retirement savings, has thus been the leitmotif of the pension policy of the Czech liberal right.

Nevertheless, several other right-of-centre parties offered a reform including a voluntary partial opt-out from the state-run PAYG system. The Christian Democratic KDU-ČSL and the free-market liberal Freedom Union-Democratic Union (US-DEU) both submitted a reform plan that would have included a voluntary opt-out. KDU-ČSL proposed an opt-out amounting to 8 per cent of covered income, while US-DEU would have limited the diversion of contributions to 3 per cent of covered income. The proposal by US-DEU also mandated all prospective savers to contribute an additional 6 per cent of their income into their private account, which constituted a significant disincentive to joining the private scheme. Given the unattractive conditions for joining the second pillar proposed by US-DEU, it appears that the only significant proponent of pension privatization during the 2005 pension reform discussions were the Christian Democrats. Their representative in the reform Committee, Ivo Foltýn, the former CEO of one of the country’s pension insurance companies, was particularly in favour of funded pensions. However, by the time the first Bezděk Committee submitted its final report in May 2005, large-scale pension reform had become politically unfeasible due to the fragility of the government.

The issue of old-age social security returned to the top of the agenda five years later, during the 2009–2010 incumbency of a caretaker government. Based on the initiative of Finance Minister Eduard Janota, Bezděk was again requested to chair a pensions committee whose primary aim this time was to develop a pension reform proposal. In contrast to the first Bezděk Committee, this one was thus expected to play an active role in shaping Czech pension policy. The composition of the Committee was, to a large extent, decided by Bezděk himself and included a majority of
policy experts with close links to the financial industry (Deník Referendum, 2010). Claiming that the Czech pension system required greater diversification and fiscal sustainability, the final proposal of the second Bezděk Committee was to introduce a mandatory privately-managed funded scheme for all workers aged 40 or younger, financed by diverting 3 percentage points from savers’ social security contributions. A minority proposal supported by the delegate of the Czech-Moravian Confederation of Trade Unions, Vít Samek, argued for the creation of a voluntary funded scheme in which members would place 3 percentage points of their old-age social security contributions, and would also be required to contribute an additional 3 per cent of covered income on top of existing contributions.

The second Bezděk Committee received declaratory support from Petr Nečas’s 2010–2013 centre-right libertarian government (Ihned.cz, 2010), formed by the ODS, the liberal-conservative TOP09 that also included Foltýn and other proponents of pension privatization, and the libertarian populist Věci Veřejné (Public Affairs) party. Arguing that Czech society was ageing, the Nečas Cabinet embraced pension privatization. Nevertheless, the final governmental proposal diverged considerably from the reform package recommended by the second Bezděk Committee.

The reform process was influenced by supporters of the second pillar, such as KDU-ČSL’s former expert Foltýn. Between 2010 and 2012, Foltýn served as advisor to Welfare Minister Jaromír Drábek, a nominee of TOP09. The very first reform plans of the Welfare Ministry postulated a 15 per cent/5 per cent split of old-age social security contributions between the public PAYG and the private funded scheme, respectively (Novinky.cz, 2011). However, after short negotiations, the government decided to respect the proposal of the Bezděk Committee concerning the size of the second pillar, and chose to divert 3 percentage points to the second pillar. Having observed the reform reversals that were sweeping across the CEECs, this was deemed to be the maximum acceptable rate that could be carved out from the public scheme.

As Deputy Finance Minister Radek Urban emphasized, the Hungarian, Polish and Slovak examples, where the second pillars were designed to be much larger, were seen as a cautionary tale of excessive reform zeal.6 In his view, the 2005 Slovak pension reform allowed an excessively large diversion of resources from the first pillar, which required subsequent corrections. He stated that such experiences provided guidance to Czech policy-makers in the design of a funded scheme whose introduction will not have serious consequences for the public PAYG system (Český rozhlas, 2012). The limited size of the Czech second pillar has largely been

6. At the time when the Czech reform was designed, Hungary and Poland had already partly reversed their second-pillar reforms. Slovakia followed in 2012 (see Table 1).
a result of observing the turbulent reform pathways of structurally-comparable neighbours.

However, choosing to divert less from the state-run system than did earlier reformers was not the only way in which the government limited the budgetary consequences of the reform. Although Ministers Drábek and Bezdeˇk were openly supporting a mandatory second pillar (ČTK, 2010; Expert Advisory Forum, 2010), the government decided to introduce a scheme that was voluntary for all cohorts, thereby greatly limiting the number of individual savers who would eventually enrol in the new system. The idea of mandatory savings in investment funds was flatly rejected by Prime Minister Nečas. The key reason for this was that the main opponent of the reform, the social democratic ČSSD, insisted that the system should remain voluntary. As the region’s countries began reversing pension privatization, it became increasingly difficult to completely ignore Czech domestic opposition to the reform. As Welfare Minister Drábek confirmed in some of his public statements in 2014, the free-market liberals hoped that making the second pillar voluntary would weaken ČSSD’s resolve to abolish the new private system once it got to power (ČT24, 2014). While having to confront a strong domestic opposition, the proponents of pension privatization could not rely on support from the IFIs. World Bank expert Hana Brixi stated in her evaluation of the Czech reforms that the second pillar is neither a necessary nor a sufficient condition for stabilizing the pension system, and emphasized the need to tackle lacunae in the country’s labour market policies (ČT24, 2011).

In addition, despite Drábek’s attempt at a last-minute amendment (Meˇšec.cz, 2011), the final government proposal did not include an automatic opt-in to the second pillar. Thus, the construction of the Czech second pillar closely resembled, in this respect, the Polish and Slovak schemes, which started as mandatory, but were later made fully voluntary with no automatic opt-in (see Table 1). Finally, the government introduced a compulsory additional contribution of 2 per cent for all savers who chose to join the private scheme. As was confirmed during interviews conducted with Czech policy-makers, this decision was primarily motivated by Nečas’s conviction that such a policy would engender prospective members to evaluate more carefully their decision to join the second pillar. However, his proposal strongly resembled trade union representative Samek’s minority proposal from the final report of the second Bezdeˇk Committee. Thus, while the Czech reform was by no means consensual, during the reform-making process, proponents of pension privatization introduced several elements favoured by opponents of the reform in order to decrease the opposition’s resolve to abolish the reform in the future. The presence of a strong and well-prepared opposition, represented

7. The Expert Advisory Forum refers to the second Bezdeˇk Committee.
mainly by ČSSD and the trade union federation ČMKOS, as well as fears of the scheme being exceedingly popular, just as in Hungary, Poland and Slovakia, were the main factors behind this process.

However, the adoption of a soft-compulsion strategy for the second pillar, based on voluntary membership combined with increased social security contributions for members proved excessively cautious. Instead of being comparable to mandatory funded schemes known from other CEECs, in its final form, the Czech second pillar resembled a supplement to voluntary state-subsidized savings in the third pillar. Parallel to the creation of the second pillar, the country’s third pillar has also been reformed. According to the reform acts, the “old” type of third-pillar accounts could be opened until November 2012. This generated a frenzy among prospective savers for third-pillar accounts, leading to the conclusion of more than 1.1 million new contracts in 2012 (Ministry of Finance, 2013). Given the perceived similarity of the second and third pillars from the savers’ perspective, this unusual interest in the third pillar also contributed to decreasing the demand for the second pillar.

Thus, as of May 2014, the number of second-pillar members totalled only a little over 83,000 (Ministry of Labour and Social Affairs, 2014). By contrast, the third pillar had approximately 5 million members (Ministry of Finance, 2013).

The 2013 parliamentary elections gave rise to a government led by ČSSD that entered office in January 2014. Although the second pillar is small and its size is not likely to grow significantly in the future, the new government decided in November 2014 to abolish pension privatization by January 2016. Measures limiting the immediate budgetary consequences of the Czech second pillar reform did not dissuade opponents of pension privatization as regards their intention to reverse the reform.

Romania

Discussions about the introduction of mandatory private accounts began in Romania as early as 1992, when the Social Democratic-led government prepared the first White Paper on pension reform, in response to conditionalities imposed by the World Bank. The document advocated the typical pillar design that the World Bank was then heavily endorsing, with a sizeable share of social security contributions (8 per cent) planned to be diverted to private accounts (Cashu, 2001). However, the adoption of the White Paper did not mean that the government was committed to the reform. Rather, at the time, the document was used as a means to fulfil the formal criteria required by international lenders, without real steps being taken towards changing the public pension system. In fact, the government held back from any major change in the public PAYG pension system for the first six years of transition, preferring a policy of hidden retrenchment combined with increases in the contribution rates.
Politically, pension privatization did not have many supporters. For fear of alienating its constituency, which was dominated by rural and blue-collar voters, the left-wing Social Democratic Party (PDSR, and later the PSD) blocked all major economic and social reforms (Armeanu, 2010). Guided by a gradualist reform approach, the left-wing Văcăroiu government (1992–96) supported the preservation of a state-managed redistributive welfare system financed through payroll taxes (Ban, 2011, p. 382). Moreover, there was no immediate crisis that could be used to justify large-scale reforms since the public PAYG system continued displaying surpluses until 1995.

However, support for pension privatization was rekindled after the 1996 elections. The elections brought to power the Democratic Convention of Romania (CDR), a centre-right pro-reform and highly fragmented coalition of no less than 19 different parties and political factions. The CDR became a strong supporter of pension privatization given that the reform was consistent with its wider goals of reducing the role of the state in the economy and welfare provision. The reform process was thus restarted with the new Minister of Labour, Alexandru Athanasiu, seeking to build support inside the governing coalition for the adoption of a mandatory second pillar modelled after the World Bank proposal. The intended reform kept the large contribution rate advocated in the 1992 White Paper while aiming at making the second pillar operational as early as January 1999.

A period of negotiations followed, with Athanasiu taking charge of gathering support for the reform from trade unions and policy-makers. In order to build trust in the financial success of the Chilean model and promote it in Romania, the World Bank and the Minister of Labour organized in 1998 a joint conference that had as its main guest the President of the Private Pension Funds Administration of Chile, Pedro Corona Bozzo (Cashu, 2001). At the same time, the privatization proposal underwent several changes during negotiations inside the coalition. Further reiterations of the proposed privatization law by the Ministry of Labour through 1998 and 1999 included an even higher contribution rate of 10 per cent to be diverted to the second pillar.

However, discussions over how to finance the deficit created in the public PAYG system were put aside. Instead, most of the debates concentrated on the management system of the future pillar. Importantly, the trade unions did not categorically oppose the mandatory private accounts, but wanted to have a say in their management. They advocated an alternative solution to privatization in which the private pillar would be optional and managed entirely by trade unions (Cashu, 2002). The other important player, the Ministry of Finance, also accepted the reform but, like the trade unions, was interested in who would manage the future pension funds. Disagreements over this issue ended up delaying the reform for almost a year until 2000. Faced with upcoming elections, the outgoing government passed the reform as an emergency ordinance in its last days in office.
It is worth noting that the choice of introducing privately-managed accounts in the mid-1990s reflected the ideological preferences of the CDR government that sought to limit the role of the state. At that time, Romanian public pensions still operated under a two-tier system adopted in 1977: a first tier accumulating contributions into an account that was part of the state budget and was financed through mandatory social security contributions of 28.5 per cent, and a second, mandatory tier that was financed through an employee contribution of 3 per cent and was accumulated into a special state-managed investment fund at the Romanian Savings Bank (CEC Bank). The system allowed savings to be invested in Romanian enterprises and provided for a guaranteed rate of return of 3 per cent annually. Due to high inflation rates during the post-socialist transition, the system began to display negative interest rates and run up deficits. In addition, the fund was used to cover expenditure for other items such as special pensions for military personnel. The poor management of the supplementary pension fund reinforced the idea that the state lacked the capacity to administer pensions in a fair manner.

In 2000, the left-wing PSD returned to power and cancelled the emergency ordinance introducing the second pillar that had been passed by their centre-right predecessors. In the following years, the new government refocused its attention on reforming the public pension system through incremental reforms, and ceased any privatization attempts despite including the policy in its governing programme. However, towards the end of its mandate in 2003, the government revisited the privatization proposals and asked the Ministry of Labour to prepare a new draft law. The Commission put in charge by the Ministry for drafting the new legislation relied on several studies that emphasized the negative impact of introducing the second pillar on the social security budget. As one of its members noted, the Commission also drew inspiration in designing its proposal for the second pillar from countries such as Bulgaria and Poland that already had an operational second pillar (see footnote 8).

Unlike previous reform episodes, the problem of financing the transition costs occupied a central position during debates on the possible size of contributions to the second pillar. Aware of the budgetary impact of a large reform, the Commission opted for a proposal to introduce a small second pillar with a contribution rate of only 2 per cent, with the possibility of increasing the contribution rate by half a point per year until it reached 6 per cent. Politically, the size of the contributions to be diverted to the second pillar was a sensitive issue as the Ministry of

8. Information sourced from an interview conducted by the authors with Mihai Şeitan in Bucharest, Romania in June 2014. After 1990, Mihai Şeitan was involved in drafting and implementing the private pensions’ legislation in Romania, acting as a State Secretary in the Ministry of Labour and Social Policy, and as an expert for the World Bank. Between 2009 and 2010, Mr Şeitan was the Minister of Labour and Social Policy in the government led by Emil Boc.
Finance was highly reactive to any measure causing budgetary deficits (see footnote 8). The National Social Security Agency (NSSA) estimated that the total budgetary impact of introducing the private pillar beginning in 2008 would be around EUR 1.5 billion – a cost that the budget was unable to cover. As financing the deficit from internal revenues seemed to be impossible, the NSSA argued that two external sources of financing could be used to cover it: a long-term loan from the World Bank or accessing European Structural Funds (Jurnalul Național, 2005).

With parliamentary elections approaching again in October 2004, a year after the Commission had begun work on the proposal for the second pillar, the legislation was rushed through Parliament, and was adopted with only minor amendments. For a major reform such as the introduction of private pensions, there was surprisingly little discussion about it by parliamentarians (Armeanu, 2010). The law drastically limited participation to the second pillar by making it mandatory only for individuals younger than age 35 who began contributing to the social security system for the first time after 2008. Moreover, the law left unresolved many regulatory issues related to the administration and supervision of the second pillar, including the responsibilities of the newly established Commission for the Supervision of the Private Pension System (CSSP). Inter alia, the law granted the CSSP unrestricted control over the establishment of the fees to be received by insurance companies while endorsing it with few powers to sanction those that violated the legislation.

Thus, starting with a problematic regulatory framework and still not fully operational, the second pillar reform was transferred to the agenda of the new government that began its mandate in 2005. Having obtained second place in the legislative elections, the centre-right Justice and Truth (DA) alliance9 negotiated a coalition with two other parties, the Humanist Party of Romania (PUR) and the Democratic Alliance of Hungarians in Romania (UDMR). Politically, the emergence of the DA on the right as an opposing force to the Social Democrats marked the institutionalization and stabilization of the Romanian party system (Gherghina and Jiglau, 2011).

The political programme of the DA alliance included the introduction of a flat tax, the finalization of pension privatization, and the establishment of the third, voluntary pension pillar. Thus, public debate over pension privatization came back onto the public agenda in 2005. Out of fear of losing World Bank funding for technical assistance, the Ministry of Labour restarted the reform by supporting the establishment of the CSSP. This became operational in 2005, but with no private pillar to supervise, the institution took responsibility for putting together the proposals for modifying the incomplete law on private funds adopted in 2004 (Pâslaru, 2005).

9. The Justice and Truth Alliance was an electoral coalition by the National Liberal Party (PNL) and the Democratic Party (PD).
The debate that followed led to a substantial reorganization of the initial law. First, the Ministry of Labour proposed that the coverage of the private pension system be extended by making it mandatory to all individuals younger than age 35 and optional for those between ages 35 and 45 (HotNews, 2005). The proposal came as a response to pressure from private insurance companies, who, a year earlier, had criticized the system for its restrictive entry requirements and threatened non-participation in the private system (Jurnalul Național, 2004). Second, in a bid to stir interest from private insurance companies in the future system, the Ministry reduced the minimum capital requirements for private insurers (Adevărul, 2006). Third, the new proposal also provided for relative and absolute guarantees inspired by the experience of earlier reformers in the region. Relative investment guarantees accounted for the degree of risk of a pension fund, conditional on its portfolio allocation. By comparison, absolute guarantees provided protection for contributors in the form of a nominal rate of return.

Even with these changes supported by the government and the opposition, the fate of the private system remained uncertain because of its short-term fiscal cost. Although initially planned to become operational as of 2006, the private system was postponed several times because of a lack of financial resources. The social security budget was unable to finance the introduction of the private system as the government introduced several increases in public pension benefits beginning in 2005, while decreasing the contribution rate by 2 percentage points in 2006 and promising to further decrease it by 8 percentage points by 2008 (HotNews, 2005).

Faced with these problems, a law introducing a revised version of the second pillar was adopted in 2007 and the private pillar became operational a year later, in December 2008. The final form of the system was the result of a “reasonable political compromise”, as President Traian Basescu called it at its launch (Placinta and Pricop, 2007). Following the first initiative to introduce mandatory accounts, the reform had been continuously renegotiated between right-wing and left-wing governments coming to power in Romania. This process of renegotiation led to a substantial reassessment, both in terms of the size of the second pillar and with regard to its regulatory structure. First, the contribution rate was decreased substantially and was scheduled to be phased in gradually in order to ease the fiscal impact of the reform. However, the contribution base for the second pillar was extended out of fears that low participation would impact profit rates. This made the Romanian second pillar a success in terms of the number of contributors. As of 2014, 5.9 million workers were contributing to the system, even more than the number of contributors to the public PAYG pillar. Second, the prolonged process of renegotiating the reform resulted in a tightly regulated second pillar that includes numerous guarantees and limitations on investments and solid institutional supervision.
As was the case in other CEECs, the newly-adopted Romanian second pillar came under attack during the recent crisis. In 2009, the centre-right Boc government proposed a reduction in the contribution rate to 0.5 per cent (Ziare.com, 2010). However, the proposal faced significant opposition from the Ministry of Labour, Family and Social Protection, which used the support of the National Bank of Romania and the World Bank to defend the second pillar (see footnote 8). Given its size, the second pillar was easy to defend. The main argument against cutting the contribution rate was that it would have an insignificant impact on the deficit of the PAYG system (Gândul.info, 2010). As a result, contributions to the second pillar were “frozen” only for a year and resumed according to the agreed schedule afterwards. Paradoxically, because it was small at the time when the government faced financing problems, the Romanian second pillar survived the financial crisis.

Conclusion

Despite the numerous critiques the reform has received, both from its former supporters and from those who opposed it from the outset, pension privatization is still on the agenda of Central and East European governments, albeit with much more attention being paid to the caveats overlooked by earlier reformers. We argue that its resilience, even at a time when some earlier reformers began to scale back their second pillars, is a result of the ideological preferences of policy-makers at the national level. Both in the Czech Republic and Romania, centre-right governments have advocated the introduction of mandatory private accounts. However, opposition to the privatization agenda, built on the lessons provided by the failures of earlier “privatizers”, has led to comparatively more moderate reforms in both cases. It remains to be seen to what extent this outcome will impact the medium-term sustainability of the two second pillars. The Czech Social Democratic government in office since 2014 has already decided to reverse the reform beginning 2016, while in Romania, the worsening of the fiscal situation of the public PAYG pillar due to recent decreases in contribution rates might lead to a similar outcome.

The article also shows that there is no single path to pension privatization, but many. As the case studies have demonstrated, the introduction of the second pillar diverged in important aspects between the two countries: in the Czech case, the reform was passed because of the political determination of a centre-right government; in the Romanian case, it stemmed from a lengthy process of adopting adjustments promoted by both right- and left-leaning governments. Nevertheless, the negative experiences of other CEECs and the caution of IFIs concerning the second pillar has, in both cases, weakened domestic proponents of the multi-pillar model, while strengthening its opponents. These conditions are likely to influence
the outcomes of future attempts to introduce multi-pillar models in other countries, limiting attempts at large-scale shifts from mature PAYG schemes to funded systems.

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Placinta, A.; Pricop, R. 2007. “Basescu: Daca ar fi fost acum 10 ani, prindeam ultimul tren si puseam fi un contributor pentru pensiile private” [Basescu: Ten years ago I could have been a contributor to the private pension funds], in Ziarul Financiar, 18 September.


Reforming against all odds: Multi-pillar pension systems in the Czech Republic and Romania


Ziare.com. 2010. “APAPR: Nerespectarea programului la pilonul II va duce la mari pierderi” [APAPR: Failure to implement the second pillar program will lead to great losses], 28 May.

The author’s starting point is the observation that over several decades, political scientists have been paying much more attention to socialist and social democratic parties than to conservative and “liberal” ones. This, he argues, is particularly true for the vast theoretical and empirical research on the impact of Left parties on the welfare state, how this impact varies across countries, and how it has been transformed by factors such as fiscal austerity, a growing service economy and rising globalization.

While some work has been undertaken on “welfare chauvinist parties”, mainstream parties of the Right have been ignored. And yet, Jensen notes, since 1960 about a third of all Cabinet seats in Western democracies have been occupied by politicians belonging to parties of the mainstream Right, and since the early 1980s these parties have led governments for long periods in several countries, notably the United Kingdom, Australia and even Denmark, the “archetypical social-democratic welfare regime”. So he finds this gap in analysis surprising and attributes it to the fact that the Left has been the main driver of social change and the build-up of “a large and expensive welfare state” across the post-Second World War period. It is this which the Right is now portrayed as trying to change, leading to the perception that the concern of all governments of the Right is to slash welfare (according to the “partisan” literature), but that what may stop them is the institutionalized pressure of those who benefit from existing arrangements (according to the “institutionalist” literature).

Jensen contests these two polarized views which he considers simplistic, stating that when considering the preferences of voters on the Right and their capacity to influence parliaments as well as the responses of governments on the Right the reality is much more complex. He argues that the outcomes may be more diverse when weighing the different components of welfare benefits, which may blur governments’ political Right–Left “markers” as well as the current perception of the relationship between high social spending and low income inequality. In short, he shows that welfare state policies of the Right are a complex phenomenon, responding to very different factors, including the role of parties and social groups (“partisanship” – political parties, pressure groups, the labour movement and trade unions, employers’ associations and their respective parliamentary representatives), socio-economic changes such as the transition to the service economy (de-industrialization), globalization, the impact of new technologies on employment, and demographic ageing.

Continuing in this vein, some authors consider that globalization induces increased competition that destroys jobs, leading Left governments to develop welfare benefits for the unemployed, especially where trade unions are strong enough to control wages. Others consider instead that de-industrialization and the related decline of manufacturing jobs led to the expansion of the welfare state and of the public sector (which they consider to be more redistributive). However, other analysts disagree that the Left will always expand all social programmes, and refer to “third-way” literature to...
show the shift from previous support for “passive” unemployment protection towards an “active labour market approach” that requires the unemployed to actively seek work and upgrade their skills, under the threat of penalties if they do not. Still others find that the Left tends to promote policies that benefit workers with secure jobs (“insiders”) rather than those with precarious job status (“outsiders”).

This bi-polar Left–Right view tended to change with the emergence during the 1990s of Christian democratic parties in several Continental European countries, whose support for public spending has not differed much from that of the Left’s, contributing to the further development of big welfare states in this region. These parties do emphasize, however, the protection of traditional family values and social status, rather than the redistribution of wealth promoted by the Left. In turn and more recently, new anti-immigrant parties have arisen that back “welfare chauvinism”, but which are strongly supportive of redistribution to native citizens only. Yet, and while these new groups are distinguishable from the mainstream Right, current discourse does not contest that the Right seeks to severely cut back the welfare state.

Jensen tries to go a step further in this direction by distinguishing between policies aimed to respond to two sets of objectives: i) to labour market risks (unemployment, low income), which concern workers and their representatives and their backing for a strong welfare state, and ii) to life-course risks (sickness and ageing), which concern all humans. The latter risks therefore tend to lead citizens (the electorate) to offer support for public health care and old-age pensions, with no discernible difference in the backing for such programmes between governments of the Left and Right.

The partisan differences in this area may be in right-wing governments supplementing large public programmes with subsidized private options such as private (complementary) health insurance or private pension savings accounts, which, arguably, favour the more well-to-do voters while limiting redistribution from rich to poor, though maintaining a high-level of life-course risk protection. Jensen argues that the “assault” of the Right on social welfare is not on the social programmes per se, but against the institutional power base of the trade unions that support them. As the trade union power base weakens, the social rights of the workers will be retrenched. However, policy legacies and veto points influence the Right’s capacity to pursue such restrictive strategies, and these differ among countries, as do their outcomes. These pragmatic hypotheses are analysed by looking at various surveys and data in 27 European Union countries concerning citizens preferences related to labour market and life-course-related programmes, confirming the author’s thesis that government involvement in the latter programmes is not conditional on income level, while those related to labour market risks is.

Case studies are presented on Australia, Denmark and the United Kingdom, because they differ in terms of policy legacies and political system and enable useful insights for comparative analysis, in which the author explores the similarities of governments of the Right in different institutional and historical contexts. The outcomes lead him to argue that the findings are valid for analysing other countries.

While having limited his analysis to two welfare programmes related to labour market and life-course risks, Jensen argues that his methodology could be helpful for extending the investigation to other welfare programmes such as childcare, early retirement schemes, etc. Conscious that some programmes may address both labour market and life-course risks, he calls for the development of a consistent analytical framework for distinguishing the features that characterize programmes independently of time and place from those that are unique to a programme in a given country during a specific period. He insists that for some programmes there are greater resemblances than variations
(e.g. health care and pension provision). Such an approach helps the better understanding of observations that have been unnoticed by many researchers.

He argues that a major impact of the Great Recession that started in 2008 is likely to be that of increasing priority being given to life-course related programmes, which may result in less capacity to reduce income inequality. This may be especially the case in countries traditionally favourable towards redistribution policies, because funding tends to be shifted from programmes that benefit mainly the poor to programmes that also benefit large numbers of middle-income individuals. He illustrates this argument with the United States’ case of health care coverage, where millions of American citizens have been uninsured or exposed to the inability to pay health expenses, while the electoral majority were not in favour of policy change. At the same time, there is wide public endorsement in the United States of government responsibility to provide adequate health care for the sick (84.6 per cent) but less than half (47.7 per cent) endorsing the provision of unemployment benefits.

Voters’ preferences matter, but implementation of policies depends on the interaction between governments, opposition parties and resourceful interest groups and organizations. In the case of health care reform, medical associations in the United States, Denmark, Australia and the United Kingdom have tried to block reforms. In Denmark and the United Kingdom, the political system offered fewer opportunities to block reforms throughout the twentieth century, enabling extensive coverage to be achieved rather early, while coverage extension was much slower in Australia and the United States.

While in the case of health care there is little direct linkage to labour market risks, the opposite seems true for old-age pensions, with the setting of the retirement age affecting labour supply, with the result that concerned actors can seek to influence policy to their advantage or block reforms considered as jeopardizing their interests. Here the author notes a need to explore the plasticity of needs assessment in this area, for example, how political actors define pension recipients as more or less deserving.

In the case of maternity – a life-course risk, and the related benefits and the availability of child-care – there are various labour market impacts, including the mother’s labour market attachment or absence, and her career prospects. Such impacts can reduce or increase the risk of child poverty, but can also adversely impact on reduced fertility, demographic ageing and labour shortage. For those who embrace traditional family values, there is pressure to refrain from policies that encourage women’s labour market participation. Others may consider that since becoming a parent is a choice, they are less “deserving” than other claimants to benefits. Hence, maternity (and family) policies vary widely among countries. But with the mounting challenges of demographic ageing and pension system sustainability, many countries acknowledge that they can no longer afford the luxury of not helping women better balance family and work responsibilities, and are reforming their policies and legislation.

A last concern raised by Jensen deals with the “paradox of redistribution”, where countries targeting a large share of the social budget on the poor, end up redistributing less than those that spread the budget over the population as whole (i.e. means-tested programmes are less effective in tackling inequality than universal programmes). The solution to this paradox of the redistributive welfare state is for middle-income or median-income voters, who are well positioned to influence policy-makers to increase coverage and benefit levels, to coalesce with the poor. However, Jensen notes that such a solution supposes that the social budget can grow or that other programmes can be reduced, in order to increase coverage and benefits. Western democracies have managed to increase social expendi-
ture despite growing financial pressures since the 1970s either because the pressures for benefits were rising only gradually in the future (e.g. ageing), or by resorting to debt. But since 2008 this latter option is no longer possible, and welfare benefits are being retrenched. As regards the class coalition response applied to the welfare state as a whole, some observers do not distinguish between the responses to different welfare programmes. Yet, as shown throughout the book, there is a clear income-related class preference for protection against life-course risks rather than labour market risks. So under the current austerity environment, there is a clear risk that “life-course” welfare for the middle classes will result in poor “labour market” welfare for the poor, as unemployment benefits and social assistance are retrenched.

The book’s retrospective analysis of how policies change over several decades, what mechanisms are used mainly under governments of the Right, but increasingly also by social democratic ones, the institutional and changing societal and political factors, weighed against prevalent social welfare analysis provide thought provoking tools as Western democracies and emerging economies try to balance their budgets, reduce their long-term growing debts, and cope with austerity and with a growing risk of social unrest.

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