Article

Attitudes towards redistributive spending in an era of demographic ageing: the rival pressures from age and income in 14 OECD countries

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Summary This article is about the relative impact of age and income on individual attitudes towards welfare state policies in advanced industrial democracies; that is, the extent to which the intergenerational conflict supercedes or complements intragenerational conflicts. On the basis of a multivariate statistical analysis of the 1996 ISSP Role of Government Data Set for 14 OECD countries, we find considerable age-related differences in welfare state preferences. In particular for the case of education spending, but also for other policy areas, we see that one's position in the life cycle is a more important predictor of preferences than income. Second, some countries, such as the United States, show a higher salience of the age cleavage across all policy fields; that is, age is a more important line of political preference formation in these countries than in others. Third, country characteristics matter. Although the relative salience of age varies across policy areas, we see – within one policy area – a large variance across countries.

Key words comparative politics, population ageing, public opinion, social policy preferences, welfare state regimes

Introduction

This article deals with the determinants of individual attitudes towards the welfare state. More specifically, it tests the relative importance of age differences in shaping these attitudes, compared to the socioeconomic position (captured by income) of the individual, the latter being a factor commonly believed largely to determine social policy preferences. The size and direction of the impact of old age effects is hugely important for two reasons. First, we are currently witnessing an era of massive population ageing in advanced democratic welfare states. If being old has an important effect on political attitudes, the *intergenerational* conflict could crowd out, supercede or simply complement the hitherto prevailing *intragenerational* conflict about social policies (Kohli, 2005: 518). This would have important

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consequences for how welfare states can be adapted to changing socio-economic conditions.

Second, the literature on attitudes towards the welfare state has, with a few exceptions, not studied the importance of age effects systematically. As we will show below, analyses are often restricted to the working age population, or age is merely included as a control variable that is explained in an ad hoc manner. We ground our empirical analyses in an explorative theoretical framework and argue that the importance of the age cleavage is systematically linked to the age-relatedness of redistributive policies. Throughout the article, we use the terminology of cleavage in a weak sense. A full-blown political cleavage is a societal line of conflict along which voters consciously align themselves and political actors mobilize their constituencies. Therefore, social class is a political cleavage. Age is not (yet) such a cleavage, but if we find a high degree of preference stratification by age this could be interpreted as a necessary condition for the formation of a full-blown cleavage.

In this article, we apply regression techniques to cross-sectional survey data for 14 OECD countries from 1996 (ISSP Role of Government III) and concentrate on spending attitudes in the areas of healthcare, unemployment, education, and pensions. Thereby, we aim to answer the following questions: Which factor is more important in explaining welfare state attitudes in a given social policy area: income or age? Do we observe strong differences between countries in the importance of the age cleavage?

There is no easily available theoretical model on the relative importance of the two cleavages in the literature. As a consequence, this article starts off with a simple rational choice framework. In contrast to the conventional political economy literature, however, we posit that individual attitudes towards social policies are not only determined by one's position on the income scale, but also by one's position in the life cycle (age). Depending on the type of social policy, the one or the other is expected to be more important. As will become clear, the naïve rational choice model can only explain part of the observed variation. Hence, in the Conclusions, we offer some thoughts on avenues for future research.

To foreshadow our findings: first, we find that old age matters – there are consistent differences in attitudes towards policy areas which can be explained by life cycle salience. Particularly in the case of

preferences for education spending, we see a clear predominance of age over income effects. Second, the predictive power of the age and the income cleavages varies significantly across countries. Third, some countries, such as the United States, show a higher salience of the age cleavage across *all* policy fields; that is, the stratification of social policy preferences by age may offer more potential for conflict in these countries than in others. Overall, however, the results of this article call for a more balanced view on the topic of age conflict in ageing welfare states than is purported by the populist literature on the 'coming war of generations'.

To outline the structure of the article, it first begins with an overview of the literature and puts forward the theoretical model which we test. The second section presents the methods and data. The third shows the empirical results, starting from simple bivariate findings. The final section discusses the results and concludes the article.

Literature review and theoretical framework

Literature review

This analysis is inspired by debates in the popular and scholarly literature on the coming conflict between generations. Population ageing is a powerful force shaping the politics of welfare states in industrial nations. The intuition is that as the population share of older people increases, so will their political power. The decisive question is whether this will result in a 'greying welfare state', catering disproportionately to the needs of older people (for example, pensions, healthcare) and neglecting necessary investment in younger generations (that is, in education) (Kotlikoff and Leibfritz, 1999; Streeck, 2007), or whether 'politics as usual' will prevail. While it is hard to imagine an overt war of the generations, in which younger and older people consciously take away public resources from each other, a situation might arise in which politicians cater to the needs of the largest voting group (retirees), significantly shaping the nature and extent of welfare state reforms (Goerres, 2008).

This article relies on two distinct strands of empirical literature: (a) studies on the role of age in public opinion on the welfare state; and (b) the emerging political economy literature on the impact of social

risks on policy preferences. Each of these research areas offers some insight into our problem, but each also lacks important aspects.

First, there is a variety of cross-national empirical studies on public opinion and the welfare state. This literature mushroomed after the publication of Esping-Andersen's (1990) seminal work and focuses mostly on finding attitude differences between the 'three worlds of welfare capitalism'. Usually this is done by constructing summary measures which aggregate attitudes towards various policies into comprehensive indices – a problematic approach, as we will see, since differences between social policy fields are crucial. The indices are regressed onto a range of predictors and compared across states. Either age or a retirement dummy or both are routinely included as control variables, but respective hypotheses are often developed in an ad hoc manner (for a similar assessment see Svallfors, 2008: 382). Despite the use of advanced statistical methods and numerous databases, this literature has not produced clear-cut results on the impact of age or retirement on social policy preferences. Some studies (Matheson and Wearing, 1999; Gelissen, 2000; Blekesaune and Quadagno, 2003; Linos and West, 2003; Svallfors 2003; 2004; Mehrtens, 2004; Fraile and Ferrer, 2005) find that age is a significant determinant of social policy preferences and that older people mostly have a higher inclination to support welfare state policies. Others (Papadakis and Bean, 1993; Bean and Papadakis, 1998; Andreß and Heien, 2001; Arts and Gelissen, 2001; Lipsmeyer and Nordstrom, 2003; Jaeger, 2006) have questioned these findings from a methodological and substantive perspective and find no consistent impact of age on preferences. In our view, one major reason for the inconclusiveness of findings is the fact that all of these studies use indices aggregating attitudes towards a variety of different welfare programmes, although the '"[t]he Welfare State" is an umbrella term covering a range of governmental activities that have distinct characteristics' (Pierson, 2001: 11).[1]

A second strand of the literature looks at the association between social risks and policy preferences and does a better job of differentiating between levels of support for different social policies. Building on Iversen and Soskice (2001), Kitschelt and Rehm (2006) state that individual preferences for market-correcting social policies depend on how people expect their income stream to flow in a pure market system: the lower and/or more uncertain they anticipate it to be, the more supportive of redistributive policies they are. They find that 'in the determination of political preferences over social policies, class notions in the sense of property, market and organizational experience do matter, even though often only marginally. In each instance, however, the single greatest effect is exercised by the socio-demographic variables (gender or age), followed by education' (Kitschelt and Rehm, 2006: 74). Older people are neither more nor less sympathetic to healthcare spending, but more likely to support unemployment benefits (mirroring the findings in Fraile and Ferrer, 2005) and less willing to spend tax money on education. However, using a similar study design, Armingeon (2006) finds that subjective class remains the most important variable for attitudes towards what he terms the 'traditional welfare state'.

We have seen that both strands of literature discussed so far contribute important insights to our problem. But each also has limitations. The literature on public opinion and the welfare state is more concerned with the relationship between welfare state regimes and institutions on the one hand and public attitudes on the other. Hence, it tends to disregard different dynamics in different policy areas. Kitschelt and Rehm (2006) and related studies are keen to underscore exactly these differences, but their focus is mainly on the active labour force, and, again, age figures as a control variable, not the main variable of interest. In our article, we attempt to address these missing parts and unify the different approaches in the literature by trying to answer the following questions: How does old age impact on preferences for redistributive policies? How does this impact relate to that of the socio-economic position of an individual; that is, to what extent do intergenerational conflicts 'crowd out', supercede or complement traditional intragenerational ones (Kohli, 2005: 518; Svallfors, 2008)?

Theoretical framework

This article sets out from a naïve political economy model at the individual level by asking for the relevance of social policy programmes by age and income, and then explores differences between countries.

The conventional political economy approach to the study of welfare state politics is to deduce individuals' welfare state preferences from their socio-economic
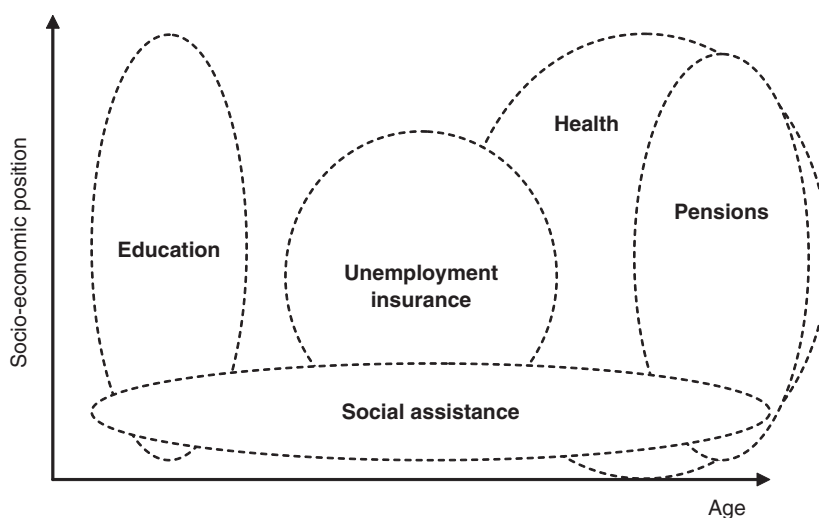
Figure 1 Individual interest in redistributive policies along two dimensions

position, that is, their position in the distribution of incomes/skills (Meltzer and Richard, 1981; Iversen and Soskice, 2001; Cusack et al., 2006). But while the income cleavage remains important to the formation of redistributive preferences, the debate on the 'coming war between generations' should inspire us to think more about the potential importance of the age cleavage. Figure 1 illustrates how the dimensions of income and old age intersect for different types of social policies. Note that this illustration does not depict the actual distribution of spending or redistribution along these two dimensions. It is an heuristic tool to structure plausible conceptions of the expected benefits to be gained from various types of social policies in relation to the individuals' position on the socio-economic and age dimensions.

The structuring of redistributive policies

Redistributive policies shift resources from one group to another. The trigger for the redistribution of resources is some notion of social need. Empirically, social need clusters around two dimensions: socio-economic position (income/education) and age.

For instance, people receive social assistance (which we will not analyse empirically) because they are poor, regardless of their age. Their state of poverty constitutes the social need which redistributive policies address. Education, however, is concentrated mainly

on the young, and the socio-economic position is less important than in the case of social assistance. Children of most social backgrounds attend public schools, but the old usually do not. The opposite case is, of course, pensions. Here, age clearly matters. It is well known that national pension systems differ widely with regard to the degree of redistribution – with conservative welfare states being less and Beveridge-type pension systems being more redistributive. The crucial point here, however, is that *only* old people receive pensions and in most OECD countries, *most* older people receive public pension benefits, regardless of their socio-economic position.

The trigger for unemployment insurance is the social need for compensation for income loss during times of unemployment, not age per se. Empirically, the risk of unemployment is, of course, concentrated in certain age-groups (job starters and older workers). But unemployment insurance covers only the working-age population, not retired people. In addition, the individual's position in terms of income/education clearly matters. The low-skilled generally face a higher risk of unemployment than the well-qualified.

Health insurance is a special case. On the one hand, the risk of illness strongly increases with age, and the bulk of health expenditure is concentrated on the elderly. On the other hand, and in contrast to pension policies, working-age individuals too enjoy concrete benefits from health insurance. In comparison with

other types of social policies, public health insurance comes closest to a universal insurance model (see also Svallfors, 2008: 387). Most people have an interest in insuring themselves against serious illnesses, although upper-income classes might prefer to opt for private alternatives instead of public schemes.

To summarize, various types of redistributive social policies differ greatly with respect to whether they are triggered mainly by age (education, pensions, health) or an individual's state of economic need (social assistance, unemployment insurance). Of course, there are large differences between countries with respect to the specific structuring of social policies (for example, entitlement criteria, benefit generosity). But the crucial point for the present analysis is that across all advanced industrial democracies there are general similarities in the structuring of redistributive policies which have important consequences for the stratification of social policy preferences along the dimensions of age and income/education.

Individual social policy preferences

At the micro level, the starting point is the assumption that individual social policy preferences will be shaped by the individual's expectation of becoming the beneficiary of a given redistributive policy.[2] Above, we outlined how this naïve political economy model lays the foundation for conventional political economy models that explain redistributive preferences. Here, however, we argue that it is not only the individual's socio-economic position that determines her social policy preferences, but also her position in the life cycle; that is, whether she is old or not. The reason for the presence of such an 'old age' effect is that social policies are triggered not only by economic need (i.e. income), but also by age-related aspects. In this respect, (old) age can be an explicit or an implicit trigger of welfare policies. In the case of pensions, the reaching of a certain age is the explicit trigger, such that welfare state policies shape and constitute 'transfer classes' (*Versorgungsklassen*) (Lepsius, 1979; see also Alber, 1984), which in turn develop an interest in the maintenance and expansion of public social programmes (Pierson, 2001). In the case of healthcare, old age is more of an implicit, de facto empirical trigger for welfare state services; that is, no one receives healthcare because they are old, but because they are ill, and the risk of illness is related to old age. Empirically, it is almost impossible to distinguish between pure 'old age' and 'transfer class'-related 'retirement' effects because old age and retirement are closely related.

Education and pension policies are the obvious examples of the age-related character of entitlements. Hence, we expect 'old age' effects to show up most clearly in those policy fields. Given that education is focused on the young, it is to be expected that older people are less in favour of increases in education spending than younger people, controlling for their socio-economic status. Of course, older people will show a certain amount of support for education spending, either because they have (grand-)children in education or realize that an educated workforce is needed to sustain economic well-being.

The case of pensions is related to, but different from education: retired people are naturally the prime beneficiaries of pension spending. Therefore, a rational choice model for preference formation would expect strong support on the part of retirees for further increases in spending. However, in contrast to education, the current non-beneficiaries of pension spending (the working-age population) expect to become a beneficiary after they exit from working life. Therefore, they might also support higher pension spending in anticipation of their later life as retirees (Svallfors, 2008; Goerres, 2008). At the same time, preferences on pension policies are shaped by the individual's socio-economic position. Individuals with higher incomes can be expected to oppose the expansion of public schemes because they can rely on private savings and fret about the redistributive component of public pension schemes. In contrast, lower-income individuals are expected to be more in favour of higher public pension spending.

Healthcare and unemployment insurance are more ambiguous because socio-economic and age effects overlap. In the case of unemployment insurance, the risk of social need tends to be concentrated in the lower skills strata. The poorly skilled will therefore be more in favour of spending increases than the rich. Given that older people in retirement have exited the labour market, they should be against spending increases on unemployment. Therefore, the expectation is that both socio-economic and old age effects will be present in the case of unemployment.

For health, we expect a similar result; that is, the rich will oppose higher spending because this increases their tax bill. In addition, a strong public insurance system crowds out private alternatives,

which are preferred by those who can afford them. As is well known, health expenditures increase with old age, so that younger people might be opposed to increases in spending that accrue mainly to the elderly. But, as in the case of pension spending, younger people can expect to need comprehensive healthcare in their later old age as well, so that they are more willing to tolerate current pensioners' overproportional draw on the system's resources.

Data and research design

For our empirical analysis, we rely on the third wave of the International Social Survey Programme's (ISSP) 'Role of Government', conducted around 1996, as it includes questions on a variety of welfare policies, as well as detailed demographic information (see the Appendix for descriptive statistics). After excluding the countries for which insufficient data are available, we were able to conduct our analysis for 14 countries: Australia, Canada, France, Germany (East and West), Great Britain, Italy, Ireland, Japan, New Zealand, Norway, Spain, Sweden, and the United States. Altogether, data for about 18,500 people are available in each regression; the sample size for the individual countries varies between 989 and 2,494.

The ISSP data include various items capturing the individual's attitudes towards the welfare state. There are four areas of redistributive spending: unemployment, education, pensions, and health. The question on spending reads:

> Listed below are various areas of government spending. Please show whether you would like to see more or less government spending in each area. Remember that if you say 'much more', it might require a tax increase to pay for it. More or less government spending on: health, education, old age pensions, unemployment benefits. Answer categories: 'spend much more', 'spend more', 'spend the same as now', 'spend less', 'spend much less'.

Since we assume that the differences between stating 'much more' and 'more' and between 'much less' and 'less' are not important for our research question and are not very reliable measurement points, we collapse the five existing categories into three, thus yielding a three-step ordinal variable spanning from spend less/much less, the same as now, to spend more/much more.

We combine the information about age and labour market position of all individuals into one nominal variable which has seven categories. We do this knowing that the data set is cross-sectional and that age and labour market status are interdependent. The first aspect means that all individuals have only been asked once and not several times. Therefore, it is technically impossible to estimate the real effect of retirement or age. Furthermore, it is impossible to estimate – at the same time – a coefficient of retirement and of age for technical and more importantly for substantive reasons because these variables are not fully independent. Technically, there is the problem of severe collinearity. High age and retirement correlate very highly; for example, being 60 and older or not correlates with retirement status at the level of about 0.78. Therefore, the statistical procedure does not know which variable to attribute the effect to and assigns values of uncertainty around the coefficients (the standard errors) which are very large for both coefficients. In the worst case, this can lead to insignificant coefficients on both variables, even though they actually do have an impact. By combining age and retirement, we make sure that the estimates are efficient in a statistical sense.

Thus, in order to combine the two variables age and labour market status, we suggest breaking up age into three categories (younger than 30, 30–59 years old, 60 years and older) and reducing the labour market status to being in education, being in the labour force (at least part-time employed or self-employed), being out of the labour force (unemployed, housewife/man, looking after family member, disabled) and retired. Arithmetically, there are 12 combinations possible. Some of these combinations are negligible because they hardly occurred and can be merged with adjacent categories: 0.08 percent of all respondents indicated being younger than 30 and retired, 0.52 percent were between 30 and 59 years old and in education, 1.70 percent were middle-aged and retired, 4.59 percent were older than 60 and out of work, and 0.02 percent were older than 60 and in education. These five categories can be meaningfully combined with other categories.[3] Most importantly, in order to capture the social meaning of retirement, we created one category for retired people which includes everyone of any age who indicated being retired (most importantly also early retirees) and also people who are older than 59 and out of the labour force (the assumption there being that the attitudes of

these individuals are already shaped by imminent retirement).

As a consequence, we can reduce all essential combinations to seven categories: younger than 30 and in work, younger than 30 and out of the labour force, younger than 30 and in education, 30–59 years old and in work (baseline category), 30–59 years old and out of the labour force, older than 59 and in work, and retired or older than 59 and out of the labour force. With these categories we capture all meaningful combinations of the position in the labour market and age without creating a problem of collinearity. So, for example, the coefficients of the last dummy indicates the difference in attitudes between the group of retirees including those who are older than 60 and out of the labour force and those who are between 30 and 59 years old and in work. The coefficient of 'older than 59 and in work' captures the difference between the small group of economically still active 60-plus population and the middle-aged people in work. If the two coefficients are in the same direction, this means that older people, no matter whether they are retired or not, are different from middle-aged people in work.[4]

As additional independent variables we employ gender and two variables of socio-economic position: education (seven levels of educational achievement) and household income on a 10-point scale (each category is the country-specific decile).[5] Also, we include a general measure of spending propensity. Some individuals tend to agree more with survey items because of personality traits (e.g. some unexplainable propensity to answer affirmatively) which have nothing to do with social policy but rather with the survey design.[6] Items which are part of a larger battery – like ours – tend to be answered in a consistent manner, even if the individuals' underlying attitudes vary.

The empirical procedure consists of three steps. First, we demonstrate that retirees differ from non-retired people in their opinion towards the welfare state by simply comparing the two groups. Second, we create a cleavage measure to assess the intensity of stratification which comes from income and from age, respectively. To measure the 'cleavage effect' of income, we use the absolute difference in predicted probabilities of being in favour of more or much more spending for the respective policy area for a person at the seventh decile in the income distribution minus the predicted probability of a person at

the third decile (corresponding to about one standard deviation above and below the mean), with everything else held at its mean (income cleavage).[7] For the age cleavage effect, the measure is the absolute difference in predicted probabilities between a person who is retired or older than 59 and out of the labour force and the baseline category, a 30–59-year-old person who is in work, with everything else held constant. As we run four regressions per country for 14 countries, we get 56 cleavage measures for income and 56 for age. The cleavage measure is a difference in percentages and therefore varies between 0 and 100 per cent. The higher the value of a measure is, the stronger the stratification of preferences is on that policy dimension by that social condition. Third, we rank countries according to the strength of the age cleavage and explore some explanations as to the underlying causes.

Results

Descriptive results

Figure 2 shows variations between 14 countries as to our four dependent variables: preferences on healthcare spending, unemployment spending, education spending, and pension spending. If the column goes to the right side, retired people are more in favour of spending in that area; if it goes to the left, retired people are less in favour of spending in that area compared to non-retired people. Each column summarizes the aggregate public opinion of the group of the retired minus the opinion of the group of the non-retired. The public opinion of each group is calculated by subtracting the proportion of people who want to decrease spending from the proportion of people who are in favour of higher spending.

Comparing the overall picture for the four areas of spending, we can see that in general, retired people tend to be more in favour of pension spending and less in favour of education spending than younger people. This overall result is the typical life cycle effect that we would expect to see. The average differences between retirees and non-retired people lie at about 8 percentage points for education spending and at about 11 percentage points for pension spending. Out of 14 countries, 13 show retirees as less in favour of educational spending than non-retired individuals and more in favour of pension spending. But the magnitudes of effects are not uniform across countries.
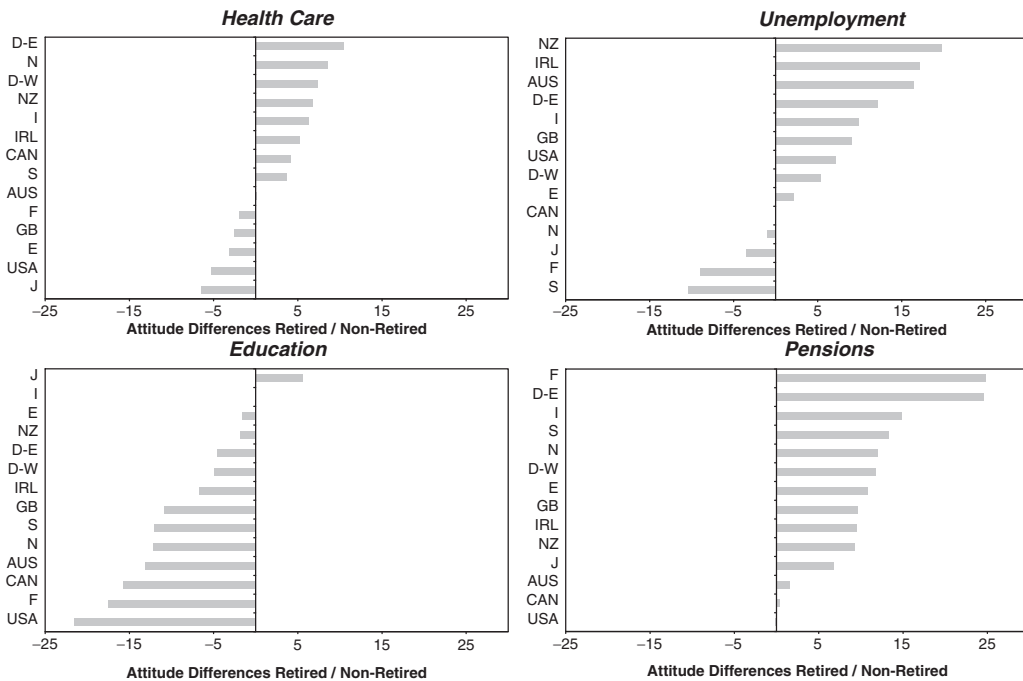
Figure 2 Differences in spending preferences between retirees and non-retired individuals in 14 OECD countries in 1996 (positive values: retirees more in favour than non-retired)

For health and unemployment, the average differences between the retired and the non-retired groups are only 2 percentage points and 5 percentage points, respectively. We find both patterns of difference between younger and retired people; that is, the number of countries in which the retired are more supportive of increased spending is similar to the number of countries in which they are less supportive.

The graphs show that there are differences between retired and non-retired individuals and that these differences vary across countries. The variance across countries could be due to genuine differences in the meaning of retirement or age for individual preferences. But they could also stem from compositional effects – retirees in one country could be richer, relative to the working population, than in another country. In order to disentangle these effects, we now turn to multivariate methods.

Multivariate results

Table 1 lists four regressions for all 14 countries together. In order to bypass the often unrealistic and, as

in our case, frequently violated 'parallel regression assumption' in simple ordinal logistic regressions, we chose to estimate generalized ordered logit models (see Williams, 2006). The regressions include country dummies to account for country specificities which can cause different intercepts. The first panel of the table shows coefficients of predictors which differentiate between the answer 'less spending' on the one hand, and the categories 'same as now' and 'more spending' on the other hand. Basically, it shows what impact the independent variables have in getting a respondent up from the first step of the three-step ladder. The second panel of the table contrasts 'less spending' and 'the same as now' on the one hand with 'more spending' on the other, meaning how people on the third step of the ladder differ from those on the first two steps.

In line with the descriptive results, we can see that on the one hand, both groups of people who are aged 60 and older (in work and out of the labour force/retired) have significant negative coefficients for education spending in both panels. This means that being in the oldest age group increases the likelihood of asking for less spending on education. In contrast,

Table 1   Generalized ordered logistic regressions, preferences for welfare spending in 14 OECD countries in 1996

Models of policy spending preferences	Health Model 1		Unemployment Model 2		Education Model 3		Pensions Model 4	
	Coef	Robust std err.	Coef	Robust std err.	Coef	Robust std err.	Coef	Robust std err.
'Less Spending' vs 'Same as now/more spending'								
Female	0.55[c]	0.07	0.27[c]	0.04	0.68[c]	0.11	0.53[c]	0.09
Spending control	0.47[c]	0.04	0.32[c]	0.04	0.55[c]	0.06	0.38[c]	0.05
Education	–0.24[c]	0.04	–0.05	0.04	–0.04	0.08	–0.22[c]	0.04
Income	–0.07[c]	0.02	–0.11[c]	0.01	0.02	0.02	–0.06[b]	0.02
Younger than 30 and in work (baseline: 30–59 yrs old and in work)	0.2	0.15	–0.09	0.08	–0.11	0.11	–0.29	0.17
Younger than 30 and out of the labour force	0.09	0.18	0.28	0.15	–0.40[a]	0.18	–0.26	0.26
Younger than 30 and in education	–0.23	0.2	0.07	0.11	0.19	0.24	–0.65[b]	0.24
30–59 yrs old and out of the labour force	0.05	0.12	0.25[b]	0.09	–0.23	0.12	0.03	0.19
Older than 59 and in work	–0.2	0.17	–0.04	0.14	–0.73[b]	0.27	0.16	0.2
Retired or older than 60 and out of the labour force	–0.06	0.12	0.15	0.15	–0.35[a]	0.15	0.60[c]	0.1
Constant	5.18[c]	0.32	0.87[c]	0.21	3.64[c]	0.36	4.37[c]	0.24
'Less spending/Same as now' vs 'More Spending'								
Female	0.36[c]	0.05	0.15[a]	0.06	0.20[b]	0.06	0.20[c]	0.05
Spending control	0.29[c]	0.03	0.25[c]	0.03	0.36[c]	0.05	0.21[c]	0.04
Education	–0.20[c]	0.04	–0.19[c]	0.03	0.08[a]	0.03	–0.24[c]	0.03
Income	–0.06[c]	0.01	–0.10[c]	0.01	–0.01	0.01	–0.08[c]	0.01
Younger than 30 and in work (baseline: 30–59 yrs old and in work)	0.08	0.09	0.05	0.08	–0.09	0.08	0	0.08
Younger than 30 and out of the labour force	0.06	0.15	0.56[c]	0.09	–0.13	0.12	–0.06	0.08
Younger than 30 and in education	–0.13	0.17	0.08	0.12	0.28	0.2	–0.32[b]	0.11

(Continued)

Table 1   (Continued)

Models of policy spending preferences	Health Model 1		Unemployment Model 2		Education Model 3		Pensions Model 4	
	Coef	Robust std err.	Coef	Robust std err.	Coef	Robust std err.	Coef	Robust std err.
30–59 yrs old and out of the labour force	0.06	0.06	0.25[a]	0.11	0	0.05	0.09	0.07
Older than 59 and in work	−0.33[b]	0.11	−0.26[c]	0.08	−0.45[c]	0.1	−0.14	0.1
Retired or older than 60 and out of the labour force	−0.12	0.07	−0.19[a]	0.08	−0.27[b]	0.09	0.04	0.1
Constant	2.44[c]	0.26	−0.80[c]	0.17	0.42[a]	0.17	1.31[c]	0.19
Valid N	18846		18407		18673		18597	
Loglikelihood	−11985		−17390		−13241		−14170	
AIC	23997		34806		26509		28367	
McFadden's Pseudo R²	0.097		0.103		0.071		0.091	

Notes: [a]/[b]/[c], significant at .05/.01/.001 level. Country dummies included (coefficients not shown). Standard errors clustered by country.

when it comes to spending on pensions, being older makes it more likely to answer with 'the same as now' or 'more spending' than with 'less spending' (significant only for older people not working). This means that the differences which we have seen between the retired and the non-retired in the descriptive statistics are not due to compositional effects related to gender, education, or income, but that there are systematic differences in policy preferences related to one's position in the life cycle.

In the case of spending on health and unemployment, we have encountered only small differences between the retired and the non-retired in the descriptive section. This is mirrored by the fact that the relevant coefficients in these two regressions are not significant most of the time, so there are no substantial differences between older people and middle-aged people in the workforce. There is one exception: older people are more likely to ask for less or the same spending on unemployment as opposed to more. Note also that the coefficients for income are in line with our expectations: they are negative for expenditure on health, unemployment, and pensions, while they are not significant for education spending.

Figures 3 to 6 show the variance of the cleavage measures calculated from single-country regressions for all four areas of spending and all 14 countries.[8] The black columns represent the strength of the age cleavage; it can range from 0 percentage points (e.g. education in Norway, pensions in Ireland) to 18 percentage points (education in the USA). That means that the difference in the probability of being in favour of more spending between the old and the middle-aged in work may be nil in one country/policy field and up to 18 percentage points in the most extreme case. The grey columns stand for the strength of the income cleavage; it can range from about 1 percentage point (education in West Germany, Sweden, and New Zealand) to about 15 percentage points (unemployment spending in Great Britain).

The cleavage measures in these figures stand for the intensity and not the direction of stratification of individual attitudes towards certain redistributive policy areas – in terms of either socio-economic position or age. They can be compared across countries and across policy areas, because they are measured in probability changes (in effect, percentage points).

For healthcare spending, we find that, on average, age cleavage effects are of similar magnitude to the income cleavage effects. Both means lie at about
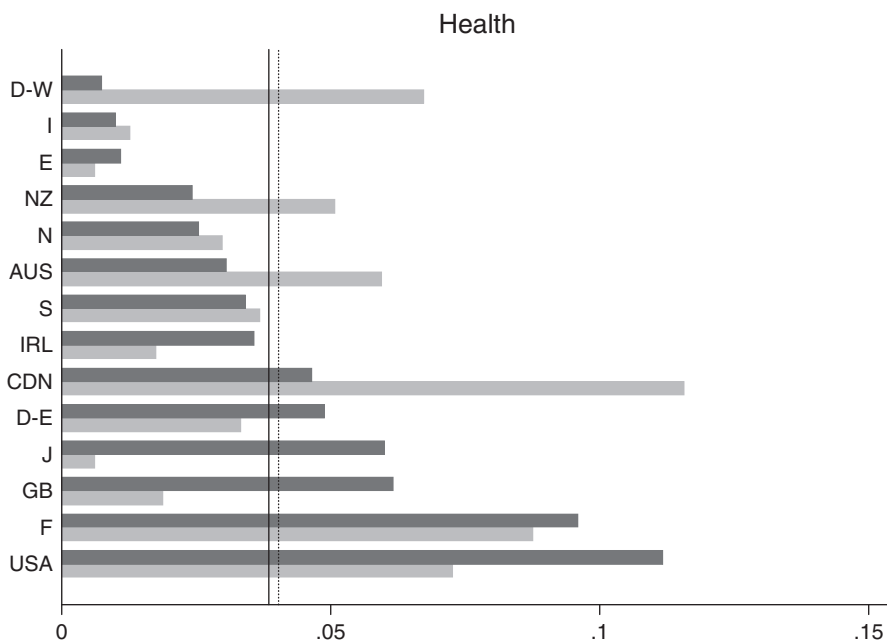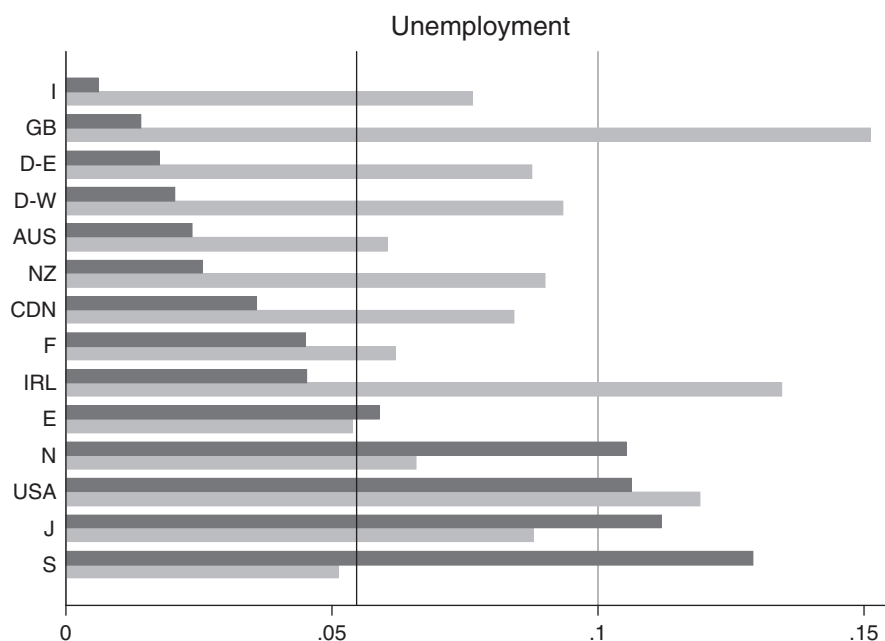
Figure 3   Cleavages of age and class in preferences for healthcare spending in 14 OECD countries in 1996
Note: Dark columns represent the age cleavage (=difference in predicted probabilities of being in favour of more spending between someone who is retired and someone who is 30–59 years old and in work, ceteris paribus). The dark vertical line indicates the mean value of the age cleavage. Brighter columns represent the income cleavage (=difference in predicted probabilities of being in favour of more spending between someone who is in the 7th decile of the country and someone who is in the 3rd decile, ceteris paribus). The dotted vertical line indicates the mean value for the income cleavage.

4 percentage points. As we expected, there are both age and income effects present for healthcare spending preferences, although they are rather weak in comparison to other policy fields, indicating the universal character of public health insurance. Also, there is a large variance between countries. The difference between old and middle-aged people runs from 1 percentage point in West Germany and Italy to 11 percentage points in the United States. The preference stratification by income varies between about 1 percentage point in Italy and 12 percentage points in Canada.

In the area of unemployment spending, age and income effects are both relevant as expected, with older people being more opposed to higher spending (see the negative regression coefficients in Panel 2 of Model 2 in Table 1). The mean differences lie at about 5 percentage points for the age cleavage and 9 percentage points for the income cleavage. There is a generally high level of income stratification in nearly every

country. The values range from a low of 5 percentage points in Sweden and Spain up to 15 percentage points in Great Britain. This is in line with our expectations: income as a main indicator of socio-economic position should be very important in determining one's expectations of protection from the labour market. Even though the mean age effect is of sizable magnitude, we find a bifurcated distribution. Age effects are rather low in most instances. For 10 out of the 14 countries, they range between 1 percentage point (Great Britain) and 6 percentage points (Spain). But there are four countries exhibiting a pronounced age cleavage: the United States, Norway, Japan (11 percentage points each), and Sweden (13 percentage points).

In the area of education spending, the general pattern shows a strong age cleavage with a mean of 7 percentage points. In comparison to the other policy areas, age effects are most pronounced here. Also, the age cleavage is more important than the income cleavage, which has a mean of only 3 percentage points.

Figure 4 Cleavages of age and class in preferences for unemployment spending in 14 OECD countries in 1996
Note: See Note on Figure 3 for guidance on interpretation.

Again, there are large differences in the magnitude of the effect between countries. While there are no differences between middle-aged people in the workforce and older people who are retired or out of the labour force in West Germany and Norway, the middle-aged are 18 percentage points more likely than the older to ask for higher spending on education in the United States. This cleavage is even more pronounced when one looks at the difference between older people out of the labour force and young people in education in the US: here, the difference is 29 percentage points.

Finally, the cleavage measure in pension spending shows strong cleavage effects for age as well as for socio-economic position, with a mean of 6 percentage points and 7 percentage points, respectively. Wealthy individuals are less inclined to demand higher public spending. This effect can be observed in nearly every country and is most pronounced in New Zealand (14 percentage points), Sweden (13 percentage points), and France (12 percentage points).

The age cleavage for pension spending is a special case in which the cleavage measure we have used so far (looking at the absolute differences between the two comparison groups) is of limited use only. For

the other policy fields, the direction of the age effect is the same for all countries and in the expected direction almost all of the time; and if not, the coefficients are close to zero. The case of preferences for pension spending is different. On the one hand we get large negative effects (between 6 percentage points and 13 percentage points) for Australia, the United States, New Zealand and Canada. In these countries, older people are actually *less* in favour of more spending for pensions than middle-aged people. On the other hand, in countries like East Germany (16 percentage points) and France (11 percentage points), retirees ask for significantly higher levels of public pension spending, which is the direction to be expected from a simple self-interest perspective.

Macro-level ranking

As a final step, we now take a tentative look at the macro features of the results we presented in the previous sections. Which countries have the highest potential for a conflict between age groups as captured in differences in political preferences? The magnitude of age stratification in social policy preferences
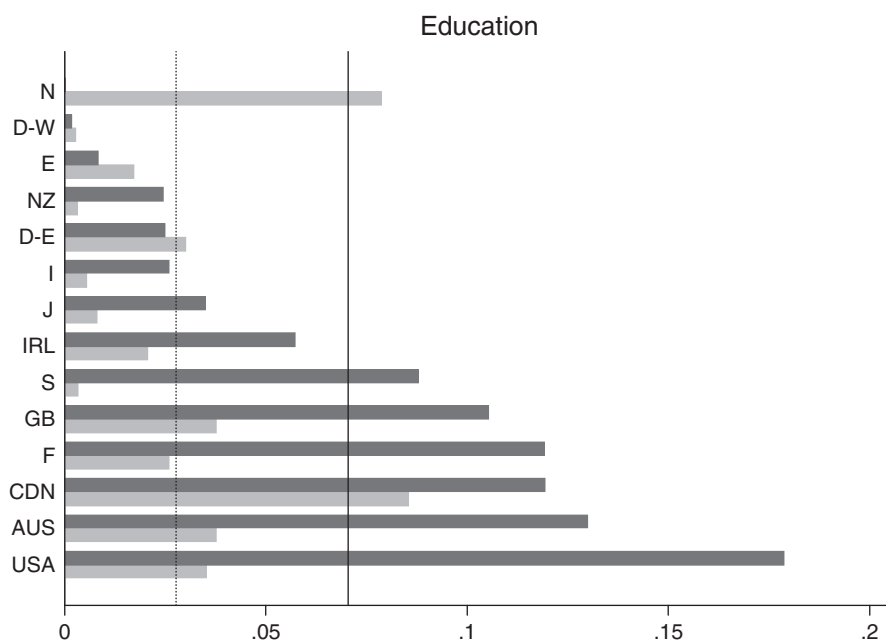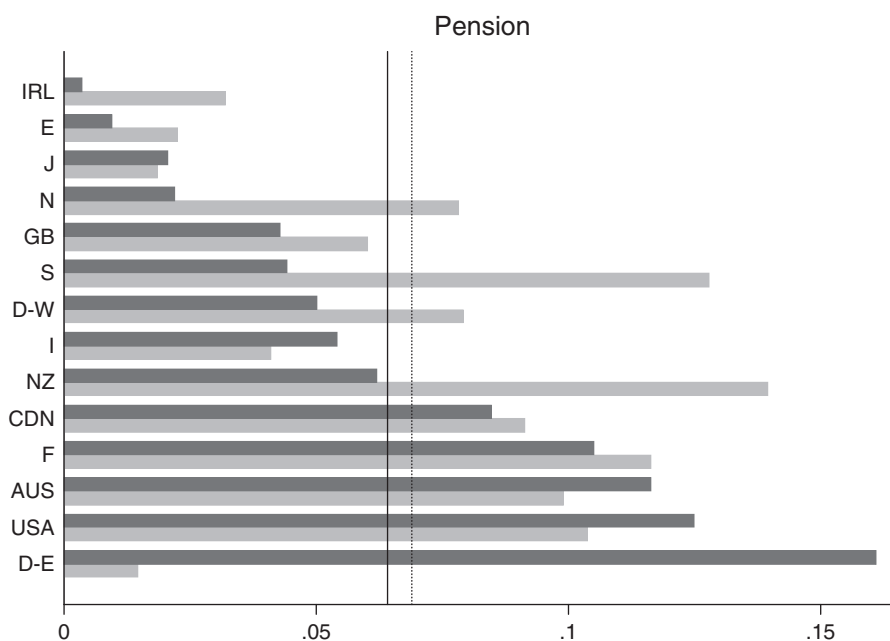
Figure 5   Cleavages of age and class in preferences for educational spending in 14 OECD countries in 1996
Note: See Note on Figure 3 for guidance on interpretation.

can be interpreted as a necessary but not sufficient condition for latent cleavages to become manifest. It is possible to rank countries according to the size of the age cleavage measure in the four policy areas. Table 2 provides a ranking of countries, with Columns 3–6 showing the ranking in the four policy areas and a summary (average) measure in the second column which, in turn, is the foundation for the absolute ranks of countries shown in the first column. The numbers show that some countries exhibit stronger overall age effects than others. The country with the highest level of age-related stratification is the United States. France is second on this list, followed by Canada, Australia, and Sweden. Some countries only exhibit strong differences in some policy areas. For example, East Germany is the country with the highest age cleavage for pension spending and Sweden for unemployment expenditure. At the bottom of the list, we find Spain, Italy, and West Germany. For those countries, differences in attitudes can generally not be well explained by age differences. They consistently rank in the bottom half for all policy fields with one exception (unemployment in Spain).

Conclusions

Age matters. The empirical evidence presented in this article has confirmed the relevance of socio-economic position (income) for explaining individual preferences for redistributive social policies. But we have shown that, in addition, the age cleavage shapes redistributive preferences. Therefore, the conventional wisdom in the political economy literature – namely that 'people's position in the economy' (Cusack et al., 2006: 366) determines policy preferences – should be amended to take account of 'people's position in the life cycle'. Second, the magnitude of the age cleavage varies across policy fields. This is because redistributive social policies vary according to the degree to which they are age-related. The strongest age effects were found in the case of preferences for education spending, while the income cleavage dominates most clearly in the case of unemployment spending. Third, in addition to the variance in the relative relevance of cleavages across policy fields, we found significant differences across countries within a given policy area. Even in the case of education spending, the severity of the age cleavage varies considerably.

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Pension

Figure 6 Cleavages of age and class in preferences for pension spending in 14 OECD countries in 1996
Note: See Note on Figure 3 for guidance on interpretation.

Further research is clearly needed in this area. The significant amount of variation in the relative importance of the two cleavages across countries suggests that in addition to policy types, country characteristics matter. The ranking in Table 2, however, does not correspond directly with established typologies such as the 'worlds of welfare' approach. Nevertheless, in some countries, age matters more in terms of political conflict than in others. At this point, we can only speculate as to the underlying reasons.

The case of the US points to the fact that age cleavage effects could be more pronounced in minimalist welfare states. Here, benefits tend to be concentrated on 'deserving' beneficiaries, of which elderly people and pensioners are prime examples (Van Oorschot, 2006). Old age then becomes an important factor determining access to relatively generous welfare state policies, such as Medicare in the case of the USA. At the other extreme (e.g. West Germany), age cleavage effects could be attenuated by generous welfare state benefits, because research (Kohli, 1999; Albertini et al., 2007) has shown that these increase the amount

of intergenerational transfers from old to young, mitigating potential intergenerational conflict. The extent to which age becomes a catalysing factor for political conflict could also be associated with the age orientation of the welfare state or other characteristics affecting the position of young and old in society (Lynch, 2006; see also Goerres, 2009: Ch. 8). For instance, young people could be more opposed to the expansion of social benefits, when the welfare state is strongly oriented towards the elderly and vice versa.

In any case, the analysis has shown that a simple rational choice framework is not sufficient to explain the variation in spending preferences. The case of education comes closest to the expectations, but, for example, in the cases of pensions and unemployment, one could have expected stronger age cleavage effects. In the former case, maybe the argument can be saved by claiming that young people rationally expect to become old and therefore oppose too far-reaching retrenchment of pension spending. But in the case of unemployment, it is not

Table 2   Ranking of 14 OECD countries and welfare state types according to age cleavage

	Absolute rank	Mean rank	Healthcare	Unemployment	Education	Pension
USA	1	1.75	1	3	1	2
France	2	4.25	2	7	4	4
Canada	3	5.5	6	8	3	5
Australia	4	6	9	10	2	3
Sweden	4	6	8	1	6	9
Japan	5	6.5	4	2	8	12
East Germany	6	7	5	12	10	1
Great Britain	7	7.75	3	13	5	10
Ireland	8	8.5	7	6	7	14
New Zealand	9	9.25	11	9	11	6
Norway	10	9.75	10	4	14	11
Spain	11	10.5	12	5	12	13
Italy	12	10.75	13	14	9	7
West Germany	13	11.5	14	11	13	8

clear why retired people should not be in favour of decreases in spending, when they themselves cannot become unemployed anymore. These inconsistencies point to the importance of norms and values underpinning welfare state policies (Lipsmeyer and Nordstrom, 2003) as well as the inertia of preferences. People seem to stick with their principles, at least for a while, and do not adjust their preferences immediately after their labour force status has changed, although it might run counter to their material interests.

Finally, it would seem fruitful to link the findings of this article with analyses of policy output on the macro level, particularly in the field of education spending (Busemeyer, 2007, 2009; Cattaneo and Wolter, forthcoming) where we have found the strongest age effects. Here, one question for future research would be whether our finding of a negative impact of the elderly on the willingness to spend more on education actually *is* associated with cuts in spending on the macro level. Political parties and party competition could additionally mitigate or exacerbate this effect.

Appendix

Table A1   Descriptive statistics

	N	Mean	Min	Max	Standard deviation
Health spending attitudes	19495	2.69	1	3	0.54
Unemployment spending attitudes	19038	2.10	1	3	0.73
Education spending attitudes	19307	2.62	1	3	0.56
Pension spending attitudes	19231	2.50	1	3	0.58
Female	19975	0.51	0	1	0.50
Spending control	20057	0.00	−7.66	2.81	1.49
Education	19783	4.56	1	7	1.43
Income	20057	5.04	−1	10	2.73
Younger than 30 and in work	20057	0.11	0	1	0.31
Younger than 30 and out of the labour force	20057	0.03	0	1	0.18
Younger than 30 and in education	20057	0.05	0	1	0.21
30–59 yrs old and in work	20057	0.40	0	1	0.49
30–59 yrs old and out of the labour force	20057	0.13	0	1	0.34
Older than 59 and in work	20057	0.03	0	1	0.18
Retired or older than 60 and out of the labour force	19650	0.22	0	1	0.42

Table A2   The distribution of cases across the combined categories of age and labour force status

	Age <30	30–59	60+	Total
Labour force status				
In work (full time or part time)	11.37	41.25	3.56	**56.18**
Out of labour force (unemployed, housewife/man, looking after family member, disabled)	3.52	12.65	4.59	**20.75**
In education	4.75	0.52	0.02	**5.29**
Retired	0.08	1.70	16.01	**17.78**
Total	**19.73**	**56.11**	**24.16**	100.00

Notes

1 Exceptions are recent works by Svallfors (2008) – looking at the case of Sweden – Kohli (2005) and Bonoli and Häusermann (forthcoming) who ask similar questions to ours.

2 Besides self-interest, the pertinent literature discusses the impact of several other factors driving individual preferences and attitudes, e.g. ideology, fairness/justice or the notion of 'deservingness' (cf. Lipsmeyer and Nordstrom, 2003; Van Oorschot, 2006). In the Conclusions we offer some thoughts on how to connect our research design with the insights of this literature.

3 In detail, the combinations were: young and retired → retired, middle-aged and in education → middle-aged and out of the labour force, middle-aged and retired → retired, 60+ and out of the labour force→ retired, 60+ and in education→ retired. More descriptive statistics on the percentage of cases in the respective categories can be found in the Appendix.

4 We inspected all regressions as to the coefficients of the dummies for retirement and the dummy for those older than 59 and in work. If the coefficients of both dummies go in the same direction, this means that the difference between individuals in both categories differs from the reference category (middle-aged and in work) in the same direction. In sum, the coefficients lend support to the idea of age rather than retirement effects. In 80 out of 112 instances, the coefficients go in the same direction. This means that in 71% of all estimations, older people (both retired and those still in work) differ from middle-aged individuals in the same way. The strength of this pattern is the same for health, unemployment and education (79%) and slightly attenuated for pension (50%). This makes sense as pension spending should be the area where we would expect retirement itself to matter rather than age; but even in this policy field, the coefficients are in the same direction in half of the instances.

5 Missing values on the income variable were imputed from other variables in the data set. More specifically, we ran a regression (listwise deletion) with income as our dependent variable. As independent variables we used a variety of demographic and attitudinal information which can be assumed to correlate with income (such as gender, attitudes on taxation, or age). We then used the predicted values to impute for missing data. The percentage of cases which were imputed varies between 0% (Italy) and 35% (Japan).

6 The variable spending propensity is constructed as a factor from a principal component analysis from individual attitudes towards spending in the non-redistributive areas of government: environment, law enforcement, defence, culture and arts. This factor is the only one with an eigenvalue above 1 and can explain about 53% of all variance. It correlates very little with our main independent variables of interest (income, age, retirement, all correlations below 0.10), which means that it does not capture any of the main effects that we want to measure with these other variables. It really captures personality and survey effects, unrelated to social position.

7 Country-specific income deciles and education do, of course, correlate, but not very highly (r=.35). Thus, the income cleavage really measures the stratification intensity of preferences by income and not by education.

8 The Pseudo R^2 for our models is between 0.05 and 0.07 for all countries together and varies for individual countries. This may not seem very high, but studies with similar research designs obtain about the same level. Examples are Svallfors (2003), Cusack et al. (2006), and Kitschelt and Rehm (2006).

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