

2. Positive-sum solutions in the generational welfare state

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Population ageing is expected to fundamentally change the ability of welfare states to sustainably support an equitable distribution of risks and resources in society. Concerns have been raised about the growing power of older voters, who may receive an increasing share of redistributive commitments at the expense of younger age groups. In this chapter, we offer a way out of this dilemma of emerging generational conflict and show that a balanced approach to policymaking that benefits all citizens, regardless of age, is not necessarily a zero-sum game, but instead a socially sustainable path.

INTRODUCTION

Few would deny that welfare states in the Western hemisphere are subject to mounting pressures for institutional change. Some would even say that the major programs for redistribution that we often associate with the welfare state have become unsustainable, not least from the perspective of generational equity and the capacity of the welfare state to adequately respond to a diverse set of social needs. The welfare state used to be the main political arena for resolving distributive conflicts by creating societal compromises between various interest groups in society (Esping-Andersen, 1985; Korpi, 1983). However, the fiscal challenges that appeared along with population ageing changed some of the fundamental principles on rapid and continuous economic growth that the expansion of welfare states in the immediate post-war decades ultimately rested upon. In hindsight, claims have been made that the welfare state cannot continue to satisfy the needs of all citizens, and that a reordering of redistributive priorities between generations has to be made (Esping-Andersen et al., 2002; Ferrera & Rhodes, 2000; Hemerijck, 2013; Taylor-Gooby, 2004).

In the debate on welfare states, population ageing, and generational equity, it is often assumed that policymaking increasingly is subject to zero-sum distributional trade-offs where the welfare of older age groups comes at the expense of protection provided to younger cohorts. The purpose of this chapter

is to offer an escape route out of this dilemma of an emerging or accelerating elderly bias of social protection and potential generational conflict. We will outline an alternative and less deterministic scenario in generational politics. This scenario carries possibilities to support forms of intergenerational cooperation that create virtuous circles in policymaking by simultaneously strengthening social protection for a greater variety of age-related social risks than those that solely appear in old age. We will also show under what conditions welfare states are adequately designed to generate positive-sum solutions in social policymaking and sustainably respond to resource claims of both contemporary and future generations. From this perspective, social sustainability implies that the welfare state should be able to reproduce itself without putting any particular age group at greater risk.

Distributional conflicts centred around age is neither new nor geographically limited. Scholarly discussions and public debates on a generational clash in social policymaking already appeared in the mid-1980s, particularly in the United States where public support for families or the unemployed has been neglected for decades (Longman, 1987; Preston, 1984; Quadagno, 1989). However, as the baby-boomers born after the Second World War started to reach retirement age, similar discussions of a pro-old bias of the welfare states surfaced in other countries as well (Esping-Andersen & Sarasa, 2002; Lynch, 2006; Pampel, 1994; Tepe & Vanhuyse, 2010; Walker, 1996).

Not all commentators on the welfare state and population ageing subscribe to the idea that electorally powerful elderly groups through politics have been able to tilt social policy in their favour (Mirowsky & Ross, 1999; Palmer, Smeeding & Torrey, 1988; Pampel, 1994), as discussed in more detail in Chapter 10 of this book. Nonetheless, it is evident that the fiscal implications of age-related spending will continue to grow for decades and affect what policymakers can and cannot do. According to Rouzet et al. (2019), tax revenue as a percentage of gross domestic product (GDP) in some OECD countries will have to increase by double-digit numbers until 2060 due to escalating ageing-related spending, if levels of social security and national debt are to be kept constant. It is doubtful that this can be accomplished without a clear agenda for how countries can organise the welfare state to generate broad popular support and political compromises that cut across not only socioeconomic class but also generational interests.

In the next section, we recapitulate the basic arguments of our approach to sustain social policy in an era of population ageing and discuss how age does not necessarily need to be a battleground of conflicting interests in the welfare state. In doing so, this chapter largely borrows from the theoretical approach to intergenerational equity developed by Birnbaum et al. (2017). We thereafter define how positive-sum solutions in generational politics can be operationalised and measured, before embarking on a new and updated analysis of the

age-related structure of the welfare state. Conclusions and how our findings contribute to an increased understanding of how to better sustain the welfare state in an era of population ageing are presented at the end.

TOWARDS A DYNAMIC PERSPECTIVE ON GENERATIONAL POLITICS AND THE WELFARE STATE

To understand how countries may avoid accelerated generational conflict and zero-sum distributional trade-offs in periods of population ageing we need to go beyond the static perspective on social policymaking that tends to characterise much of comparative research (Yerkes, Nelson & Nieuwenhuis, 2022). Broadly speaking, research on the social sustainability of welfare states can be divided into at least two loosely defined compartments: drivers and outcomes. Whereas research in the former compartment focuses on various pressures for social policy reform (may it be in the form of demographic change, macro-economic developments, or democratic backsliding, and so on), studies in the latter compartment concentrate on the consequences of social policy (for example, in the form of well-being, attitudes, or behaviour). Rarely is research in the two compartments brought together into a more dynamic perspective on the welfare state in which cause (driving force) and effect (outcome) are linked and interpreted as processes with reciprocal causality.

Reciprocal Causality and Policy Feedback

In the presence of reciprocal causality, there is no single direction of change, as cause and effect constantly shift positions as time goes by. For example, the level at which social insurance is set determines whether people in different risk groups feel economically protected when they are unemployed or unable to work. The extent to which people are included in the welfare state, in turn, forms a feedback loop to politics and observed voting behaviour at both the micro and macro levels.

This dynamic perspective of the welfare state is fruitful in debates about generational equity as it adds a temporal dimension that helps us to formulate questions about social policymaking in terms of vicious or virtuous circles. A vicious circle reinforces itself through feedback effects that move the chain of events in an undesirable direction. A virtuous circle also feeds on itself but produces results that we consider beneficial for various reasons, such as how social and financial sustainability of the welfare state positively reinforce each other. For our purpose of identifying positive-sum solutions in generational politics, it is important to recognise that social policy not only redistributes resources in society but also carries potential to encourage broader support for social policy that cuts across generational interests. In the presence of such

positive-sum solutions and virtuous circles in social policymaking, the welfare state should be in a better position to adequately respond to a greater variety of social needs, with no clear winners or losers in generational politics.

Policy feedback loops have been prominent in political science for decades, where they have come to characterise how existing policies reshape the political environment and living conditions in a dynamic and cyclical manner (Evans, Rueschemeyer & Skocpol, 1985). Feedback loops were also central in the many historical institutionalism approaches to policy research that emerged in the 1990s. The early proponents of historical institutionalism differed in their emphasis on state structures, administrative capabilities, interest group formation, and political coalition-making as major drivers of policy change (Béland, 2010). However, they all at least to some extent shared the objective of identifying those critical junctures in welfare state formation that came to shape subsequent policy developments (Skocpol & Pierson, 2002). Despite the tremendous influence of historical institutionalism on contemporary theories of the welfare state, policy feedback is seldom part of the main narrative guiding discussions of population ageing and generational equity. As a consequence, the possibilities of positive-sum solutions in generational politics have gone largely unnoticed, or only mentioned in passing.

The Positive-Sum Solutions Hypothesis

Our starting point is that all citizens are exposed to a diverse set of distinct age-related social risks as they move through the different stages of life. Although the risk structure has changed as countries have become increasingly de-industrialised (Taylor-Gooby, 2004), sickness and unemployment still constitute significant hurdles during working age. Despite substantial improvements in longevity in most (if not all) affluent countries (OECD, 2021), old age is often still characterised by reduced work ability (and sometimes possibility). With the advent of the dual-earner family as the current norm in many affluent countries (Alm, Nelson & Nieuwenhuis, 2020; Cantillon, 2011), we should also add early childhood and caring responsibilities to this list of age-related contingencies. While welfare states have often targeted the new post-industrial social risks (for example, lack of work and family reconciliation, low skills, and precarious employment) by various forms of service provision (Bonoli, 2007), the historically more long-standing age-related social risks of reduced earnings capacity during the early years of family formation, working age, and old age, are still dominated by social insurance programmes substituting work income with a cash transfer.

The welfare state may not necessarily respond to these age-related social risks on equal terms, which may foster conflicts of interest in society between population subgroups whose risks are prioritised (i.e., supposedly the old) and

subgroups whose risks are less protected (i.e., supposedly the young). In such scenarios, the conditions for interest mediation and coalition formation in defence of the welfare state are likely to be severely weakened, as is the willingness among large groups of the electorate to financially contribute to the welfare state. Instead of positive-sum solutions, policymaking will most likely take the form of zero-sum distributional trade-offs where the overall pool of resources available for redistribution over the longer term will be considerably constrained. Instead of united claims for more social spending, people in different age groups may try to get as big slices as possible of a constantly smaller cake, supposedly at the expense of those with less bargaining power. Analogous to Korpi and Palme's (1998) influential socioeconomic account of a paradox of redistribution, it seems reasonable to assume that such vicious circles in social policymaking will negatively affect the possibilities of providing adequate forms of protection for all, even for older voters with typically high levels of electoral participation.

To financially sustain the welfare state in periods of population ageing, several countries need to increase their fiscal space, for example by widening the base, increasing social security contributions, or generally extending contributions periods. Previous research shows that this is already partly addressed by postponing retirement and lengthening working lives (Kuitto & Helmdag, 2021). Nevertheless, ensuring the financial sustainability of pension systems will continue to be a daunting task, given that the share of the population aged 65 and over is forecast to increase until at least 2050 (OECD, 2021). However, this is not necessarily an impossible task, as tax revenues in OECD countries are far in excess of what is needed to sustain current public redistributive commitments into the future. Empirically, current tax revenues vary from 46.9% of GDP in Denmark to 21.1% in Ireland, and differences between countries in income taxes and social security contributions are even greater (Modica, Laudage & Harding, 2018).

Due to the political economy surrounding the financing of the welfare state, budgetary pressure to sustain social policy is not necessarily greater in countries where the redistributive commitments are higher. One reason is of course that budgetary pressures foremost are caused by a mismatch between revenues and outlays, not primarily by the size of social expenditures alone. Evidence from attitudinal surveys indicate that the former are related to the latter. Popular support for financing the welfare state (for example via progressive taxation) depends at least in part on the extent to which taxpayers receive something in return. What matters is not necessarily the final distribution of disposable income, but how well taxpayers feel protected by the welfare state (Berens & Gelepathis, 2019).

This dynamic perspective on generational politics helps us to identify a strategy in social policymaking that reduces the likelihood of escalating zero-sum

distributional trade-offs and increases the possibilities of positive-sum solutions. Countries may thereby be pushed towards a more viable path for the welfare state that is both financially and socially sustainable for the foreseeable future. Instead of conflicting claims for redistribution caused by an elderly bias of the welfare state, the crux of the matter is to design social policy in ways so that everyone feels protected. Over time, this should increase the willingness of a large part of the electorate to financially contribute to the welfare state, as well as the financial possibilities of policymakers to scale up redistributive commitments without putting one particular age group at greater risk.

Before presenting our hypothesis, we need to make another clarification. Analyses of a fair allocation of resources between generations are typically based on social spending patterns collected from national financial accounts (Kuitto, 2016; Lynch, 2006; Tepe & Vanhuyse, 2010). Occasionally, national transfer accounts are used, which often are more nuanced by introducing an age dimension into spending patterns (Gál, Vanhuyse & Vargha, 2018; Hammer, Istenič & Vargha, 2018). Another advantage of national transfer accounts is that private transfers between generations sometimes can be included, which makes spending patterns less biased towards the elderly.

Although spending patterns are valuable for some research purposes, it is doubtful that citizens care that much about which cost category in the national accounts they belong to. In all likelihood, they have only vague ideas about how much money governments spend on various population subgroups. Social expenditures are also very sensitive to changes in needs and demographic shifts. In an era of population ageing and fertility decline, the share of social spending going to the elderly is likely to increase simply because the number of retired people is growing faster than the pool of people in other age groups (see for example Chapter 3 in this volume). Based on an analysis of social spending, nearly all advanced welfare states will thus appear as if they are becoming more oriented towards protecting the needs of the elderly population that have exited the labour force. However, increased social spending on old people does not necessarily imply that pensions for new retirees have become more generous. Quite the contrary, available evidence suggests that pension benefits for new retirees have become less generous, despite escalating expenditures on this cost category in the national accounts (Tepe & Vanhuyse, 2009). To avoid being trapped in this framework of seemingly unavoidable zero-sum distributional trade-offs in the welfare state, we provide a complementary conceptualisation of social policy. Instead of analysing crude levels of social expenditures, this chapter will focus on the degree to which needs for social protection in the different stages of life are satisfied by the welfare state.

We are convinced that the escape route out of zero-sum distributional trade-offs and escalating generational conflict is related to the possibilities of welfare states to generate interest coalitions between age groups that are subject to

different types of social risks. One important aspect is the degree to which the institutional structures of the welfare state are believed to be just and fair, for example by providing similar levels of protection for a greater variety of age-related social risks. Over time, this will in most likelihood increase both the political and budgetary possibilities of improving social policies for all. With this in mind, we formulate the following hypothesis:

Hypothesis: Systems that provide similar levels of protection for different age-related social risks tend to produce more generous benefits for all citizens, irrespective of age.

Once this prerequisite of institutional equity is fulfilled, the likelihood should be greater of welfare states embarking on a route of social transformation that generates fruitful conditions for change towards an equal and unbiased provision of social protection in the upward direction of improved quality.

SOCIAL RIGHTS DATA ON GENERATIONAL POLICIES

Income Replacement in Social Insurance

Our sample for analysis comprises 18 affluent countries over a period of six decades from 1960 to 2020.¹ The quality of social protection can be measured in different ways. Our focus is on the degree of income replacement in social insurance programmes that target reduced earnings capacity for contingencies that tend to appear in different periods of life: (early) childhood, working age, and old age. Although coverage and take-up are other aspects of social policy that may deserve closer attention, their conceptualisation and measurement are generally muddled and confusing (Nelson and Nieuwenhuis, 2021).

The data on income replacement is from the Social Policy Indicators (SPIN) database (Nelson et al., 2020). SPIN income replacement data is based on model family types, which are often used in comparative research and by international organisations to facilitate comparisons of benefits between countries and contingencies. For each programme, entitlements are established with reference to national legislation, calculated net of taxes, and expressed as percentages of an average production worker's net wage. The wage level of an average production worker is also used in determining the size of entitlements.

For the childhood risk category, we include applicable child allowances, child tax allowances, child tax credits, postnatal parental leave benefits, and maternity grants paid in relation to childbirth.² We use the yearly net benefits paid to a one-earner family with two adults and two young children. The non-working parent is expected to be out of employment performing care work in the home for the whole year. It should be noted that none of these benefits is

paid directly to the child. However, the presence of a child in the family is a prerequisite for entitlement, hence the labelling of this age-related risk category as childhood.

For working-age risks, we include unemployment insurance benefits and sickness insurance benefits.³ Because income replacement sometimes varies over the duration in receipt of benefits, we assume two periods of unemployment and sick leave: 1 week and 26 weeks. Income replacement for working-age risks is an additive index of benefits for unemployment and sickness over the two periods of duration.

For old-age risks we use the yearly pension benefit of two model families: a single retired person and a married retired couple.⁴ In both instances, the breadwinner is assumed to have a 40-year employment record. The non-working spouse only qualifies for a minimum pension, if applicable.

Although there is some age-related logic to how countries have organised social protection, it is sometimes difficult to fully separate benefits for different age-related social risks identified in this chapter. One reason is of course that people in some instances belong to more than one risk category. The most obvious examples are young parents of working age. Another reason is that many benefit schemes have effects that go beyond their primary risk category. Unemployment insurance is a case in point, where benefits are important not only for the economic position of jobless people of working age, but also for child well-being (Alm, Nelson & Nieuwenhuis, 2020). Many countries also provide special supplements for dependent children in connection with their out-of-work benefits (Morris, Duncan & Clark-Kauffman, 2005). To the extent possible, we have tried to avoid confusion of benefits across the three age-related social risk categories. One example is by using only a single person model family for the working-age risks of sickness and unemployment. Although the categorisation of benefits according to different age-related social risks (including their labelling) is somewhat artificial, it serves our analytical purpose of identifying positive-sum solutions in generational politics.

Balance of Income Replacement

The degree of balance (i.e., similarity) in age-related social insurance is calculated using the inverse coefficient of variation for income replacement during childhood, working-age, and old-age as just defined. The coefficient of variation is obtained by dividing the observed standard deviation by the observed mean (in our case multiplied by 100). Because we are dealing with an inverse coefficient, higher values represent a more balanced system of age-related social insurance, whereas lower values show that the system is generationally more unbalanced. It should be noted that the degree of balance in age-related social insurance is independent of the overall (mean) level of income

replacement that is provided as a whole. In other words, a country that provides full income replacement throughout all its social programmes has the same degree of balance as a country with no income replacement rate at all. Thus, it is important to conduct descriptive analyses that employ a comparison of both the overall level and the balance of income replacement provision.

SOCIAL INSURANCE FROM A GENERATIONAL PERSPECTIVE

Levels and Balance of Income Replacement in Age-Related Social Insurance

Table 2.1 shows the degree of income replacement in age-related social insurance for the period 1960 to 2020 in our 18 OECD countries. For childhood-related risks, the countries in the top three positions are Sweden (67.3%), Finland (57.9%), and Norway (55.3%). Since the 1990s, Sweden has been at the vanguard of generous parental leave, in terms of both the length of leave granted to both parents and the degree of income replacement. In more recent years, however, this unique position has been crumbling as many European countries have caught up – at least in terms of income replacement (Jahn & Helmdag, 2019; Kautto & Kuitto, 2021). The lowest levels of income replacement for childhood-related risks are observed in five of the six Anglophone countries (i.e., the United States, New Zealand, Australia, Ireland, and the United Kingdom). This is especially true in the United States, where there is no federal paid parental leave benefit. Income replacement for childhood-related risks in the United States is due entirely to child tax credits.

The cross-national patterns are somewhat different for income replacement in relation to working-age risks, as the top three positions are taken by Germany (81.3%), the Netherlands (74.6%), and Sweden (74.2%). The high degree of income replacement for working-age risks in Germany is mainly explained by sickness insurance, which provides six weeks of full pay without any waiting days (the programme has been virtually unchanged since 1970). By comparison, income replacement during unemployment in Germany is only slightly above the OECD average. The lowest levels of income replacement for working-age risks are again observed in the Anglophone countries (but now also including Canada).

For old-age risks, the highest levels of pension provision are found in Finland (73.8%), Austria (71.5%), and Italy (69.7%). It is noteworthy that the United States has comparatively high replacement rates for public pensions (63.8%), placing it in sixth position in our country ranking. This above-average level of pension provision, coupled with comparatively meagre benefits for childhood and working-age risks, ultimately contributes to a massive imbalance in

Table 2.1 Balance and levels of income replacement in age-related social insurance as averages for the period 1960–2020 in 18 OECD countries (country rankings within parentheses)

-	Child- hood (mean)	Child- hood (rank)	Working- age (mean)	Working- age (rank)	Old-age (mean)	Old-age (rank)	Overall (mean)	Overall (level)	Balance (mean)	Balance (rank)
SE	67.3	(1)	74.2	(3)	68.0	(5)	69.8	(1)	79.8	(1)
FI	57.9	(2)	66.4	(8)	73.8	(1)	66.0	(2)	75.3	(2)
NO	55.3	(3)	70.0	(7)	63.8	(7)	63.0	(4)	72.5	(3)
FR	38.9	(11)	55.1	(11)	61.8	(8)	51.9	(10)	72.4	(4)
IT	46.9	(5)	47.6	(12)	69.7	(3)	54.8	(8)	71.7	(5)
AT	49.7	(4)	70.2	(6)	71.5	(2)	63.8	(3)	70.6	(6)
BE	41.4	(8)	71.1	(5)	69.6	(4)	60.7	(5)	69.5	(7)
DK	39.6	(9)	58.7	(10)	57.2	(10)	51.8	(11)	68.6	(8)
CAN	39.2	(10)	46.6	(13)	52.9	(11)	46.2	(13)	60.8	(9)
DE	45.8	(6)	81.3	(1)	49.4	(15)	58.9	(6)	56.0	(10)
CH	29.7	(12)	65.2	(9)	43.8	(17)	46.2	(12)	54.6	(11)
NL	27.5	(13)	74.6	(2)	58.7	(9)	53.6	(9)	54.6	(12)
IE	25.0	(15)	34.3	(14)	48.6	(16)	35.9	(14)	54.5	(13)
JPN	44.3	(7)	72.3	(4)	49.5	(14)	55.4	(7)	50.3	(14)
UK	26.9	(14)	25.4	(16)	50.8	(13)	34.4	(15)	47.9	(15)
NZL	11.9	(17)	31.4	(15)	51.9	(12)	31.7	(17)	33.1	(16)
AUS	15.1	(16)	23.6	(18)	43.5	(18)	27.4	(18)	32.1	(17)

-	Child- hood (mean)	Child- hood (rank)	Working- age (mean)	Working- age (rank)	Old-age (mean)	Old-age (rank)	Overall (mean)	Overall (level)	Balance (mean)	Balance (rank)
USA	6.9	(18)	25.2	(17)	63.8	(6)	32.0	(16)	8.7	(18)
Average	37.2	-	55.2	-	58.2	-	50.2	-	57.4	-

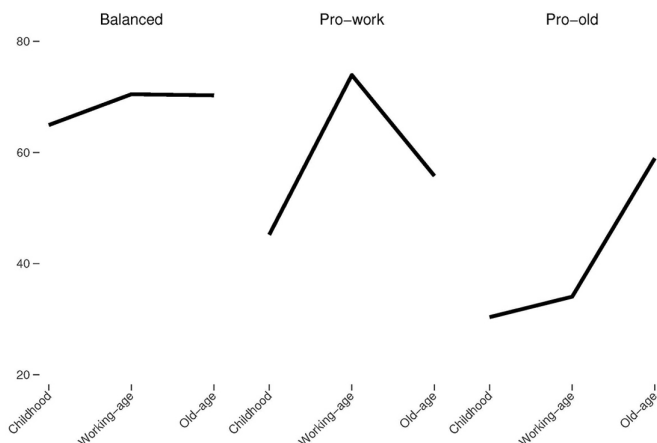
age-related social insurance in the United States. It should be noted that there is no federal sickness insurance benefit in the United States. The lowest replacement rates for pensions are observed in Australia (43.5%) and Switzerland (43.8%), which both put heavy emphasis on private or occupational provisions.

Our data reflects much of what we know about the core differences between welfare state models (Esping-Andersen, 1990). The highest degree of income replacement in the overall system of age-related social insurance is observed in Sweden and Finland. Austria comes in at third, due to its generous provisions for working-age and old-age risks. At the other end of the spectrum with least generous benefits, we find Australia and New Zealand, closely followed by the United States. The cross-national pattern is similar when it comes to the balance of income replacement in age-related social insurance. Three Nordic countries (Sweden, Finland, and Norway) are ranked at the top, with highly balanced systems of income replacement. The Continental European countries are generally located somewhere in the middle of the cross-national ranking, whereas the Anglophone countries are at the bottom, with highly unbalanced age-related social insurance programmes.

Positive-Sum Solutions in Generational Politics

In the next step, we visually depict and group countries according to levels and balance of income replacement in the overall system of age-related social insurance. Based on cluster analysis, Figure 2.1 shows the three distinct age-related profiles of income replacement in social insurance that we can observe empirically in our data.⁵ The three age-related social risk categories (childhood, working age, and old age) are shown on the horizontal axis, while the vertical axis shows the degree of income replacement in social insurance. To improve the validity of the results and make the results less sensitive to individual measurements, we have in this analysis pooled data for each country over the period 1980 to 2020.

We can identify one group of countries where income replacement in social insurance is balanced and fairly similar across the three age-related social risk categories. Austria, Denmark, Finland, France, Norway, and Sweden are included in this group. The remaining 12 countries have unbalanced generational profiles of either a pro-work or a pro-old subtype. The pro-work subtype is observed in Belgium, Germany, Japan, the Netherlands, and Switzerland. In these countries, income replacement in social insurance peaks for working-age risks. The pro-old subtype, where income replacement increases with each subsequent age-related social risk, is found in Anglophone countries (Australia, Ireland, New Zealand, United Kingdom, and the United States) and Italy. Notably, it is only the pro-old subtype that approximates patterns



Notes: The balanced subtype includes Austria, Denmark, Finland, France, Norway, and Sweden. The pro-work subtype includes Belgium, Germany, Japan, the Netherlands, and Switzerland. The pro-old subtype includes Australia, Ireland, Italy, New Zealand, United Kingdom, and the United States.

Figure 2.1 *Income replacement in social insurance for three age-related social risks in 18 OECD countries (averages 1980–2010)*

observed in research based on social spending, as it is only here that income replacement is clearly tilted in favour of the retired.

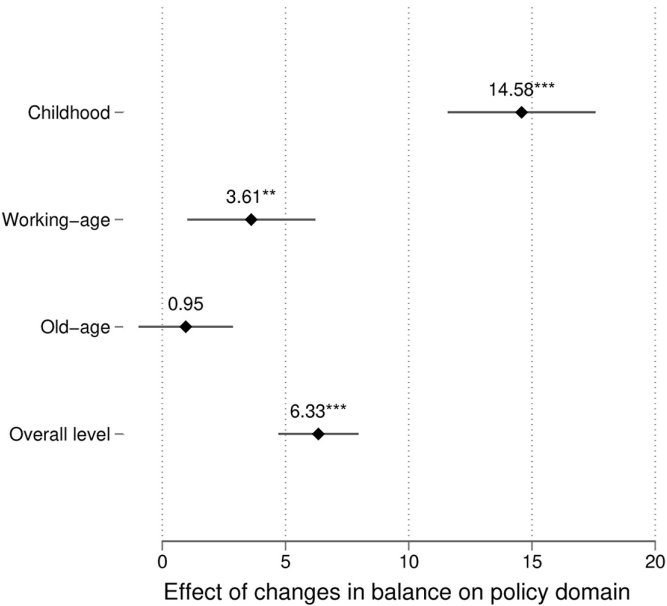
According to our hypothesis, income replacement should be higher in countries with balanced age-related profiles of social insurance than in countries with unbalanced profiles. Although individual countries may deviate from the overall patterns revealed by our data, income replacement for each age-related social risk evidently tends to be higher in countries where the overall system of social insurance is more generationally balanced. Thus, it is not necessarily the case that retired persons are better off in countries where their needs for social protection are prioritised vis à vis the needs of other age groups. One exception is for working-age risks, where the pro-work subtype reaches a level of income replacement that is slightly above that of the balanced profile. However, this pattern is largely explained by the single case of Germany, where sickness insurance is exceptionally generous, as noted earlier. If Germany is excluded from the analysis, income replacement in the pro-work subtype is well below the balanced group.

This descriptive analysis suggests that welfare states are not necessarily plagued by generational trade-offs between policies that target social risks appearing in different stages of life. It is not a universal rule of law that generous pensions for older people by necessity are offset by lower levels of security for younger age groups, as expected in much of the literature on the welfare state, population ageing, and generational conflict. Quite the contrary, in countries where the degree of income replacement in social insurance is balanced and fairly similar across risks that appear in different stages of life, all age groups seem to benefit from generational politics, thus lending support to our positive-sum solution hypothesis. As a next step, we will examine this relationship between balance and levels of income replacement in age-related social insurance over time using more sophisticated statistical regression techniques. Besides being more sensitive to temporal changes, this analysis will also give us an opportunity to include additional explanatory factors that could potentially affect the results.

Estimating Potential Trade-offs Between Policy Domains with Regression Analyses

In a next step, we employ regression analyses to establish whether the structures of age-related social insurance are subject to zero-sum trade-offs. In other words, we want to find out if the increase in income replacement provision within one policy domain is tied to a decrease in another. We start by analysing the relationship between balance and levels of income replacement in age-related social insurance without including any control variables. To recapitulate, in this analysis we are not only interested to see if the degree of balance in age-related social insurance (our main independent variable) is positively associated with the overall level of income replacement, but also if it is positively related to the degree of income replacement for each age-related social risk (our dependent variables). If so, we would have further support for our positive-sum solution hypothesis. A positive association indicates that higher values on one variable tend to go together with higher values on another variable, and vice versa.

Figure 2.2 shows the point estimates for the degree of balance in age-related social insurance.⁶ The results show that the degree of balance in age-related social insurance is indeed positively related to the overall level of income replacement, as well as to the degree of income replacement for childhood and working-age risks. These coefficients associated with the degree of balance in age-related social insurance are also statistically significant (i.e. the size of the coefficients is not due to random processes in our data, including measurement errors). To give an example, a one standard deviation change in the degree of balance in age-related social insurance is associated with a



Notes: Dots are point estimates and grey lines show their standard errors. Stars show if the coefficients are statistically significant (i.e., whether there is an association or not).** $p < .01$; *** $p < .001$.

Figure 2.2 *Income replacement in age-related social insurance. Effect of a change in the degree of balance in age-related social insurance. Country fixed effects regressions of 18 OECD countries 1960–2020*

6.33-point increase in the overall level of income replacement rates. Notably, there is no statistically significant association between the degree of balance in age-related social insurance and the generosity of old-age pensions. This indicates that older persons are not necessarily worse off the more the overall system of income replacement in age-related social insurance is balanced across all stages of the life course.

The results we present here are based on multiple regression models that include three sets of control variables capturing functional pressures on the welfare state, as well as a series of macroeconomic and political determinants. To capture functional pressures, we include OECD comparative data that captures the employment ratio, the unemployment rate, the share of the elderly

population (over 65 years), and the share of people younger than 15 years. As macroeconomic controls, we include GDP per capita (OECD), the openness of the economy in terms of trade, and government debt, the latter two measured as share of GDP (Armingeon et al., 2023; Feenstra & Timmer, 2015). The set of political controls capture the cabinet share for centre parties and right parties, also from Armingeon et al. (2023). Finally, we include an index of constitutional structures, which measures the degrees of federalism, parliamentarism, proportional representation, bicameralism, and the frequency of referenda (Huber, Ragin & Stephens, 1993).

The three sets of control variables reveal results that are generally in line with expectations. Increases in employment are associated with higher levels of income replacement for childhood-related social risks. This result probably reflects that employment correlates strongly with female labour force participation, thus creating increased demand for child benefits and more generous paid parental leave. The share of individuals above 65 years is positively related to income replacement for childhood-related risks. This may indicate that governments have tried to address the financial burden of retirement by increasing the size of the labour force. GDP per capita and government debt are negatively associated with working-age benefits and pensions, whereas there is no association with income replacement for childhood-related risks. The latter result is not that surprising, given the position of family policy as an important social investment (Morel, Palier & Palme, 2011). Concerning the political controls, right-wing parties seem to exert a negative pressure on income replacement for childhood and working-age risks. This evidence of classical partisanship is consistent with previous studies that attribute a negative impact of right government on the welfare state more generally, and out-of-work benefits but also family policy particularly (Helmdag & Kuitto, 2022; Korpi & Palme, 2003). The results are also in line with previous findings that there is no clear partisan effect in pension reform when levels of income replacement are considered (Kuitto & Helmdag, 2021).

CONCLUSIONS

The question of how to achieve social sustainability in contemporary welfare states facing progressive demographic ageing is one of the most pressing issues of our time. In this chapter, we set out to investigate whether social policymaking is subject to a distributional zero-sum game in which younger age groups are systematically disadvantaged in favour of older people. For this purpose, we performed an institutional analysis of income replacement in age-related social insurance. Analytically, we distinguish between income protection for social risks that appear in three distinct stages of life: childhood, working age, and old age. The empirical analyses indicate that a more balanced approach

to social insurance (i.e., in which income replacement for different types of age-related social risks is provided at similar levels), may socially sustain the welfare state and solve the dilemma of emerging generational conflict and zero-sum distributional trade-offs during periods of dramatic demographic change. In our view, social sustainability implies that the welfare state should be in a position to maintain and gradually expand its redistributive commitments, without placing some vulnerable groups in a less favourable position. Notably, social insurance systems that are generationally more balanced seem to be of advantage in this regard. In countries with generationally balanced age-related social insurance, there is a clear trend towards an expansion of redistributive commitments that are beneficial to all age groups, and thus with no clear winners and losers in generational politics.

The social sustainability of the welfare state for future generations is closely related to public support and the extent to which large fractions of the electorate believe that they receive a fair share of the sums that are channelled through social policy. However, it would be a mistake to think that people evaluate their position by comparing how social spending is distributed across cohorts. No one fights for increased spending per se. What matters is how this spending is used to secure needs that appear in different stages of life. A balanced system of income replacement in age-related social insurance has many advantages in this respect. Particularly, it carries great possibilities to nurture virtuous circles in policymaking, whereby different generations are better placed to join forces in defence of the welfare state and secure the financing needed to sustain broad redistributive commitments well into the future.

Despite the novelty of our findings for the welfare state's social sustainability, we are only beginning to understand how social policy is structured by age and how it affects the possibilities of governments to provide good-quality social protection for all citizens in society. Different avenues for research along these lines are not missing. One is of course to broaden the analysis to services or in-kind benefits (Vaalavuo, 2013) or the combination of these with cash benefits in the form of social investment (Kuitto, 2016). Another is to explicitly investigate how the age-related structures of welfare states are related to financing. Research could fruitfully also analyse how age and generational interests intersect with socioeconomic class and gender, and the consequences of these intersectionalities for the future sustainability of welfare states.

NOTES

1. All these countries have been stable democracies since the end of the Second World War; something that is considered central for the arguments of political economy put forth in this chapter.

2. The two variables for benefits during childhood are *tnrrly* and *rr_cb_total_apw*. They are extracted from two SPIN data modules: the Parental Leave Benefits Dataset (PLB) and the Child Benefit Dataset (CBD).
3. The two variables for income replacement in unemployment and sickness insurance are *uz2inds* and *sz2inds*, respectively. Both variables are from the Social Insurance Entitlement Dataset (SIED), which is another SPIN data module.
4. The SIED variable used for old age pensions is *px2indst*.
5. We conducted a k-means partition cluster analysis applying an Euclidean distance with 10,000 iterations over the three age-related risk categories, with data pooled from 1980 to 2020.
6. All estimates are based on Prais-Winsten time-series cross-section regressions with country-specific autocorrelation processes, unit fixed effects, and panel-corrected standard errors. A summary statistic on all variables used in the analysis is provided in Table 2A.1 in the appendix.

REFERENCES

- Alm, S., Nelson, K., & Nieuwenhuis, R. (2020). The diminishing power of one? Welfare state retrenchment and rising poverty of single-adult households in Sweden 1988–2011. *European Sociological Review*, 36(2), 198–217.
- Armingeon, K., Engler, S., Leemann, L., & Weisstanner, D. (2023). Comparative Political Data Set 1960–2021. Zurich/Lueneburg/Lucerne: University of Zurich, Leuphana University Lueneburg, and University of Lucerne. www.cps-data.org.
- Béland, D. (2010). Reconsidering policy feedback: How policies affect politics. *Administration & Society*, 42(5), 568–590.
- Berens, S., & Gelepihis, M. (2019). Welfare state structure, inequality, and public attitudes towards progressive taxation. *Socio-Economic Review*, 17(4), 823–850.
- Birnbaum, S., Ferrarini, T., Nelson, K., & Palme, J. (2017). *The Generational Welfare Contract: Justice, Institutions and Outcomes*. Edward Elgar Publishing.
- Bonoli, G. (2007). Time matters: Postindustrialization, new social risks, and welfare state adaptation in advanced industrial democracies. *Comparative Political Studies*, 40(5), 495–520.
- Cantillon, B. (2011). The paradox of the social investment state: Growth, employment and poverty in the Lisbon era. *Journal of European Social Policy*, 21(5), 432–449.
- Esping-Andersen, G. (1985). Power and distributional regimes. *Politics & Society*, 14(2), 223–256.
- Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Polity Press.
- Esping-Andersen, G., Gallie, D., Hemerijck, A., & Myles, J. (2002). *Why We Need a New Welfare State*. Oxford University Press.
- Esping-Andersen, G. & Sarasa, S. (2002). The generational conflict reconsidered. *Journal of European Social Policy*, 12(1), 5–21.
- Evans, P. B., Rueschemeyer, D., & Skocpol, T. (Eds). (1985). *Bringing the State Back In*. Cambridge University Press.
- Feenstra, R., & Timmer, M. (2015). The next generation of the Penn World Table. *American Economic Review*, 105(10), 3150–3182.
- Ferrera, M., & Rhodes, M. (2000). Building a sustainable welfare state. *West European Politics*, 23(2), 257–282.

- Gál, R., Vanhuyse, P., & Vargha, L. (2018). Pro-elderly welfare states within child-oriented societies. *Journal of European Public Policy*, 25(6), 944–958.
- Hammer, B., Istenič, T., & Vargha, L. (2018). The broken generational contract in Europe: Generous transfers to the elderly population, low investments in children. *Intergenerational Justice Review*, 4(1), 21–31.
- Helmdag, J., & Kuitto, K. (2022). The politics of unemployment benefit reforms. In Baltz, E., Kosanke, S., & Pickel, S. (Eds), *Parties, Institutions and Preferences: The Shape and Impact of Partisan Politics* (pp. 261–297). Springer.
- Hemerijck, A. (2013). *Changing Welfare States*. Oxford University Press.
- Huber, E., Ragin, C., & Stephens, J. D. (1993). Social Democracy, Christian Democracy, constitutional structure, and the welfare state. *American Journal of Sociology*, 99(3), 711–749.
- Jahn, D., & Helmdag, J. (2019). Generosität von Sozialleistungen [Generosity of social benefits]. In Obinger, H., & Schmidt, M. G. (Eds), *Handbuch Sozialpolitik* (pp. 561–583). Springer.
- Korpi, W. (1983). *The Democratic Class Struggle*. Routledge & Kegan Paul.
- Korpi, W., & Palme, J. (1998). The paradox of redistribution and strategies of equality: Welfare state institutions, inequality, and poverty in the Western countries. *American Sociological Review*, 63(5), 661–687.
- Korpi, W., & Palme, J. (2003). New politics and class politics in the context of austerity and globalization: Welfare state regress in 18 countries, 1975–95. *American Political Science Review*, 97(3), 425–446.
- Kuitto, K. (2016). From social security to social investment? Compensating and social investment welfare policies in a life-course perspective. *Journal of European Social Policy*, 26(5), 442–459.
- Kuitto, K., & Helmdag, J. (2021). Extending working lives: How policies shape retirement and labour market participation of older workers. *Social Policy & Administration*, 55(3), 423–439.
- Kautto, M., & Kuitto, K. (2021). The Nordic countries. In Béland, D., Morgan, K. J., Obinger, H., & Pierson, C. (Eds), *The Oxford Handbook of the Welfare State*, 2nd edition. (pp. 803–825). Oxford University Press.
- Longman, P. (1987). *Born to Pay: The New Politics of Aging in America*. Houghton Mifflin.
- Lynch, J. (2006). *Age in the Welfare State: The Origins of Social Spending on Pensioners, Workers, and Children*. Cambridge University Press.
- Mirowsky, J., & Ross, C. E. (1999). Economic hardship across the life course. *American Sociological Review*, 64(4), 548–569.
- Modica, E., Laudage, S., & Harding, M. (2018). Domestic revenue mobilisation: A new database on tax levels and structures in 80 countries. OECD Taxation Working Papers, OECD Publishing.
- Morel, N., Palier, B., & Palme, J. (2011). *Towards a social investment welfare state?: Ideas, policies and challenges*. Policy Press.
- Morris, P., Duncan, G. J., & Clark-Kauffman, E. (2005). Child well-being in an era of welfare reform: The sensitivity of transitions in development to policy change. *Developmental Psychology*, 41(6), 919–932.
- Nelson, K., Fredriksson, D., Korpi, T., Korpi, W., Palme, J., & Sjöberg, O. (2020). The Social Policy Indicators (SPIN) database. *International Journal of Social Welfare*, 29(3), 285–289.
- Nelson, K., & Nieuwenhuis, R. (2021). Towards a new consolidated framework for analysing benefit coverage. *Journal of European Social Policy*, 31(3), 352–362.

- OECD (2021). *OECD Health at a Glance: OECD Indicators*. Organisation for Economic Co-operation and Development (OECD). <https://doi.org/10.1787/ae3016b9-en>.
- Palmer, J., Smeeding, T., & Torrey, B. B. (1988). *The Vulnerable*. Urban Institute Press.
- Pampel, F. C. (1994). Population aging, class context, and age inequality in public spending. *American Journal of Sociology*, 100(1), 153–195.
- Preston, S. (1984). Children and the elderly: Divergent paths for America's dependents. *Demography*, 21, 435–457.
- Quadagno, J. (1989). Generational equity and the politics of the welfare state. *Politics & Society*, 17(3), 353–376.
- Rouzet, D., Sánchez, A. C., Renault, T., & Roehn, O. (2019). Fiscal challenges and inclusive growth in ageing societies. OECD Publishing.
- Skocpol, T., & Pierson, P. (2002). Historical institutionalism in contemporary political science. In Katznelson, I. and Milner, H. V. (Eds), *Political Science: State of the Discipline* (pp. 693–721). W.W. Norton.
- Taylor-Gooby, P. (Ed.) (2004). *New Risks, New Welfare: The Transformation of the European Welfare State*. Oxford University Press.
- Tepe, M. & Vanhuysse, P. (2009). Are aging OECD welfare states on the path to gerontocracy? Evidence from 18 democracies, 1980–2002. *Journal of Public Policy*, 29(1), 1–28.
- Tepe, M. & Vanhuysse, P. (2010). Elderly bias, new social risks and social spending: Change and timing in eight programmes across four worlds of welfare, 1980–2003. *Journal of European Social Policy*, 20(3), 217–234.
- Vaalavuo, M. (2013). The redistributive impact of 'old' and 'new' social spending. *Journal of Social Policy*, 42(3), 513–539.
- Walker, A., (Ed.) (1996). *The New Generational Contract: Intergenerational Relations, Old Age and Welfare*. UCL Press.
- Yerkes, M. A., Nelson, K., & Nieuwenhuis, R. (2022). Where to from here? Social policy research in future European societies. In Nelson, K., Nieuwenhuis, R., & Yerkes, M. A. (Eds), *Social Policy in Changing European Societies: Research Agendas for the 21st Century* (pp. 294–302). Edward Elgar Publishing.

APPENDIX

Table 2A.1 Descriptive statistics of the variables used in the analysis

-	<i>n</i>	$\bar{x}$	σ_x	min	max
<i>Dependent variables</i>					
Childhood	216	4.15	10.31	-22.0	56.8
Working-age	216	1.15	7.85	-17.8	51.6
Old-age	216	1.60	6.47	-13.7	27.6
Overall level	216	2.30	5.57	-11.6	30.4
<i>Independent variable</i>					
Degree of balance	216	0.11	0.40	-1.2	1.6
<i>Functional pressures</i>					
Employment ratio	216	0.43	2.55	-8.5	8.3
Unemployment rate	216	0.31	1.88	-7.3	7.5
Population over 65	216	0.74	0.69	-0.8	3.3
Population under 15	216	-0.87	0.96	-3.8	1.1
<i>Macroeconomic controls</i>					
GDP (per capita)	216	0.33	0.31	-0.4	3.7
Economic openness	216	3.54	6.41	-9.5	35.0
Government debt	216	3.63	14.38	-39.1	76.4
<i>Political controls</i>					
Centre party cabinet share	216	0.00	0.24	-0.9	0.9
Right party cabinet share	216	0.00	0.35	-1.0	0.9
Constitutional structure	216	2.18	2.15	0	7

Notes: All variables capture five-year differences. All functional, macroeconomic and political controls cover the time lag of the preceding five-year period. *n* : number of observations, $\bar{x}$: mean, σ_x : standard deviation.

Table 2A.2 *Balance and levels of income replacement in age-related social insurance: country fixed effects regressions in 18 OECD countries, 1960–2020*

-	Δ Childhood	Δ Working-age	Δ Old-age	Δ Overall
-	$\Delta y = 4.15$	$\Delta y = 1.15$	$\Delta y = 1.60$	$\Delta y = 2.30$
-	$\sigma_{\Delta y} = 10.31$	$\sigma_{\Delta y} = 7.85$	$\sigma_{\Delta y} = 6.47$	$\sigma_{\Delta y} = 5.57$
Δ Degree of balance	14.58***	3.61**	0.95	6.33***
-	(1.53)	(1.32)	(0.97)	(0.83)
<i>Functional pressures</i>	-	-	-	-
Δ Employment ratio	0.78**	-0.13	0.19	0.15
-	(0.30)	(0.25)	(0.19)	(0.16)
Δ Unemployment rate	0.70	-0.59	0.32	-0.05
-	(0.43)	(0.43)	(0.34)	(0.25)
Δ Population over 65	4.06***	-0.29	-1.50	1.01
-	(1.13)	(0.96)	(0.87)	(0.68)
Δ Population under 15	-0.03	0.25	0.26	0.19
-	(0.72)	(0.58)	(0.47)	(0.43)
<i>Macroeconomic controls</i>	-	-	-	-
Δ GDP (per capita)	-3.28	-4.55*	-4.34*	-4.47**
-	(2.33)	(2.16)	(1.70)	(1.50)
Δ Economic openness	-0.06	0.02	0.05	-0.02
-	(0.10)	(0.10)	(0.08)	(0.07)
Δ Government debt	-0.06	-0.11*	-0.11***	-0.10***
-	(0.05)	(0.05)	(0.03)	(0.03)
<i>Political controls</i>	-	-	-	-
Δ Centre party cabinet share	1.69	-3.92	1.40	-0.69
-	(2.63)	(2.48)	(1.60)	(1.47)
Δ Right party cabinet share	-3.81*	-2.74*	0.55	-2.50**
-	(1.70)	(1.14)	(1.07)	(0.80)

-	Δ Childhood	Δ Working-age	Δ Old-age	Δ Overall
Constitutional structure	0.96	0.66	0.33	0.71
-	(0.76)	(1.20)	(1.43)	(0.85)
n	216	216	216	216
N	18	18	18	18
T	12	12	12	12
R ² adj.	0.424	0.185	0.175	0.363
RMSE	8.383	7.103	5.973	4.695

Notes: Estimates from Prais-Winsten time-series cross-section regressions with first-order autocorrelation process and unit fixed effects (not shown). All independent variables capture the average change within the previous five-year interval. Mean (Δy) and standard deviation ($\sigma \Delta y$) of the dependent variable in the table header. Panel-corrected standard errors in parentheses. Symbols: * $p < 0.05$, * $p < 0.01$, *** $p < 0.001$.