

Intergenerational Justice Perceptions and the Role of Welfare Regimes:

A Comparative Analysis of University Students

Abstract

This article studies perceptions of intergenerational justice among 2,075 undergraduate university students from eight democracies spanning four different models, or 'worlds,' of welfare. We examine two different, though interrelated, aspects of intergenerational justice: (1) whether, and how, different welfare regimes structure young people's perceptions of the justness of public resources transfers from young to elderly age-groups and (2) the perceived relative contributions and rewards of various age-groups. Thus we inquire about both the perceived support in principle and about the perceived justness of actual outcomes of resource transfers between age-groups. We find that support of transfers from the young to the old is higher in social-democratic and conservative welfare regimes than in liberal and radical regimes. Support of resource transfers also correlates positively with a 'welfare-statist' ideological frame (the endorsement of egalitarian redistribution and broad state responsibility for welfare provision and the attribution of social inequality to external causes), and negatively with a 'market-based' frame (individualism, a work ethic, and internal attribution). Regarding actual outcomes, the following ordering of age-groups obtained regarding perceived contributions to society: Adults > youth > elderly. Regarding perceived rewards from society, the ranking was: Adults > elderly >= youth. The one exception in both cases was formed by the conservative regime, which stands out by its straightforward profile: the younger the age-group, the lower its perceived rewards, and the higher its perceived contributions.

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In the past few decades, the political, economic and social consequences of ageing societies have risen to the top of the agenda of policy communities and social scientists alike. Fertility rates have hit post-war lows (Castles, 2003) and elderly cohorts live longer but do not retire later (Ebbinghaus, 2006; Kohli, Rein, Guillemard, & van Gunsteren, 1991). As a result, welfare state finances and pay-as-you-go pension systems have come increasingly under strain, both in advanced democracies (Myles & Pierson, 2001; Scharpf & Schmidt, 2000) and in emerging democracies (Vanhuyse, 2006). International institutions such as the OECD (1996) and the World Bank (1994) have devoted major policy documents and increasing resource levels to addressing the perceived old age crisis. In electoral terms, the political balance between different age cohorts has increasingly shifted in favor of the elderly. This has led many observers to argue that liberal democracies are increasingly reflecting distributional conflict between generations in terms of public policy (Lynch, 2001; Lynch, 2006; Mulligan & Sala-i-Martin, 2003; Vanhuyse, 2006), but see Esping-Andersen and Sarasa (2002). In this context a number of authors have studied the changing political attitudes of working-age cohorts and elderly cohorts (Campbell, 2003; Rhodebeck, 1993; Van Parijs, 1998). However, much less attention has been given to the views of the age group that will arguably be affected by generational imbalances for the longest span of time – the young.

This article addresses perceptions of intergenerational justice among the latter age group. We inquire about the perceptions of intergenerational justice among 2,075 undergraduate university students from eight democracies spanning four different regimes, or 'worlds,' of welfare provision.¹ Welfare regimes distribute social and

economic resources between different generations and risk categories based on distinct, if sometimes tacit, principles of fairness, merit, and justice. In so doing, welfare regimes contribute to shaping or structuring the justice perceptions of among the electorate (Andress & Hein, 2001; Arts & Gelissen, 2001; 2002; Linos & West, 2003; Svallfors, 1993b; 1997; 2003). Since in ageing societies ever more welfare resources are taken up by programs that predominantly favor the elderly (notably pensions and health care), intergenerational justice perceptions gain prominence in political and social debate. While this topic has been the focus of systematic philosophical analysis, much less attention has been given to the empirical examination of perceptions of intergenerational justice (see for example, Hegtvedt & Flinn, 2000; Silverstein, Parrott, Angelelli, & Cook, 2000). Still less attention has been given to the question of how these perceptions vary across different types of welfare regimes.

We examine whether, and how, different welfare regimes structure young people's perceptions of the justness of the allocation of public resources between different age-groups and of the relative contributions and rewards of various age groups. In so doing, we address two distinct dimensions of perceived justice between generations. First, we inquire about the perceived support in principle of resource transfers between different age-groups, as evident from surveys questions about the intergenerational fairness of social security, the fairness of taxing the young to support the elderly, and the degree to which both age-groups have common interests. Second, we inquire about university students' evaluation of the actual outcomes of intergenerational resource transfers (hereafter, sense of intergenerational (in)justice), as evident in the degree to which they perceive different age groups to receive a fair share of society's benefits, and to make a fair contribution to society. By relating the

former (rewards) to the latter (contributions), we compute a mathematical estimation of the degree to which university students evaluate different age-groups to be justly, or unjustly, treated in society.

Compared to common understandings of (intragenerational) distributive justice, intergenerational justice raises a number of distinct issues. For instance, intragenerational principles of justice may yield unreasonable solutions when applied to cohorts or populations whose size varies over time (Laslett & Fishkin, 1992). Similarly, social norms of reciprocity can lead to logical problems when applied to non-adjacent generations whose lifetimes never overlap (Barry, 1989, p. 189; 1991). As Derek Parfit (1984) famously noted, there is a permanent power asymmetry between those alive today and those alive the remote future. Principles of intergenerational justice thus assume that we "think not of a choice made by a particular generation at a single point in time but of a pattern of collaboration across many generations in a common scheme of justice."² Intergenerational justice as it will be understood here will be restricted to specific age groups that share the same present – that coexist, cooperate, and compete in the same political and moral time space.

How are welfare regimes affected by intergenerational justice? Historically, welfare states have been set up in part as a public means of taxing working-age individuals in order to transfer and redistribute income across different categories of income, risk and age. These transfers, which formerly used to be primarily the responsibility of families, have turned welfare into major agents of intergenerational justice (Daniels, 1988). According to Johnson and colleagues (1989, p. 6), the tax-funded welfare systems that evolved in the advanced industrial democracies in the 1950s and 1960s operated on the basis of an implicit 'welfare contract' between age groups that involved "people paying contributions during the productive phases of

their life cycle, and drawing benefits during childhood, in periods of sickness, and after retirement." In this understanding, the 'welfare contract' meant to create a balance between benefits and relative contributions or burdens. This works in the long run only if each generation honors its obligations to both the preceding and succeeding generations (Daniels, 1988; Laslett, 1992). Population ageing is likely to strain this implicit welfare contract between generations, as fewer children and young voters are in need of education and job training but more elderly voters need health care and resource transfers. Adverse developments in fertility and longevity may therefore have far-reaching implications for social welfare institutions and intergenerational transfers. For instance, since the 1980s social security and other programs for the elderly have increasingly come under attack in the US (Ermisch, 1989; Silverstein et al., 2000).

Elderly generations have been characterized as winners in the competition for public resources and are perceived as putting a growing tax burden on relatively small age cohorts of youth and working-age adults. The result of this intergenerational competition for scarce resources may be a heightened sense of intergenerational injustice among the younger generations of today and tomorrow. However, such perceptions are themselves likely to be mediated by the specific welfare regime in place for dealing with intergenerational transfers. Important recent work by Rothstein (1998), Bowles and Gintis (2000), Goodin (2002), and Mau (2004) emphasizes how different welfare state configurations draw on *and shape* norms of giving, helping, exchange, and mutuality. These norms embody notions of appropriate or fair behavior and of mutual moral obligation between welfare state contributors and beneficiaries. An analytical focus on the ways in which welfare states shape and stabilize a moral logic of justice between age-groups can therefore throw new light on perceptions of

intergenerational justice. In the following we specify how welfare regimes may differently structure such perceptions and how these perceptions are associated with other types of welfare attitudes.³ In so doing, we adopt a recent approach to the evaluation of welfare state attitudes which suggests that these types of attitudes are not isolated but rather form complex sets of interlocked attitudes within larger market-based or state-based ideological frames (Sabbagh, Powell, & Vanhuysse, in-press; Sabbagh & Vanhuysse, 2006).

Liberal and radical regimes. Liberal welfare regimes, such as the USA, the UK, and Canada, provide comparatively small and flat-rate benefits and are committed to minimal levels of state intervention. They are characterized by low income tax levels and high income inequalities, but also by high labor market flexibility and effective job creation. Radical (or Antipodean) regimes, such as New Zealand and Australia, combine high benefit equality with low social security contributions, low levels of redistribution, and high levels of wage and job regulation. Both these regime types are residual in the sense that their benefit systems concentrate mainly on those in need. Rather than providing comprehensive safety nets, these regimes adhere to a narrow conception of which needs should be covered by the state (Castles, 1996; Esping-Andersen, 1990; Mau, 2004). The direct responsibility for providing welfare is primarily assigned not to the state but to individuals and families (Daniels, 1988). For instance, a comparatively large proportion of workers are shifted away from the system of social security into private pensions (Silverstein et al., 2000). Accordingly, support for resource transfers from the young to the old is likely to be weaker than in more state-based systems of welfare and pension provision. Liberal and radical welfare regimes tend to be bolstered by a 'market-based' frame of popular

attitudes towards the welfare state (Sabbagh & Vanhuysse, 2006). This frame entails three coexistent facets.

(a) *Individualism*. Individuals, supplemented by the family and by voluntary groups, are seen as first and foremost responsible for competing in the market to provide for their own welfare (Pinch, 1997). In other words, people are expected to live and to have control over their own lives, without worrying too much about others (Triandis, 1995). Accordingly, each age group will be perceived as depending on its own resources and being responsible only for its own well-being (Daniels, 1988; Silverstein et al., 2000; Williamson, McNamara, & Howling, 2003). (b) *Work ethic*. Individuals are expected to get ahead economically by means of hard work, personal effort, talent and thrift (Hasenfeld & Rafferty, 1989). Resource transfers that do not explicitly specify the conditions of repayment or that grant benefits for 'nothing' (no contributions) are likely to command low support (Silverstein et al., 2000). (c) *Internal attribution*. Poverty, unemployment and other social and economic problems tend to be attributed to personal shortfalls, such as the failure to take advantage of opportunities, laziness, lack of talent and loose morals, rather than to structural, political or institutional causes (Hasenfeld & Rafferty, 1989; Kluegel, 1990; Kluegel & Smith, 1986). Accordingly, resource transfers that favor an age group unconditionally or disproportionably to its contributions will be perceived as unjust.

Conservative and Social-Democratic regimes. These two welfare regime types rely to a higher degree on state involvement in welfare provision (Esping-Andersen, 1990; 1999). Conservative (or Christian-democratic corporatist) regimes, such as Germany, Austria and France, allocate relatively generous welfare benefits mainly on the basis of previous earnings. They tend to promote the interests of highly skilled and well-paid (predominantly male) jobholders at the expense of young,

unskilled, and female workers, and they impose high family care burdens (or, conversely, high employment penalties) on young mothers. The high cost of child care makes it expensive for women to combine work with children, which adds to existing problems of labor market exclusion, low fertility, and adverse retiree-to-worker rates (see also Esping-Andersen, 1996). Lastly, social-democratic regimes, such as Norway, Finland and Sweden, provide more generous benefits on a universal basis. While the state is even more involved in welfare provision in social-democratic than in conservative regimes, the first regime type actively promotes the economic independence of women by providing extensive and low-cost day care facilities and by stimulating female employment through public sector absorption and active labor market programs.

Retirement pensions in the latter two welfare regime types are predominantly organized by the state on a 'pay-as-you-go' basis, whereas extensive publicly financed education systems represent transfers in the opposite direction. In these more public pension systems, the economic wellbeing of current retirement cohorts has been financed more heavily by the state than in more predominantly private pensions systems. As Esping-Andersen and Sarasa (2002), Myles and Pierson (2001) and others have pointed out, current pension-age cohorts in mature public pensions systems are triple beneficiaries of historical circumstance. They have benefited from (a) privileged labor market insider careers during periods of rapid real-wage growth, full employment and rising job security, (b) pensions upgrading in the 1960s and (c) rising returns to capital in the 1980s when wage growth stagnated. The frame of welfare attitudes that jointly characterizes conservative and social-democratic regimes was labeled 'welfare-statist' by Sabbagh and Vanhuyse (2006). It entails the following three coexistent facets.

(d) *Egalitarian redistribution*. Government intervention is supported in order to reduce socioeconomic inequalities and gaps in income distribution (Hasenfeld & Rafferty, 1989; Svallfors, 1997) (e) *Broad scope of welfare*. The state is seen as responsible for ensuring citizens' well-being. Ideally, a wide range of benefits and services should be delivered to large segments of society or even on a universal basis. Young people are likely to be perceived as responsible for furthering the well-being of the old (Andress & Hein, 2001; Gelissen, 2000; Svallfors, 1997). (f) *External attribution*. Rather than being attributed to personal features, personal socio-economic problems are largely seen as a consequence of social forces such as prejudice, limited opportunities, bad schooling, and exploitation (Orkeny & Szekelyi, 2000; Svallfors, 1993a).

Based on the previous analysis, we derive the following hypotheses:

Hypotheses 1a-1b: Support for intergenerational resource transfers in principle:

Hypothesis 1a. Support of resource transfers from the young to the old will vary negatively with market-based attitudes and positively with welfare-statist attitudes.

Hypothesis 1b. Respondents in conservative and social-democratic regimes will show higher levels of support for resource transfers from the young to the old than respondents in liberal or radical regimes.

Hypothesis 2: Sense of intergenerational (in)justice in actual outcomes

The ratio of rewards to contributions to society of older age-groups will be perceived to be less just than that of younger age-groups

Method

Samples

We use data collected in 1996-1998 from the Cross-Cultural Variations in Distributive Justice Perception (CVDJP) project among 2,075 university students in eight countries: United States, Canada-Ontario, Australia, New Zealand, France, Sweden, Norway, and the Netherlands. The project explores the 'cognitive maps' used by citizens in their thinking about justice relationships among different groups and classes (see special issue of the *Journal of Cross-Cultural Psychology*, 2005 (35/1), particularly Powell, 2005). Specifically, it measures attitudes towards the programs and redistributive functions of welfare states, the fairness of the relationships between taxpayers, welfare recipients and governments, and the perceived contributions to and rewards from society of fifty different types of social groupings. In addition to standard welfare attitude questions (regarding, for instance, the scope of governmental intervention), which are included in larger representative surveys such as the International Social Survey Program (ISSP) and the International Social Justice Project (ISJP), the present data set includes a larger set of topics of special relevance for intergenerational justice.

Our sample consists of first or second year undergraduate students participating in large introductory classes in the humanities and the social sciences (sociology, psychology, anthropology, and politics). There are both limitations and advantages in using university student samples. By sheer virtue of their age, students may display more instability in their attitudes than older age-groups. Nevertheless, there is evidence that regarding basic social values, there is a degree of crystallization by the time of young adulthood as a result of various forms of political socialization. In an influential study of values in modern societies, Ronald Inglehart has argued that "the basic values of individuals are largely fixed by the time they reach adulthood... generations have collective memories, imprinted in adolescent and early adulthood

that persist throughout the life cycle. Thus we expect to find substantial differences between the values of the young and the old in societies that have experienced a rising sense of security (Inglehart & Baker, 2000, p. 42; see also Mandell, Porter, Tesson, & Lewko, 1994; Schwartz, 1992). Second, while it is important to bear in mind that university student samples are unlikely to be representative of the general population, they also present a window on the orientations of a future economically and politically influential subgroup. Third, studies of context effects on public opinion typically need to take into account individual-level differences and explanations, such as the belonging of respondents to different subcultures and/or loci in social structures (for example, Andress & Hein, 2001; Gelissen, 2000). As our sample is likely to exhibit relatively little variation in subculture and structural location, it is much less likely to be affected by such compositional effects. In other words, the context effects here are probably clearer than in random population samples.

In line with the Esping-Andersen (1990; 1999) and Castles (1996; 1993) typologies, we split our total sample of students in eight democracies into four subsamples, each representing a distinct world of welfare. (1) 513 respondents in the United States and Canada-Ontario representing the liberal world (average age 23; SD=5.47; 45% males and 55% females). (2) 617 respondents in Australia and New Zealand representing the radical world (average age 24; SD=9.22; 40% males and 60% females). (3) 256 respondents in France representing the conservative world (average age 22, SD=5.21; 35% males and 65% females). (4) 689 respondents in Sweden, Norway and the Netherlands representing the social-democratic world (average age 23; SD=5.25; 32% males and 68% females).⁴ The distribution of background variables (sex, age and income quartiles) across student subsamples displayed moderate

differences.⁵ As these variables can affect justice and welfare attitudes, we have included them as control variables.⁶

Instruments

Support in principle for intergenerational resource transfers from the young to the old: This construct was measured by means of three items: (a) Social security is a fair system that rewards both the young and the elderly (fair social security); (b) Taxing young workers to support the elderly is fair (reversed) (fair taxing young); (c) the elderly and the young have common interests (common interests). Respondents rated each item along a Likert scale ranging from (1) “It represents my opinion” to (5) “It represents my opposite opinion”. Descriptive values, $M= 3.30$; $Std = .82$; *Alpha Cronbach*, $\alpha= .51$

Sense of intergenerational (in)justice (outcomes related aspect of justice): Following Powell (2005), we use an inventory for the International Project on Cross-Cultural Variations in Distributive Justice Perceptions among the following age-groups: children, teens, and young adults (aged 18-35), adults (aged 35-65) and the elderly (beyond 65). Respondents were asked to rank the extent to which each age-group (a) contributes to society’s well-being, and (b) receives a fair share of society’s benefits and rewards. Ranking was obtained by placing an “x” on a line segment at the point that represented respondents' subjective evaluation. These line segments were then scored using a template calibrated 0-100.

When the perceived contributions of various age-groups do not correspond to their perceived rewards, there will be perceived injustice between generations. Guillermina Jasso’s (1980; 1989) definition of justice evaluations can be applied to our data to more clearly estimate the sense of intergenerational (in)justice among university students. Jasso (1980, p. 3) defines the sense of (in)justice as follows:

$$\text{Justice evaluation} = \ln \frac{\text{Actual share}}{\text{Just share}}$$

In our conceptualization, 'actual share' refers to the respondent's evaluation of "the extent to which a given age group receives a fair share of society's benefits and rewards." 'Just share' in turns refers to the respondent's evaluation of "the extent to which a given age group contributes to society." When the ratio equals zero, perfect justice is perceived. A positive (negative) value in turn implies the perception of over-reward (under-reward).

Welfare attitudes: The inventory included 25 items that we used as a proxy for the six facets of welfare attitudes discussed above.

Individualism: The measure represents the average of three items: (a) One must avoid dependence upon persons; (b) a person should feel free to live his/her own life; (c) in life a person should for the most part "go it alone". Respondents rated each item along a five-point Likert scale ranging from (1) disagree strongly to (5) agree strongly (reliability Cronbach Alpha=.49).

Work ethic: The measure was defined as the average of three items: (a) any person who works hard has a good chance of succeeding; (b) people who fails has not tried enough; (c) the person who can approach and unpleasant task gets ahead. Respondents rated each item along a five-point Likert scale ranging from (1) disagree strongly to (5) agree strongly (reliability Cronbach Alpha=.53).

Internal attribution of inequality. Respondents were asked to evaluate who important are four different causes for explaining unsuccessful people to support themselves financially. These causes included (a) failed to take advantage of opportunities; (b) laziness and little ambition; (c) lack of talents; (d) lack of character

and will power. Respondents rated each item along a five-point Likert scale ranging from (1) not important at all to (5) very important. The measure represents the average of these four items (reliability Cronbach Alpha=.74).

Egalitarian distribution. The measure represents the average of the following six items: (a) people with more ability should earn higher income (reversed); (b) taxing punishes those who have worked the hardest (reversed); (c) I would prefer to see more freedom (reversed); the private enterprise is generally a fair system (reversed) (d) the government should reduce the income gap between the poor and the rich; (e) there should be a law limiting the amount of money an individual is allowed to earn. Respondents rated each item along a five-point Likert scale ranging from (1) disagree strongly to (5) agree strongly (reliability Cronbach Alpha=.77).

Broad scope of welfare. Respondents were shown a list of five benefits and asked to indicate to what extent the government, or individuals, should be responsible for providing them: (a) health and medical care. (b) retirement income in old age (c) financial assistance during periods of unemployment (d) financial assistance to poor families (e) financial assistance to the disabled. Respondents rated each item along a five-point Likert scale ranging from (1) individual responsibility to (5) government responsibility. The measure represents the average value of these five items (reliability Cronbach Alpha=.83).

External attribution of inequality. Respondents were asked to evaluate how important are four different causes for explaining unsuccessful people to support themselves financially. These causes included: (a) prejudice and discrimination; (b) limited opportunities; (c) failure to provide good schools; (d) being taken advantage of by persons who are better off. Respondents rated each item along a five-point

Likert scale ranging from (1) not important at all to (5) very important. The measure represents the average of these four items (reliability Cronbach Alpha=.68).

Individual level variables: As individual level variables have been found to affect attitudes towards the welfare state and justice perceptions (Andress & Hein, 2001; Kluegel, Mason, & Wegener, 1995), the following variables were included as control variables;

Sex: 0= females; 1= males

Age: Mean age as reported by respondents 22.92 (SD 6.70).

Political ideology of attitude towards socio-economic issues, which ranges from 1= far right to 7 far left. Mean value of 4.22 (SD 1.27), meaning a slight tendency towards the left.

Results

Support for intergenerational resource transfers in principle

Hypothesis 1a: Support for intergenerational resource transfers and welfare attitudes:

To clarify the validity of the construct referring to legitimacy of resource transfers, we computed bivariate correlations for these composite measures and the six types of welfare attitudes which were found to be organized in two ideological frames – market-based and welfare-statist (Table 1). In line with our expectations, there is a positive and statistically significant correlation between support for intergenerational resource transfers and the three types of attitudes representing the welfare-statist frame. Respondents who support intergenerational resource transfers also tend to support egalitarian resource redistributions and a broad involvement of government in welfare provision, and they tend to attribute social inequality to external causes. It is worth noting that the strongest correlation was obtained with the broad scope of

welfare provision. In contrast, support for intergenerational resource transfers is correlated negatively with the three measures of market-based ideological frame. Respondents who score high on support for intergenerational resource transfers tend to disregard the individualist and work ethic stances and to attribute internal causes to social inequality. The strongest negative correlation was obtained with the measure of individualism.

Table 1 about here

Hypothesis 1b: Support for intergenerational resource transfers by regime type: We conducted a hierarchical regression analysis in which welfare regimes (coded as dummy variables) and individual level variables were defined as predictors of support of resource transfers from the young to the old (See Table 2). We found significant effects of the individual level variables (Model 1). Moreover, when the predictors of welfare regimes are added to these controls, social-democratic, rather than liberal or radical, regime membership significantly predicted stronger support for resource transfers from the young to the old. No significant differences were found between respondents of social-democratic and conservative regimes. Thus, Hypothesis 1b was corroborated.

Table 2 about here

The sense of intergenerational (in)justice in outcomes

Table 3 presents mean ratings of the perceived contributions and rewards for the young, adults, and the elderly, thus indicating the socially constructed map of equitable relations within different welfare regimes. By means of MANOVA, moderate main effects were obtained for age-group ($F_{(2, 3386)}=7.51, p<.001$) and regime ($F_{(3, 1693)}=14.47, p < .000$), and a strong effect was found for the equity

component ($F_{(1, 3386)} = 149.37$; $p < .000$), meaning a disparate perception of contributions and rewards. There was a moderate, albeit significant, interaction effect of age-group x equity component x regime ($F_{(6, 3386)} = 15.34$, $p < .000$). Table 3 indicates that the mean contribution and reward ratings vary along age groups and welfare regimes. Adults were judged to be higher contributors than youth in three out of four welfare regime types, the conservative regime being the exception. University students clearly perceived the young to contribute more to society than the elderly in every welfare regime type. The picture of perceived rewards from society is similar. In the liberal, radical, and social-democratic regimes, adults were judged to be best rewarded, followed by, respectively, the elderly and the young (which were perceived as receiving broadly similar rewards in the latter two regimes). Again, the conservative regime stands out by its straightforward age profile: the younger the age-group, the lower its perceived rewards.

Table 3 about here

In other words, respondents in different welfare regime types do not think that the contributions of various age-groups necessarily correspond to their rewards. Using Jasso's definition, we then applied MANOVA – repeated measures - for estimating variation of perceived injustice estimation across the three age-groups and welfare regimes. We defined welfare regime type as a group factor and the three age-groups as a factor of repeated measures, controlling for individual level variables. The computed justice evaluations of three age-groups by regime type are shown in Table 4 and visually represented in Figure 1.

Table 4 about here

Figure 1 about here

MANOVA results suggest a moderate main effect for age-group ($F_{(2, 3386)}=4.77, p<.001$) but not for welfare regime ($F_{(3, 1693)}=.99, p=.398$). A remarkably consistent pattern is evident. The elderly were perceived as being only very mildly under-rewarded (or even over-rewarded in the conservative regime). In contrast, adults and, to a still larger degree, the young were perceived as more strongly under-rewarded, most starkly so in the conservative regime (Hypothesis 2a). But contrary to expectations, there was no main effect of welfare regime, but a small, though significant, interaction effect of age category X regime ($F(6, 3202) = 9.94, P<.000$). We also found a slight, though significant, interaction effect of age-group x regime ($F_{(6, 3386)}=12.26, p<.001$), indicating that the slight differences between welfare regimes are dependent on the age-group in question. In order to assess the unique predictive ability of welfare regimes on the sense of (in)justice across age-groups, ANOVA was separately applied to each set of age-groups. In each analysis, regime was defined as a group factor, age-groups as dependent variable, and sex and reported income as control variables. The results of these analyses are presented in Table 4. It is clear that there is a moderate effect of welfare regime type on sense of (in)justice as pertaining to young people, and smaller but still significant effects of regime type on sense of (in)justice pertaining to both adults and the elderly.

Young (18-35). While respondents in all four welfare regimes perceive young people as being under-rewarded, this sense of injustice is strongest in the conservative regime (value of -.61) followed by, respectively, the social-democratic and radical regimes (values .37, non-significant) and the liberal regimes (-.49). **Adults (35-65).** Respondents in all four samples perceived adults to be under-rewarded, although levels of injustice are lower than those obtained for young people. Specifically, respondents in the social-democratic regimes reported significantly lower levels of

perceived injustice (-.20) with respect to adults than those in the radical (-.28) and conservative regimes (-.33). No significant differences were obtained for respondents in liberal regimes (-.25) and respondents in the other three types of regimes, respectively. **Elderly (65+)**. Interestingly, respondents in liberal, radical and social-democratic regimes also perceived the elderly to be weakly under-rewarded (-.06, -.17, -.11, respectively). But perceived inequity towards this group is lower than for young people and adults, and the mean values obtained among respondents in these regimes types were not significantly different. In contrast, respondents in conservative regimes perceived the elderly to be over-rewarded (.16); a difference that is statistically significant in relation to the three other welfare regime types.

In sum, the conservative welfare regime is the odd one out in terms of intergenerational justice perceptions among university students. Our findings are corroborated also by other attitudinal research among adult populations. Boeri et al.'s (2001, pp. 27-28) survey of 5,500 citizens in four conservative welfare regimes shows that between 43 and 82 percent of respondents expect a public pensions crisis 10-15 years ahead. Similarly, between 19 and 47 percent of respondents favor an unconditional opt-out away from public pensions, whereby they would receive the cash equivalent of a 50% reduction of their public pension contributions, with youth (<35) being strongly positively, and old age (>54) being strongly negatively related to having such an opt-out preference. Lastly, given the choice, within a status-quo overall welfare budget, between re-allocating resources towards the young (less to pensions and more to the unemployed and young job seekers) or towards the old (more to pensions), the first option was more popular among respondents in conservative welfare regimes by between 6 and 27 percentage points. Again, a generational pattern could be discerned: the young (<35) as well as labor market

outsiders (the unemployed) strongly opposed pro-old redistribution, whereas the elderly (>54) and labor market insiders (permanent job holders) strongly favored such a move (Boeri et al., 2001, p. 36).

Discussion

This study has empirically examined how university student populations perceive the legitimacy of resource transfers from younger to older age groups, the sense of (in)justice they feel towards different age grouping, and the extent to which these justice perceptions are differently structured across four types of welfare regimes. A number of noteworthy or counter-intuitive findings merit discussion. Intergenerational justice *principles*, as measured by the perceived generational fairness of social security and of tax-based redistribution as well as perceived commonality of interests across generations, received higher support in social-democratic and conservative welfare regimes than in liberal and radical regimes. Intergenerational justice perceptions also correlate positively with what we termed a 'welfare-statist' ideological frame – the endorsement of egalitarian redistribution, of broad state responsibility for the provision of welfare, and the attribution of social inequality to external causes. Conversely, high levels of intergenerational justice correlate negatively with a 'market-based' ideological frame – individualism, a work ethic, and external attribution. In the same vein, we found moderate, albeit statistically significant, levels of perceived injustice regarding resource transfer *outcomes* and of differences across age-groups and welfare regimes. We also found moderate but significant differences in intergenerational justice perceptions between market-based (liberal and radical) and 'welfare-statist' (conservative and social-democratic) regimes. These findings jointly corroborate the validity of the general distinction between the

basic role of states versus markets in shaping welfare provision (e.g. Esping-Andersen, 1990, 1999), welfare attitudes (e.g. Sabbagh & Vanhuysse, 2006; Svallfors, 2003) and the larger institutional constellations of political economies (e.g. Hall & Soskice, 2001; Iversen, 2005)

Regarding the perceived justice of actual *outcomes* between age-groups, as measured by respective contributions to and rewards from society, we found relatively clear patterns in three out of four welfare regimes. Regarding perceived contributions to society, the following ordering of age-groups obtained: Adults > youth > elderly. Regarding perceived rewards from society, the ranking was: Adults > elderly >= youth. The one exception in both cases was the conservative regime. There, younger the age-group, the lower its perceived rewards, and the higher its perceived contributions. Relating each age-group's perceived rewards to its contributions, we found that university students' sense of generational injustice followed a clear-cut pattern. The elderly were perceived as being only very mildly under-rewarded and even over-rewarded in the conservative regime, whereas adults and, to a still larger degree, the young, were perceived as more strongly under-rewarded, most starkly so in the conservative regime. Importantly therefore, and consistent with claims in much of the recent policy and research literature on the looming crisis of ageing welfare states, the implicit post-war 'welfare contract' between generations appears to be challenged, at least by the socially advantaged groups of university students which we have studied here.

Perhaps the most remarkable finding regards the apparently pervasive sense of perceived intergenerational injustice in the conservative regime. University students in this regime perceived both the young and the adults to be more strongly under-rewarded than in the other three regimes, and they judged the elderly to be positively

over-rewarded. One plausible explanation might be that conservative regimes uniquely combine a high level of state involvement in welfare with a particularly strong policy bias in favor of elderly age cohorts. Conservative welfare regimes are simultaneously characterized by heavy tax burdens on labor, high levels of labor market exclusion or precarious employment for younger age cohorts, and generous earnings-related public pensions (Esping-Andersen, 1996; 1999; Scharpf & Schmidt, 2000). For instance Esping-Andersen and Sarasa (2002, pp. 6-7) have calculated an aged/non-aged public policy spending ratio of 1.7 in predominantly conservative Continental Europe, compared to 1.2 in Anglo-Saxon countries and 0.8 in Scandinavia. This has been corroborated extensively by Lynch (2001, p. 419), who has calibrated an elaborate demographically adjusted elderly/non-elderly per capita public spending ratio (see also Lynch, 2006). Conservative countries such as Italy, Spain, Austria, France and Germany occupied respectively the fourth, fifth, sixth, eighth, and eleventh rank amidst a population of 21 OECD countries in terms of this pro-elderly spending ratio, while the bottom eight ranks were exclusively occupied by countries from radical or social-democratic regimes.

In addition, conservative regimes have seen increasingly divergent socio-economic fortunes between the young and the old in recent years. On the one hand, as we argued above, current retirement cohorts have been triple beneficiaries of historical circumstance in the predominantly public conservative pensions systems (Myles & Pierson, 2001). Conservative regimes are also characterized by significantly higher levels of early retirement, typically at high replacement rates (Ebbinghaus, 2006). On the other hand, by the mid-1990s, poverty rates among families with children (less than half of median income of all households with children) stood at 7, 9, 10 and 17 percent in conservative countries such as France, Germany, Spain and

Italy -- lower than in liberal regimes such as the US and the UK (19 and 16 percent), but much higher than in social-democratic Scandinavia (between 2 and 3 percent) (Esping-Andersen & Sarasa, 2002, p. 9). Tellingly, when we include into Lynch's pro-elderly public spending ratio a policy variable particularly relevant to student populations -- per capita expenditures on education -- these same four countries plus Austria turn out to occupy five of the top six OECD ranks throughout the 1980s and 1990s (Lynch, 2001, p. 424). In other words, the particularly high levels of perceived intergenerational injustice appear to be founded on hard distributional grounds in the conservative world of welfare. Admittedly, our use of data from the Cross-Cultural Variations in Distributive Justice Perception (CVDJP) project has limited our study of this regime type to the case of France. A wider comparative study of other conservative welfare regimes would undoubtedly be helpful. Yet France can be confidently singled out as an example in this exploratory analysis, as it closely resembles other conservative welfare regimes, especially Germany and Austria, on all the indicators of elderly/non-elderly spending bias, pensioners' welfare and poverty outcomes discussed above.

Nevertheless, a number of further remarks and caveats are in place in conclusion. We have measured the sense of (in)injustice generally, by asking respondents about different age-groups without formulating more contextualized questions about specific issues such as, for instance, pension benefit systems and income insurance programs. Such contextualized studies constitute a promising avenue for future research. Of course, age-groups may be perceived as heterogeneous along lines of class, education, or ideology, rather than as a consolidated group that can be characterized by a specific socio-economic agenda. Finally, it is possible that welfare states have indeed succeeded to transfer resources between age-groups in line

with citizen expectation, so that distributions are perceived as relatively just. Evaluations of resource transfers between generations are performed under a specific ideological frame. For instance, people in liberal regimes judge the elderly to be justly rewarded because there is no expectation on the part of the state to intervene and give them a larger (or smaller) part of the resources. Lastly, we have measured perception of intergenerational justice at only one point in time and for just one or two countries typifying each world of welfare. Future research should explore more explicitly the temporal dynamics of such perceptions, ideally for a larger number of countries. The use of qualitative methods, including in-depth interviews, is likely to shed further light on the cognitive maps regarding justice relations and resource transfers between generations in ageing welfare states.

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Table 1: Bivariate correlations between perceived intergenerational justice, trust and six types of welfare attitudes

1. Support of intergenerational resource transfers						
2. Individualism	-.21					
3. Work ethic	-.14	.20				
4. Internal attribution	-.18	.16	.41	-.13		
5. Egalitarian redistribution	.08	-.08	-.05	-.33	.21	
6. Broad scope of welfare	.38	-.25	-.33	-.19	.10	
7. External attribution	.11	-.12	-.32	-.13	.21	.36
	1	2	3	4	5	6

* non-significant.

Table 2: Hierarchical Regression Analysis for Variables Predicting Perception of Intergenerational Justice

Variables	Model 1			Model 2		
	B	SEB	β	B	SEB	β
Background variables						
Gender (1=men)	.10	.04	-.06**	-.07	.04	.04
Age	.02	.00	.13***	.02	.03	.14***
Political ideology	.11	.02	.17***	.08	.02	.12***
Welfare regime						
Radical				.17	.05	.09***
Conservative				.36	.06	.15***
Social-democratic				.48	.05	.28***

Note. $R^2 = .052$ for Model 1; $\Delta R^2 = .052$ for Model 2 ($ps < .000$).

** $p < .01$; *** $p < .000$.

Table 3: Mean (standard deviations) “contributions: and “rewards” rating by stimuli-age group and regime type

<i>Stimuli-age group</i>	Liberal	Radical	Conservative	Social- Democratic
Young adults (18-35)				
Rewards	42.24 (17.43)	42.89 (17.14)	39.44 (17.07)	43.84 (14.62)
Contributions	63.09 (19.18)	59.76 (19.04)	67.16 (20.32)	61.30 (16.44)
Adults (35-65)				
Rewards	54.68 (18.00)	50.25 (18.77)	49.43 (15.21)	52.15 (13.68)
Contributions	67.17 (16.57)	62.95 (18.69)	65.48 (16.60)	62.70 16.11
Elderly (over 65)				
Rewards	48.66 (24.77)	42.59 (24.52)	57.86 (21.32)	42.81 (20.17)
Contributions	49.57 (22.03)	47.47 (23.24)	51.15 (23.06)	47/02 (20.01)

Table 4: Mean values (standard deviation) of justice evaluations by stimuli-age group and regime type

<i>Stimuli-age group</i>	Liberal	Radical	Conserva- tive	Social- Democratic	F (df, df)
Young adults (18-35)	-.48 (.70)	-.37 (.58)	-.61 (.75)	-.37 (.55)	10.70** (3, 1708)
Adults (35-65)	-.25 (.25)	-.28 (.66)	-.33 (.58)	-.20 (.45)	4.11* (3, 1717)
Elderly (over 65)	-.06 (.99)	-.17 (1.00)	.16 (.87)	-.11 (.82)	5.88* (3, 1774)

* $p < .01$; ** $p < .000$

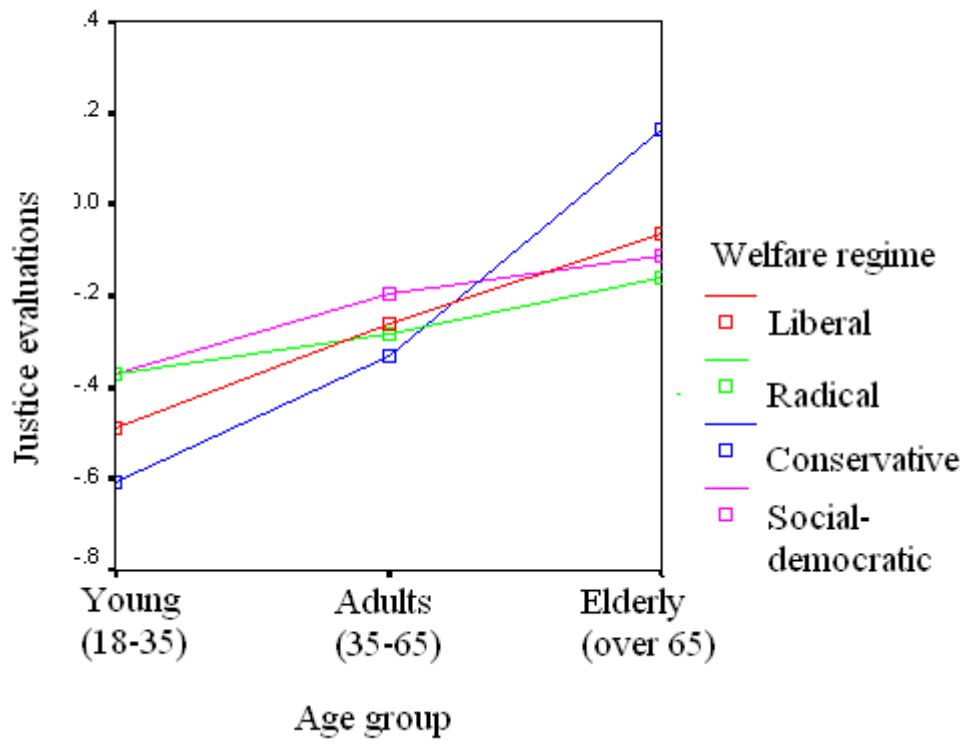


Figure 1: Justice evaluations for 3 stimulus-age groups by regime type

Endnotes

¹ The original "three worlds of welfare" typology was suggested by Esping-Andersen (1990). For subsequent summaries and extensions, see Castles (1996; 1993), Esping-Andersen (1999), Iversen (2005).

² See Barry, (1989, p. 201). Another problem of intergenerational justice regards generations that do not coexist at the same time (Barry, 1988; Epstein, 1992; Fishkin, 1992; Laslett, 1992; Scanlon, 1998). Philosophical and normative problems here include the question of what current generations owe to future generations with regard to the preservation of the environment's finite resources (Barry, 1991; Hegtvedt & Flinn, 2000), the development of technologies (Barry, 1978), and just savings (Rawls, 1971). On 'generational equity' -- the balance of benefits and burdens between age groups, see Daniels (1988).

³ See footnote 1 for the relevant literature on different worlds of welfare. Our two-fold grouping below of liberal and radical models on the one hand, and conservative and social-democratic models on the other, is in line with a related distinction in the Varieties of Capitalism literature between Liberal and Coordinated Market Economies (Hall & Soskice, 2001; Iversen, 2005; Scharpf & Schmidt, 2000).

⁴ The Netherlands are admittedly a more ambiguous case. The Dutch model of 'social capitalism' (van Kersbergen, 1995), while less supportive of families, can be classified as social-democratic on the grounds that it combines strong universalism, comprehensive coverage and generous benefits in its income maintenance programs (see also Esping-Andersen, 1999, pp. 85-87). Note also that we do not consider Mediterranean countries separately, although many authors argue that these countries constitute another distinct model of welfare capitalism.

⁵ Statistical differences in sample composition were as following: sex x regime type, Chi-Square=24.36; $p < .000$; age x regime type, $F=9.93$ (3, 1949); $p < .000$ and income quartiles x regime type Chi-Square=67.29; $p < .000$. Income distribution into quartiles specifies to what extent a given respondent belongs to the upper, middle-upper, middle-lower and lower income quartile.

⁶ Of course, a number of factors outside of this study may still cause substantial variation in student populations. For instance, cross-country differences with respect to university financing, eligibility criteria, and study costs may affect who enters university, thereby causing variation in student populations' welfare attitudes. Likewise, different cross-country distributions of study fields may affect welfare attitudes.