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Is a handful of old tricks better than a sackful of new ones?

Generations of research and post-retirement poverty in the European Union

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CONTENTS

ABSTRACT

In welfare state research, it is customary to speak of generations of research. We focus on three of them: social expenditure; social rights; and the public-private mix in pension schemes. The aim of the article is to study to what extent the generations are linked to cross-national differences in old-age poverty.

The expenditure approach displayed the strongest association with the outcome. The two later research generations performed less well. In that sense the old trick is better than the new ones. Expenditure data also makes it possible to evaluate the poverty reducing effect of social services. The analysis of legislated social rights shows who is entitled to what. However, calculated rights for typical cases may not be realized: human life seldom is typical. Variability between genders, sectors of employment and social class tends to be higher than in legislated rights, and therefore, the association between the third generation measures and poverty outcomes remains low.

All the approaches share the same problem: not only pensions but many other factors have impacts upon the economic situation of the retired population. Furthermore, the dependent variable, old age poverty is an elusive concept that opens need for a new generation of comparative welfare studies.

Key words: social expenditure, social rights, pension schemes, poverty, elderly, pensioners, economic situation

1 INTRODUCTION[1]

Social policy, in its diversity, has produced a multitude of approaches for studying and comparing welfare systems implemented in different countries. In welfare state research, it is customary to speak of generations of research, each of which identifies problems with its predecessors and professes a steadfast faith in its ability to overcome those problems and to better portray social reality than the previous ones. Our focus in this study is on three such generations of pension research, focusing, respectively, on 1) social expenditure, 2) social rights, and 3) the public-private mix in income protection schemes.

In the first generation of social policy research, social policy (including pension provision) was evaluated in terms of social expenditure. The dominant mind-set behind this was "the bigger, the better!" (Ringen and Uusitalo 1992). However, this expenditure-focused approach was considered too narrow. A similar level of expenditure may be produced by a wide range of alternative systems of pension provision. This is because the level of expenditure is influenced not only by the level of pension provision, but also by the relative size of the retired population (Alestalo and Uusitalo 1992; Kangas and Palme 2008).

To overcome the aforementioned problems with expenditure data researchers began to build indicators of social rights. The idea was to measure the rights the welfare state offers the population through legislation and political decision-making (see Korpi 1980). Researchers developed typical cases with imputed incomes and hypothetical employment histories. Social rights accruing by law to such typical cases were then calculated. In comparative pension research, the focus was on calculating national replacement rates of pensions relative to earnings (e.g., Palme 1990). This approach is also followed in the Comparative Welfare Entitlements Data compiled jointly by the University of Connecticut and the University of Greifswald (Scruggs et al. 2014).

This second-generation approach, which involved the quantitative analysis of social rights, introduced a new and innovative perspective to comparative welfare state research in the 1990s and early 2000s. Yet this approach, too, was soon criticized for being too narrow. It was viewed as gender-blind: the models were said to lean too heavily on model cases more representative of men's than women's careers and earnings (e.g., Lewis 1992 and 2001; Orloff 1993). Moreover, the pin-point focus on legislated social rights did not pay heed to the variety of collective and individual insurance arrangements that are relevant to people's financial circumstances and well-being (Castles 1984; Castles and Mitchell 1994). In order to get a fuller picture, it was argued, we should take into consideration the impact of various private schemes payable on top of legislated benefits. This method can be called stacking (Kvist et al. 2013).

A third line of criticism was directed at typical cases. An analysis of the benefits targeted at the 'typical' Average Production Worker (APW) does not capture the cross-national variation in the benefits paid to people in different income categories. Two countries may display exact-

ly the same replacement rates for the hypothetical APW, while the pension system in the first country may be generous to low-income earners and pensions in the second country may favour high-income groups. An analysis focused on averages cannot bring out distributional effects. To grasp these differences, we have to calculate replacement profiles over income distribution – i.e., carry out profiling (Kvist et al. 2013).

In response to this criticism, researchers began to profile pensions over the income ladder, to calculate benefits for different income groups and to simultaneously do stacking by including non-statutory pensions in the generosity measurements. The OECD has been foremost in applying this more inclusive "third-generation" approach in its numerous research publications, and has modelled levels of pension provision in different income categories and with different balances of the public-private mix. *Pensions at a Glance* publications are prime examples of a multi-dimensional research approach (OECD 2011a and 2013; see also European Commission 2015).

The present article takes its cue from the three generations portrayed above. The reduction of poverty can, after all, be seen as the main goal of social policy. In this paper we investigate how strongly the indicators used in different research generations are correlated with old-age poverty. This kind of exercise is not only academic acrobatics: the European Union in its analyses on pension adequacy is gradually moving in the same direction and searching for satisfactory indicators to measure the adequacy of pension protection and 'explain' differences in old age poverty between the member states (European Commission 2015). It goes without saying, that 'explaining' is too demanding a word: we use correlations and regressions and can only find circumstantial evidence, as do most other studies in the field (e.g., Korpi and Palme 1998; Kangas and Palme 2000; Pontusson 2005; Brady 2009, 70–93; Hemerijck 2013, 221–289; Bradshaw 2013; Vandenbroucke and Diris 2014; European Commission 2015).

The aim of the paper is to:

1. describe the level of pension provisions in different European countries in terms of social expenditure, profiling and stacking;

2. study the relationship between pension benefits and post-retirement poverty.

Our main aim is to see to what extent, if any, the three generations are linked to cross-national differences in poverty among the elderly. The structure of the article is as follows: We first describe our data and discuss the methods used (section 2). The level of pension provision in different countries is discussed in section 3. We are interested in how the generosity of pension schemes in 15 EU countries is portrayed by the indicators used by three generations of comparative welfare research. Our main interest in section 3 is to find out the extent to which the picture changes if we do profiling and compare benefits in different income categories (low, average and high) and how the inclusion of collective supplementary pensions in addition to legislated pensions (stacking) changes our picture of the level of pension security in different income categories and in different countries.

In section 4, we investigate the relationships between the prevalence of post-retirement poverty in Europe and the generations of comparative pension research. Several comparisons of poverty among the elderly population exist (e.g., Eurostat 2011 and OECD 2011b). On that point we do not have specific contribution (our results are presented in Appendix Table). Our contribution is in comparing various indicators of the level of pensions with poverty rates (research question 3). Furthermore, the use of the micro-data panel survey EU Statistics on Income and Living Conditions (EU-SILC) allows us to control for a number of individual and household related background variables usually impossible to control for in macro-level comparisons. We ask whether extensive, third-generation indicators are more strongly associated with cross-national differences in poverty rates than the more traditional, first and second generation indicators based on expenditures and social rights, respectively. Or is it so that the old tricks are better than the new ones? In the final section we summarize our findings and discuss them at a more general level. Furthermore, we ask how adequate the relative at-risk-of-poverty (AROP) indicators based on 60% and 70% poverty thresholds are to measure the actual level of living and well-being of the European elderly.

2 DATA AND METHODS

This study combines data from various sources. For the first generational expenditure analyses, we use data from Eurostat (2011) and OECD (2011b). Data on pension generosity are derived from two different sources. Minimum pension levels and indicators of employment-related pensions for the average wage earner (APW) are taken from the Comparative Welfare Entitlements Dataset (CWED; Scruggs et al. 2014) providing data on the generosity of pension benefits. The CWED contains information on minimum pensions and APW pensions but not on pensions paid to high-income earners. In order to preliminarily carry out profiling we derive the level of maximum pensions, i.e., ceilings in relation to the average wage, from the Social Citizenship Indicators Program (SCIP) housed at the Swedish Institute for Social Research at Stockholm University. Whereas the two databases yield rather consistent figures for the APW pensions (r = 0.95**)[2], the consistency is not as good for basic pensions (r = 0.55*). If we omit the two deviant cases (Portugal with much higher basic pension in the CWED and Germany with a much lower pension level in the CWED, the correlation increases to 0.83**).

The third generational data on collective supplementary pensions are obtained from the OECD (2011a). All these replacement rate comparisons share a similar starting point. Pension entitlements are first calculated for a set of typical cases under certain career and wage assumptions. The pensions and the wages are then taxed, and the net pension is compared with the net wage for the year of retirement. All pensions (minimum, APW and maximum) are related to the average wage in the respective countries. The derived ratio is used as an indicator of the generosity of the pension system. The difference between the second and third generations is that the former is focused exclusively on statutory pensions, whereas the latter is in-

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2 Any statistical significant correlations (r) found between the variables are marked by asterisks as follows: * = result is significant at the 5% level; ** = result is significant at the 1% level; and *** = result is significant at the 0.1% level.

terested also in the impact of collective supplementary pensions, i.e., they contain legislated pensions and collectively negotiated supplementary benefits.

The problem with the above mentioned calculations is that when estimating benefits for the APW, a number of assumptions on full career are made. However, fictitious persons are fictitious persons and in many cases assumptions on the length of the work career are not met and hence, pensions are lower than the APW calculations indicate. Therefore, in our case we have minimums, APW pensions and maximum benefits and most 'real' cases fall somewhere between the minimums and maximums.

The analysis of post-retirement poverty is based on the micro-data panel survey EU Statistics on Income and Living Conditions (EU-SILC) pertaining to years 2004–2011. Poverty rates (see Appendix Table) are national averages for the whole period. Correlation between the 'official' EU average poverty rates for the period 2006–2011 (using the 60 percent poverty threshold) is as high as 0.98. Retirees are defined by reference to their labour market position (variable PL030 = 5) and their age. Our analysis is limited to persons aged 65 or older.

The sizes of national data are presented in Appendix Table. Incomes have been adjusted by the modified equivalence scale of the OECD. In order to see to what extent result are sensitive to the adopted poverty threshold we analyse – in addition to the 60 percent of the median at-risk-of-poverty (AROP) line – also 40, 50 and 70 percent of the median income (see Appendix Table).

We illustrate correlations between different factors at the country level by bivariate scatter plots and, in the text, sometimes numerically with a correlation coefficient (r).

The consistency of research generations is studied empirically by principal components analyses, which – as will be seen – yields three dimensions (components) that nicely correspond to the three generations of comparative research. We apply these components and compose additive indices by weighting respective variables by their factor loadings.

As our hypothesis is that micro-level phenomena are related to country-level units, we could utilize a multilevel approach. However, to properly continue to carry out multilevel analyses, we should have a considerable number of higher-level units and a limited number of lower-level units (Rasbash et al. 2000; Goldstein 2003; Bryan and Jenkins 2013). In our case the situation is reversed: in the EU-SILC data we have close to 500,000 lower-level units (individuals) and only 15 higher-level units (countries). Therefore, because the requirements for reliable multilevel analyses are not met, we mimic a method called a two-step strategy (Achen 2005). At the first step, we use logistic regressions (y variable: non poor = 0; poor = 1) and control for the effect of both individual (age, gender, health and educational attainment) and household (household structure) factors, as well as year and country dummies. At the second step, we regress the country-level parameters (odds ratios for being poor) against country-level indicators on pension generosity as calculated in the three generations of comparative welfare research. The country-level parameters represent nation-specific factors not captured by the covariates included in the logistic regressions.

This kind of two-step approach is warranted because there are substantial differences between countries in household structure as well as in age, gender and educational attainment of retirees. These factors will, in turn, have an impact on poverty. Therefore, logistic regression models based on micro-data were run to control for the usual confounders (gender, age, family structure and level of educational attainment). France was used as a benchmark (odds ratio = 1). The choice fell on France because of the ample data set. We only present country-specific odds ratios from regressions where confounders are included in the models. Needless to say that even this more detailed analysis leaves a significant amount of the variation between the countries unexplained.

3 MEASURING THE LEVEL OF PENSION PROVISION: FROM AN ANALYSIS OF EXPENDITURES TO VOLUNTARY PENSIONS

3.1 First generation: Generosity according to expenditures

The simplest first generation indicator was the share of pension expenditure of the gross domestic product (GDP). The next step, naturally, was to look at the GDP share of pension expenditures relative to the percentage of elderly people in the population, thus increasing the comparability between countries. The decomposition of expenditures has been refined further towards increasingly exact calculations. Good examples of such earlier decompositions can be found in the Growth to Limits series (Flora 1986a and b). In those calculations expenditure growth was decomposed into demographic and transfer components (see also OECD 1985; Saunders 1986). The basic idea there was to adjust social spending targeted at a specific population subgroup proportionally with the size of that group. In the case of retirees, for instance, the decomposition was performed by adjusting the share of pension expenditure of GDP (pensions / GDP, %) to the share of retirees in the total population (over 65 / total population, %). It was possible to perform a corresponding decomposition also with absolute figures by adjusting the amount of pension expenditure per retiree, e.g., average pension income, to per-capita GDP ((pension expenditure (€) / number of retirees) / GDP (€) per capita)).

Francis Castles' The Future of the Welfare State (2004) is a good example of what can and what cannot be achieved by the decomposition of expenditure (see also Brady 2005 and 2009: 78–93; Adema et al. 2011; Kuitto 2011; Cantillion and Vandenbroucke 2014). There is also a number of more specific studies focused on pension expenditures and old age poverty (Oishi and Oshio 2004; Oshio and Shimizutani 2005; Milligan 2008; Van Vliet et al. 2012).The decomposition tradition also continues in the indicator construction of the European Union (Eurostat 2011; European Commission 2015).

Figure 1 (p. 10) illustrates the first-generation expenditure-based comparisons of social provision. Figure 1A describes the situation on a gross basis, in which total social expenditure is shown in proportion to GDP. There is a strong correlation (r = 0.73**) between total social expenditure and social spending on old-age where the correlation simply indicates that age-based expenditures take a lion's share of all social expenditure. Figure shows that Italy,

France, Sweden and Austria are the most generous countries in terms of their expenditure on the elderly. But what this kind of inspection does not reveal is that there are substantial cross-national differences in the distribution of expenditure between public services and income transfers. While the Scandinavian countries can be described as public-service states, the Mediterranean countries are clearly classifiable as income-transfer states (OECD 2015). This division has important ramification for our measurement and understanding of poverty (see Decancq et al. 2014).

The accuracy of expenditure inspections can be elaborated by separating benefits in cash (pensions) from benefits in kind (services) and by comparing the share of pensions of the GDP to the share of pensioners in the overall population (the horizontal axis in 1B). This measure is a rough indicator of pension generosity. Another approach is to compare average retiree incomes with average incomes in the working-age population: the 'aggregated replacement level' (vertical axis in 1B). The indicators used in Figure 1B also show a positive correlation ($r = 0.68**$) and both indicators depict the same group of countries (France, Austria, Italy and Sweden) as generous. Perhaps surprisingly, the Netherlands and, in Figure 1B, Denmark are at the bottom of the rank order. Greece is an exceptional case in the sense that, looking at the x axis of both figures, it is among the five most generous countries, yet in terms of the replacement rate shown on the y axis, it appears as relatively tight-fisted. Mediterranean exceptionalism is something we will have to return to once or twice in the following.

Figure 1. Pension generosity in terms of social expenditure ('first generation') in the late 2000s.
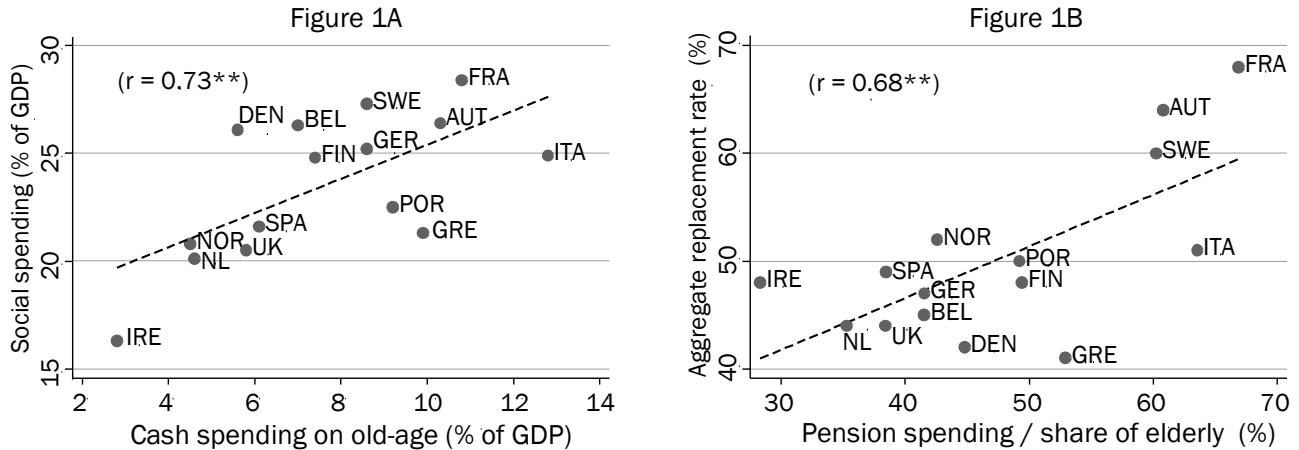

3.2 Second generation: Generosity according to social rights

In this section we are interested in seeing the way in which different parts of the pension system are linked to each other, i.e., what is the connection between minimum, APW pensions and maximum benefits as depicted in Figure 2 (p. 11). In this context Palme (1990, 79–81) speaks about systemness, i.e., to what extent different aspects of pension systems are associated with each other. Figure 2 illustrates the degree of systemness by comparing minimum, APW and maximums pension. As can be seen in Figure 2A, the correlation between minimum provision and average earnings-related pension is negative, although not very strong

(r = −0.18). Figure 2B focuses on two aspects of earnings-relatedness. Here, too, the horizontal axis represents the APW pension, whereas the vertical axis shows the maximum level of pensions (pension ceilings) in the legislated pension schemes. The maximum level is expressed as percentage of the average APW wage. In countries where the pension ceiling is very high (such as Greece) or where no maximum exists (such as Finland), an arbitrary value of 150 has been assigned to the maximum.

Figure 2. Pension generosity in terms of social rights ('second generation') in the late 2000s.
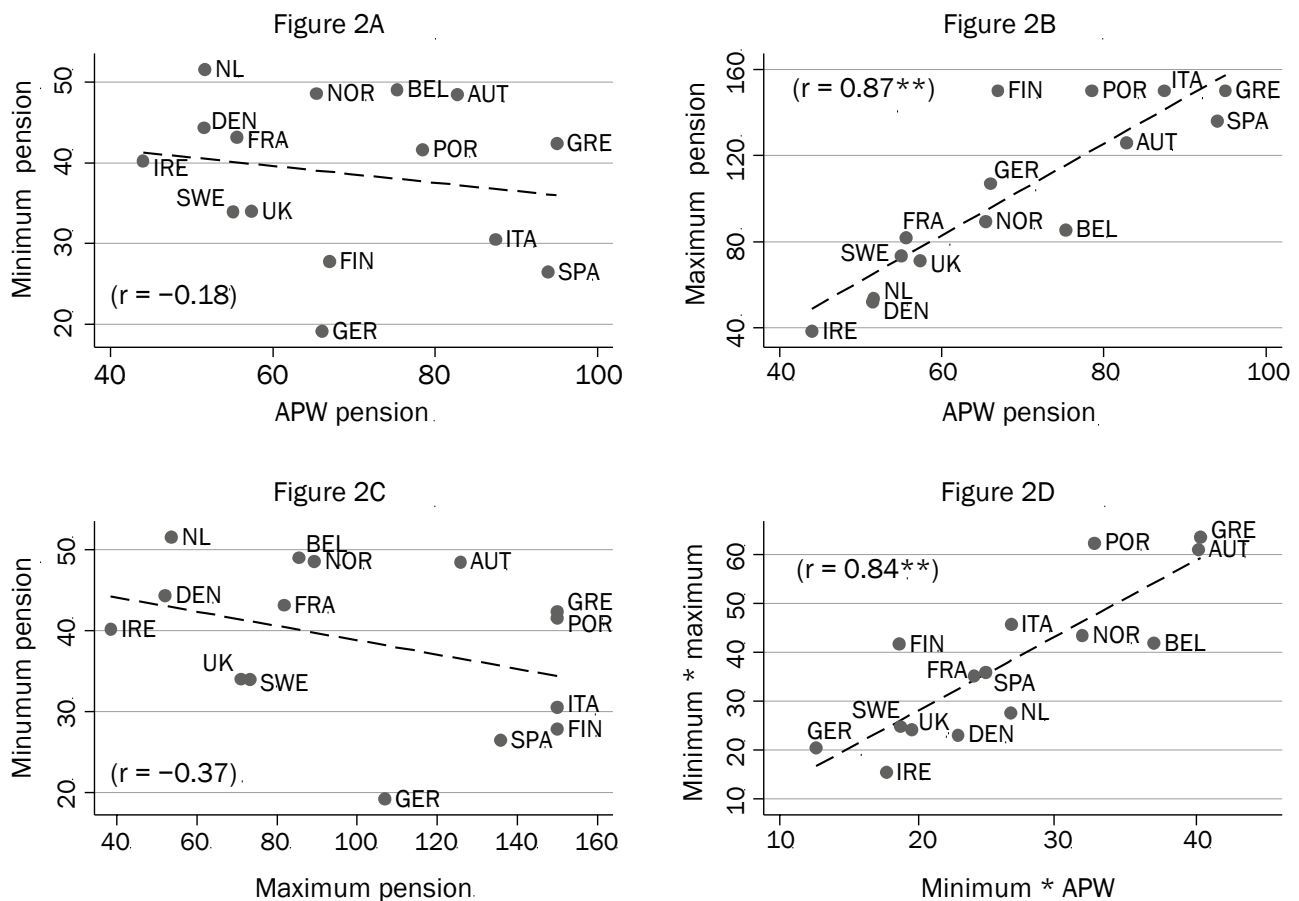
There is a very strong correlation between earnings-related pensions and maximums (r = 0.87** and 0.93** if we omit all countries with a ceiling value of 150). When we look at maximum and minimum benefits (Figure 2C), we find a negative correlation (r = −0.37 and −0.32 excluding no-ceiling countries). The results are in line with Palme's findings from the mid-1980s[3]. All in all, Figure 2 indicates that pension systems that are generous towards high-income earners tend to be less generous in providing minimum pensions.

However, the pension systems – as indicated above – have dual tasks: to provide guarantee against old age poverty by the means of basic pensions and income maintenance via income-related benefits (Barr and Diamond 2008; Cantillion et al. 2014). Therefore, indices of 'de-commodification' combine basic security with income-related programs (Esping-Andersen

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3 In the 1985 data the correlations were as follows: r = 0.11 between minimum and APW; −0.13 between minimum and maximum; 0.63 between APW and maximum (Palme 1990, 80).

1990; Scruggs and Allan 2008) and consequently, as argued by Korpi and Palme (1998), the redistribution is best achieved through such a combination. That is why we constructed indicators where we combined basic pensions with APW and maximum pensions. In order to get more robust results we calculated four separate measures (SCIPminimum * SCIPAPW / 100; SCIPminimum * SCIPmaximum / 100; CWEDminimum * CWEDAPW / 100 and CWEDminimum * SCIPmaximum / 100) to be used in our later principal component analysis. In Figure 2D, APW (CWED) and maximums (SCIP) weighted by the minimum benefits (CWED) are portrayed against each other yielding a strong positive relationship (r = 0.84**). In sum, while the relationship between the minimum and income-related benefits in the 15 EU countries is weak and negative (Figures 2A and C), there is a strong degree of 'systemness' in the income-related part of pension protection (Figures 2B and D). The inspection gives support to Cantillion's et al. (2014, 158) argument that systems that are preoccupied with providing income maintenance are less concerned with adequate minimum incomes.

3.3 Third generation: Generosity according to stacking and profiling

While the quantification of social rights opened up a new perspective on comparative welfare state research, it had its limitations. The focus on legislated benefits neglected all alternative ways of gaining economic security in old age, and, as noted in the introduction, growing old is a social risk that one can make preparations for in many different ways. Where the focus is exclusively on statutory benefits, countries whose social policies are founded on multiple pillars (statutory, collective and private insurance plans), to which the Anglo-American countries typically belong, come second to those countries that place all their eggs in the statutory basket, which is the case in the Nordic countries. Also, countries with high income taxes win out over countries that tax less. Australian researchers, in particular, have drawn attention to this problem (Castles 1985; Castles and Mitchell 1994). In other words, we have to take into consideration the impact of stacking which have important ramifications for our understanding on the correct level of social security and the factual costs of social protection in different countries (Bridgen and Meyer 2009; Immergut et al. 2009; Adema et al. 2011; European Commission 2015).

In the next panels (Figure 3, p. 13) we illustrate the effect of profiling (3A) and stacking and their joint impacts (3B). As a rule, statutory pension schemes provide the highest replacement rate for those with low incomes. Boxes represent replacement rates for persons earning half of the average wage. Circles pertain to the pension paid to the average worker and the replacement rate among those with higher incomes (1.5 times the average) is depicted by triangles. For a number of countries – notably so Austria, Finland, Germany, Italy, Portugal and Spain – calculations focusing on the average worker are also representative of other income groups. Typical for these countries are a strong connection between benefits and earnings and relatively high maximum pensions. Broadening the analysis from statutory pensions (from 3A) to total pension incomes (to 3B), including statutory as well as collective pensions, does not change the picture for these six countries. For the rest of the countries, the APW analysis is biased and does not reveal the great variation in retirement security according to income level categories. Belgium, Denmark, Ireland, the Netherlands, Norway and the United Kingdom are examples of this.

Denmark and the Netherlands serve as the best examples of how stacking changes the rank order of the countries. In both countries legislated pensions are paid on a flat-rate basis and income-relatedness is obtained through collective labour market pensions. The figure shows that while the replacement rates of statutory pensions for higher income groups are comparatively speaking low, the contribution from collective pensions markedly increases the combined (stacked) replacement level being among the highest in the EU hemisphere.

Figure 3. Net replacement rates of statutory (3A) and statutory and collective (3B) supplementary pensions at different levels of income in the late 2000s.
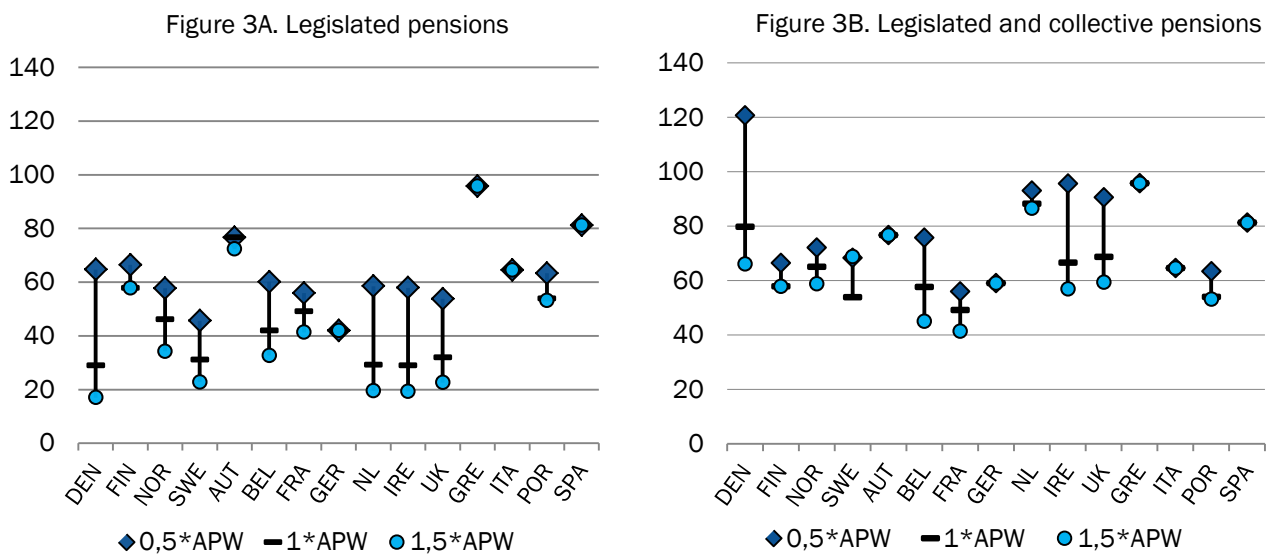
3.4 Three generations?

Each new approach has justified itself by reference to the alleged shortcomings of previous research and its own excellence. Yet, how much do the approaches really differ from each other and how much overlap lies between the indicators the three generations rely on? The consistency of the generations is examined in Table (p. 14) by means of principal components analysis that seeks latent dimensions (principal components) behind individual variables. The key indicators of retirement security used by different generations of research were included in the principal components analysis. The analysis resulted in a three-component model (Table). The correlations of the variables with the underlying components are strong, they clearly do not overlap and they can also be meaningfully interpreted. On the first component, all the expenditure-related variables get strong loadings, while the second component is linked to the social rights based indicators and the third component represents the profiling and stacking approach.

Table. Principal component analysis of indicators of pension generosity.

Indictors	1st generation: Social spending	2nd generation: Social rights	3rd generation: Stacking and profiling
Social spending	0.760	0.153	−0.280
Spending on the elderly	0.924	0.261	−0.024
Pension expenditure / elderly population	0.954	0.226	−0.053
Aggregated replacement rate	0.699	0.028	−0.362
APW(SCIP)*minimum (SCIP)	0.059	0.828	0.026
Maximum(SCIP)*minimum (SCIP)	0.329	0.848	−0.158
APW(CWED)*minimum (CWED)	0.044	0.864	0.258
Maximum(SCIP)*minimum(CWED)	0.288	0.817	0.124
All pensions 0.5*APW	−0.469	−0.188	0.703
All pensions APW	−0.290	0.218	0.913
All pensions 1.5*APW	−0.003	0.162	0.914
Eigenvalue	4.399	1.368	2.522

When constructing our new three 'generations' for the subsequent analyses we compound additive indices by multiplying each indicator by its factor loading, sum them together and finally divide by the number of indicators. Thus, e.g., the 'third generation', consisting of legislated pensions and collectively negotiated supplementary pensions, is counted as follows: (0.908 * 'All pensions 0.5 APW' + 0.947 * 'All pensions APW' + 0.919 * 'All pensions 1.5 APW') / 3. The first and second generations are constructed accordingly. In the next section we use these three components as independent variables when analysing cross-national differences in poverty rates among pension-aged population.

4 OLD-AGE POVERTY AND GENERATIONS OF WELFARE STATE STUDIES

In Figure 4 (p. 16) the three generations are used as independent variables on the horizontal axis. As dependent variables on the y axis, we use country-specific odds ratios derived from the logistic regressions controlling for age, gender, household and education. In all graphs France is the reference (= 1). In order to test the sensitivity of the results, separate analyses are carried out for 40, 50, 60 and 70 percent poverty lines.

A comparison of correlations (not shown here) of 'gross' (controls not included) and 'net' poverty rates with explanatory variables (the three generations) showed that, as a rule, associations were weaker when the background factors were taken into consideration. Furthermore, the incidence of poverty (in relation to France) seems to diminish in the Southern European countries whereas it increases in the Nordic countries. The results show that when comparing poverty rates we cannot merely assign all explanatory power to social policies or pension generosity (cf. Kangas and Ritakallio 2000; De Dewilde and Raeymaeckers 2008;

Vaalavuo 2013). The independent effect of pension system is circumscribed by a wide array of confounding factors.

Different panels (A to L) in Figure 4 show that the correlations between odds rates and the generations are the highest for the expenditure-based first generation. If we omit the outlier Netherlands from the sample, correlations for the first generation significantly increase (to –0.34; –0.43, –0.67** and to –0.68** for the 40, 50, 60 and 70 percent thresholds, respectively). The public spending on pensions in the Netherlands (4.5% of the GDP) is the third lowest in Europe (Adema et al. 2011, 42). Comparing Figures 4A and B to Figure 4C illuminates the Dutch (and Danish) peculiarity: the Dutch statutory pensions only include national pensions, and income-related contractual pensions that cover almost the total labour force are neither included in the OECD data (4A) nor in the social rights calculations (4B). Therefore, a modelling that also takes account of supplementary pensions (4C) gives a more accurate picture of the true income level among the elderly in the Netherlands.

The social rights approach has been blamed for making too many assumptions that are not fulfilled in real life. The criticism is more valid for non-legislated contractual benefits (Kvist et al. 2013). Variability between genders, sectors of employment and social class tends to be higher than in legislated rights. However, despite of this variability, it has been shown that the relation between the share of private provisions and old-age poverty and inequality is more ambiguous than the critics of private pensions argue (Meyer and Bridgen 2008; van Vliet et al. 2012). The comparison of the Netherlands and Denmark provides a good example. While at the lowest 40% poverty line there are no differences in the poverty rates between the two countries (4C), there are substantial differences at the higher poverty thresholds (4I and 4L). In both countries basic security (poverty prevention) is adequate but due to more extensive coverage and better income replacement rates in non-legislated pensions (stacking) the Dutch public-private package leads to lower poverty rates at the higher poverty thresholds (cf., Antolin 2008; European Commission 2008).

When it comes to the legislated social rights (the 2nd generation), their correlations with poverty levels get stronger when moving from the 40% to the 70% poverty threshold (r = –0.00 and –0.46, respectively). This trend conceals an intriguing, but not surprising finding. At the 40% poverty threshold the level of minimum pensions is strongly (r = –0.67**) correlated with the risk of poverty than at the highest 70% threshold level (r = –0.42). Correspondingly, the positive association of the APW pension and poverty (r = 0.36 at the 40% poverty line) turns out to be negative at the 70% poverty threshold (r = –0.26). The result simply indicates that while the level and universality of minimum pensions are important at the low poverty thresholds, the higher the poverty threshold is, the more important the role of income related pensions becomes, something that reflects the dual tasks of the pension system: combatting poverty and maintaining incomes (cf. Barr and Diamond 2008; Cantillion et al. 2014).

Figure 4. Generations of welfare state studies and incidence of old-age poverty (odds rates; France = 1) 2004–2011 in 15 EU countries using 40, 50, 60 and 70 percent poverty lines.
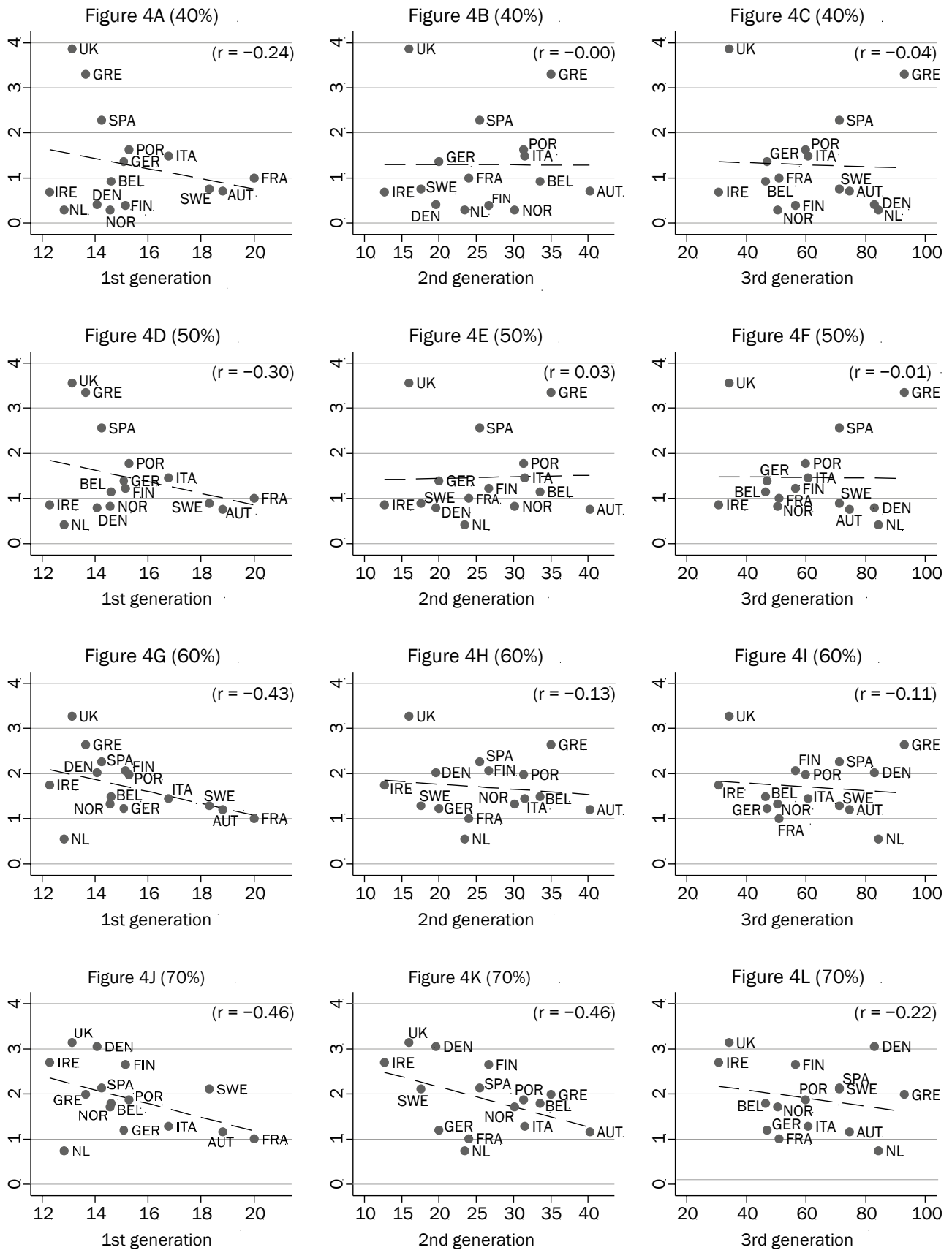
5 CONCLUSIONS: IS A HANDFUL OF OLD TRICKS BETTER THAN A SACKFUL OF NEW ONES?

This study took as its general point of departure the previous debate on the three approaches or generations of welfare state research focusing respectively on expenditures, legislated social rights and on public-private mixes taking into consideration private supplementary pensions (stacking) and the different benefits rates for different income groups (profiling).

What are the merits of these approaches in explaining outcomes, old-age poverty rates in the EU? To put it diplomatically, rather than being mutually exclusive, these three research generations can best be described as complementing each other. The strength of the first generation's expenditure-based analyses lies in their objectivity. In fact, the expenditure approach displayed the strongest association to the outcome. The two later research generations performed less well. In that sense the old trick is better than the new ones. By focusing on expenditures, we see social security as it is realized. Furthermore, on the basis of expenditure data it is possible to evaluate the poverty reducing effect of social services. What may, however, be a problem is that even if expenditures are broken down into their smallest components, it may not be possible to shed light on the income-distribution mechanisms related to social rights that lie in the background. The analysis of legislated social rights shows who gets what, and how much, at least in principle. However, herein we also meet problems. First, changes and differences in taxation practices may lead to biased comparisons between countries and across time. Changes in the net replacement rates may be attributable to changes in taxation and not to changes in pension policy. Correspondingly, countries with a high wage taxes perform well in terms of net replacement rates[4]. Second, calculated rights for typical cases may not be realized: human life seldom is typical. Some Southern European countries are problematic for the social rights approach. Judging by social rights, they have most generous pensions which is inconsistent with the high old-age poverty. The problem is best handled by the old tricks of the first generation.

Growing old is a risk that can quite well be addressed by private insurance. Since the ability of different social classes to avail themselves of private insurance coverage is biased in favour of strong groups, it has been warned that the expansion of private pensions may jeopardize social fairness (e.g., Greve 2007; Marier and Skinner 2008). However, some other analyses are not that critical against the expansion of the private component (e.g., Mayer and Bridgen 2008; van Vliet et al. 2012). Also, our results indicate that the distributional effects of private pensions are not that problematic in countries combining high basic pensions with private supplementary arrangements. If the basic pension is universal and high enough whatever is paid on top of the national pension it is unlikely to significantly increase income inequality. The situation is different in countries with low basic pensions allowing for much wider variability in pension levels between sectors and socio-economic classes.

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4 Let us assume that in countries A and B both, a wage is equal to 100 units and the tax-free national pension is equal to 40 units. The gross replacement rate is, then, 40% in both countries. In country A, a tax of 10% is levied on wages, while in country B, the taxman lays claim to 30% of wages. While both countries have the exact same level of pension provision, their net replacement rates differ quite markedly: 44% in country A as opposed to 57% in country B.

One obvious problem in all the three generations (and at-risk-poverty measures as well) discussed above is that the well-being of the elderly population is not only dependent on the generosity of pensions or spending levels. A wide array of other factors is involved: all other income transfers, housing (Dewilde and Raeymaeckers 2008), health care and other social services (Vaalavuo 2013; Verbist and Matsaganis 2014) have their impact upon the economic coping capacity of the retired population.

For analytical purposes we used four different poverty thresholds often utilized in comparative studies. Not surprisingly, the relative positions of countries – and hence policy recommendations, too – change substantially when we increase the poverty threshold. The finding questions the adequacy of the high poverty thresholds as relevant poverty measures. The correlation between AROP70% and the EU-SILC question on making ends meet, is negative ($r = -0.13$), whereas the correlation is substantially higher at the 40% and 50% levels ($r = 0.57^*$, each). The danger is that if the relative poverty threshold is risen too high, the link between measurement and the phenomenological perception of poverty disappears, which in turn, erodes the legitimacy of the measurement. The strong relationship between experienced economic problems and the poverty measure by the 40% and 50% poverty thresholds hints that perhaps the 'old' lower poverty lines capture poverty more adequately than the higher thresholds. However, all the relative measures share a similar problem: if the median income decreases, relative poverty rates go down – something that has happened in many countries during the post-2008 crisis. Therefore, complementing measures are needed and within the EU indicators are developed to better approach the multidimensional aspects of poverty (for a fuller discussion see e.g., Dewilde 2004; Decancq et al., 2014; Whelan et al. 2014). This rapidly grown research activity around the outcome variable, i.e., poverty and exclusion perhaps represents the fourth generation or comparative welfare studies.

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APPENDIX

Table. Post-retirement poverty (%) in 15 EU countries (mean values for 2004–2011[a]; poverty line at 40, 50, 60 and percent of the median income) and sample sizes.

	40%	50%	60%	70%	Sample size
1_Denmark	3.3	5.7	11.3	19.7	46,858
2_Finland	2.3	5.6	12.6	21.3	73,971
3_Norway	3.7	6.6	11.8	19.4	61,877
4_Sweden	2.7	5.5	11.0	19.0	57,546
5_Austria	3.1	6.3	12.4	19.9	63,767
6_Belgium	3.4	7.8	14.8	23.6	66,111
7_France	3.0	6.8	13.2	21.3	108,327
8_Germany	3.7	8.1	14.3	22.0	178,552
9_Netherlands	2.5	4.2	8.9	16.0	111,034
10_Ireland	2.6	7.3	14.4	25.0	20,142
11_U.K.	5.5	10.6	17.8	25.8	86,737
12_Greece	7.3	13.3	20.6	27.7	62,057
13_Italy	7.1	12.1	18.8	26.3	221,675
14_Portugal	6.5	12.1	19.5	27.5	53,825
15_Spain	8.6	13.8	20.6	27.9	155,819

[a]For DK, FR and GR, the years 2004–2010 are used.