5. Contracts against poverty

The capacity of the welfare state to reduce poverty is one of the most classical goal dimensions of social policy. The development of social citizenship and income replacement in major age-related social insurance schemes are in this context likely to play a pivotal role. Compared to many other outcomes of the welfare state, the causal links between institutional structures and outcomes of relevance for generational justice are expected to be fairly straightforward here.

The nature and seriousness of age-related social risks have varied over the course of history, not only following profound structural transformations, but also reflecting the role of institutions for redistribution (Lenski, 1966). Differences in institutional designs of welfare states and adjustments to social policy have contributed to a diversity of contexts for how issues around generational justice are played out. Nevertheless, the stages in life when citizens have to cope with elevated risks for poverty have remained surprisingly stable, even in the presence of substantial structural change (Elder et al., 2003, Leisering, 2003; Mayer, 2004, 2005).

In this chapter, we initiate our empirical investigation of outcomes linked to generational welfare contracts by studying economic vulnerabilities that citizens are exposed to from birth to the very end of their lives. The purpose is to analyse how generational welfare contracts are related to poverty. Our main focus is on the direct pathways between income replacement in social insurance and poverty. Potential indirect effects that may arise in the intersection of social and labor market policy, through the ways in which policies create incentives or disincentives for employment, are addressed in Chapter 8. As outlined previously in this book, our main expectation is that balanced generational welfare contracts make citizens better equipped to handle periods of financial difficulties that appear in different stages of life. Balanced generational welfare contracts are thus expected to decrease poverty, not only overall, but also in each age-related risk period. The reason for these expectations relates to the political economy of the welfare state, an issue we will return to below.

The chapter is organized as follows. Next, we situate our analysis on generational welfare contracts and poverty in the context of the political economy of redistribution. Then, we discuss our poverty measurements and review

poverty trends in different age-related risk groups. The following sections are devoted to an analysis of links between policy and poverty, first, based on a descriptive data analysis and second, by performing statistical regressions.

WELFARE STATES AND INCOME DISTRIBUTIONS

How should we analyse distributional outcomes of the welfare state? Our main argument rests on the recognition that dominant approaches in recent scholarly and policy discourse are not adequately equipped to evaluate the role of institutional designs and conditions attached to the generational welfare contract. The problem is certainly not that issues related to inequality are ignored. Quite the contrary, the distribution of income is not only a recurrent theme in the social sciences but it also receives considerable attention in public debates.

The OECD (2011) recently showed that income inequality has been on the rise in most affluent countries since the mid 1980s, not surprisingly in tandem with rising poverty in some countries. The reasons for these changes to income distributions have been subject to intense discussion and several possible explanations have been brought forward, including demographic transformations, labor market change and the return of mass unemployment. Another partial explanation is the rapid growth of top incomes, not least for wider income inequalities (Atkinson and Piketty, 2007). In this explanatory framework some researchers view the role of welfare states and social policies as being of minor importance. In an analysis on the determinants of income inequality in Sweden for the period 1970–2009, Björklund and Jäntti (2011, p. 50) concluded that the contribution of transfers to the Gini coefficient had remained stable and at a low level.[1] This is indeed a very surprising finding against the background of recent changes introduced to the Swedish welfare state, where several studies report substantial cuts in cash benefit programs (Bäckman and Nelson, 2017; Fritzell et al., 2013; Kuivalainen and Nelson, 2011).

One reason for the difficulties in observing any substantial impacts of changing welfare states on income inequality is related to restrictions in standard analytical techniques, which seldom facilitate a sound separation between policy designs (i.e. welfare state institutional structures) and social risks (i.e. child bearing, unemployment, sickness, old age and so on). Decompositions of inequality indices may provide good descriptions, but also say very little about causal effects (i.e. whether inequality is affected by changes in the design of policy or changes in social risks, or a particular combination thereof). If income replacement in social insurance is reduced as the number of beneficiaries increase, the contribution of social transfers

to income inequality may actually be quite stable, although the institutional mechanisms surrounding redistribution have completely changed. Standard procedures of analysing income inequality are therefore poorly adapted to address institutional effects, whether in relation to issues of social class, gender, ethnicity or generational relations.

Failure to separate policy and social risks also characterizes a related branch of research on the distributive welfare state that relies heavily on the concentration of transfer income in an income distribution.[2] The confusion of social policy and social risks in such analyses is similarly easily illustrated. Let us for the sake of argument imagine a universal benefit that covers nearly every citizen in a particular risk group (e.g. an unemployment benefit). If risks of becoming unemployed are equally distributed in society, every segment of the income distribution would receive more similar shares of transfer income. However, in reality, many social risks are unequally distributed. In effect, even a universal policy may concentrate transfer income among the poor, thereby resembling the distributive profile of a means-tested and low-income targeted program, simply because benefits to a larger extent are received by people in the lower part of the income distribution.

By comparing the reduction of income inequality against the concentration of transfer income in the income distributions of a large number of countries, both Kenworthy (2011) and Marx et al. (2016) argue that transfer programs that reach further up the income ladder have become less relevant for income redistribution, which now appears to be explained more by the degree of low-income targeting in social policy (Whiteford, 2008). These new results may be interpreted in a way that has far-reaching policy implications, potentially harking back to the ideas of income redistribution that were embedded in the old poor-relief programs, and that still also tend to characterize modern forms of means-tested social assistance.

It is easy to understand the relevance of means-tested minimum income benefits, especially in periods characterized by financial crisis and fiscal constraints. However, for reasons stated above, we believe that it is problematic to analyse the concentration of transfers in an income distribution and low-income targeting without proper consideration to institutional structures and changes in social risks. Nor should low-income targeting in policymaking be analysed in isolation from the broader policy context in which social assistance and other forms of means-tested minimum income benefits belong (see our analysis on the institutional design of social insurance and social assistance in Chapter 4). One reason that we have already touched upon is the difficulty in theoretical terms in separating anti-poverty strategies in policymaking from the political economy of the welfare state (Marx et al., 2016). An exclusive reliance on low-income targeting is here likely to increase distributional trade-offs in policymaking of relevance not only for class-

based inequalities (Korpi and Palme, 1998), but also for generational equity. The political sustainability of the redistributive welfare state ultimately relies on broad interest coalitions that are formed around social policy.

The dynamic perspective on institutional change outlined in this book provides a sound basis for questioning the idea of low-income targeting as a powerful, stand-alone strategy for effective redistribution, also in a generational perspective. Rather than accepting at face value recent interpretations about the negligible role of changing social policy for income inequality and the significance of low-income targeting for effective redistribution, we will highlight the need for more institutionally informed analyses of income distributions that facilitate inferences on policy designs. Instead of relying on standard approaches that cannot adequately address questions about welfare state institutional structures, we will in this chapter apply analyses more aligned with theories on the political economy of redistribution. We give closer attention to imbalances in age-related social citizenship rights, thus providing new evidence of positive-sum solutions in generational politics. Empirically, we will analyse how poverty rates vary across age-related risk groups in countries that have defined their generational welfare contracts differently.

EMPIRICAL ANALYSIS

Poverty Trends

The empirical analyses in this chapter are based on comparative income data from the Cross-National Data Center in Luxembourg (LIS), which is an international research infrastructure that collects nationally representative micro-level income datasets that are harmonized to improve analyses across countries.[3] LIS data is organized in different waves that roughly correspond to the five-year interval used in our institutionally oriented analyses of generational welfare contracts in Chapter 4. We use the LIS waves most closely corresponding to our measurements of income replacement in social insurance.[4]

We follow common procedures in research on income distributions and conceptualize poverty in relative terms. Although it may be justified for some research purposes to focus on more absolute aspects of poverty, the relative income thresholds used in this chapter provide poverty measures that are both highly valid and relevant in comparative assessments of policy impacts. Our focus on relative poverty is clearly motivated from the perspective of relational equality discussed in Chapter 2. Recall that relational equality implies that people should be able to appear in public without shame, including access to resources necessary for full

participation on equal terms according to prevailing standards and conditions in society (Satz, 2010; Sen, 1991; Marshall, 1950).

Our basic benchmark is a poverty line of 50 percent of national median disposable household income in the whole population. The procedure of setting relative poverty thresholds is often characterized by various degrees of arbitrariness. Because policy impacts are sometimes sensitive towards the exact definition of the poverty line, in parts of the empirical analyses we will use alternative thresholds set at 40 and 60 percent of median disposable household income. Poverty counts are at the individual level, although income to begin with is measured at the household level. To adjust for the economy of scale within families, household-level income is divided by weights that vary according to household size and composition. Based on expert judgments about actual costs of additional family members, we use the so-called old OECD scale, which assigns a value of 1 to the first household member, 0.7 to each additional adult and 0.5 to each child.[5] For example, household income of a family with two adults and one child is thus divided by a value of 2.2, before poverty counts are made at the individual level.

Figure 5.1 shows poverty rates in three age-related risk categories as averages of 17 OECD countries in 1980–2010, using the 50 percent poverty threshold. LIS does not provide data for New Zealand, which consequently is excluded from analysis in this chapter. Poverty rates are calculated for three age-related risk categories roughly corresponding to those analysed in the previous chapter: families with dependent children, households headed by working-age individuals without dependent children, and elderly people aged 65 and over. In parts of the subsequent analyses we refer to these age-related risk groups as childhood, working age and old age as abbreviated forms.

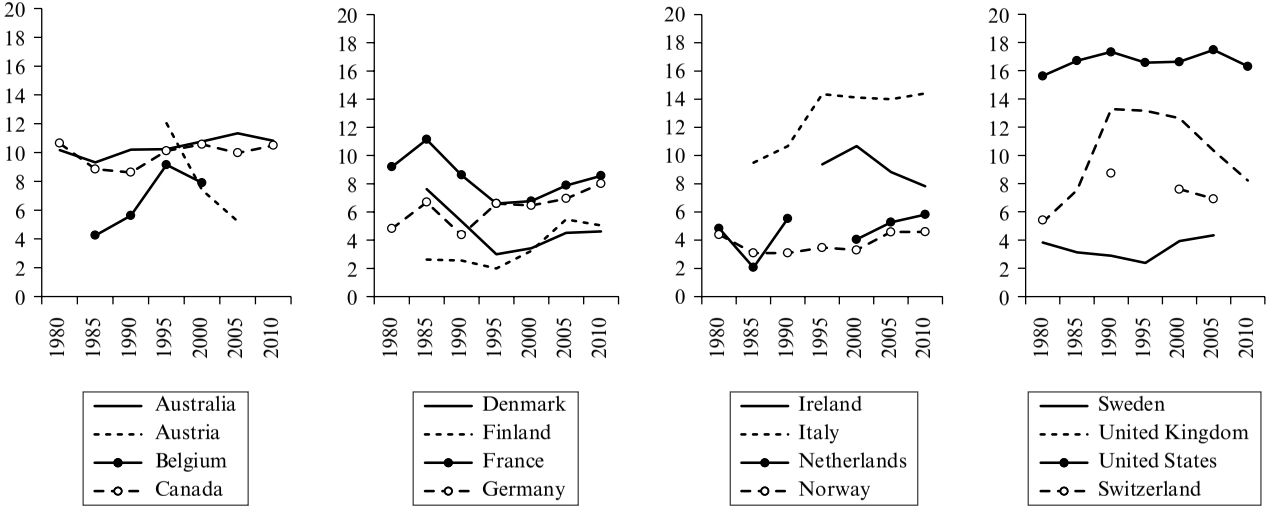
Poverty rates vary quite substantially across our age-related risk groups, and differences grew somewhat larger in the 1990s and after the global financial crisis around 2010. Although we have observed different phases involving expansion, stagnation and stabilization in the development of social citizenship rights, it is evident that the rank order of age-related poverty risks has been fairly unaffected by these changes to the generational welfare contract. The general pattern indicates that poverty decreases with age, no matter the time period in focus. Poverty is lowest among the elderly, where poverty rates have fluctuated quite steadily around 5 percent throughout the period. At the other end of the poverty spectrum we have families with dependent children, where poverty increased from around 10 percent at the beginning of the period to 12 percent a few years into the new millennium. Working-age households without dependent children take an intermediate position, but in relative terms we here find the most marked increase in poverty, from slightly above 6 percent in the early 1980s to slightly above 8 percent around 2010.

Note: The poverty threshold is 50 percent of median equivalized household disposable income. New Zealand is excluded due to missing data. The childhood risk category includes families with dependent children. The working-age risk category includes childless persons in working age. The old-age risk group includes people 65 years and older.

Source: The Cross-National Data Center in Luxembourg (LIS) and the Social Policy Indicators Database (SPIN), own calculations.

Figure 5.1 Poverty rates disaggregated by age-related social risk 1980–2010 (averages of 17 OECD countries)

A few individual countries deviate from the overall patterns above. One example is Austria, where poverty rates declined substantially between the mid 1990s and the mid 2000s (Figure 5.2), partly as a result of markedly reduced poverty among families with children (country-specific poverty rates disaggregated by age-related risk category are found in the Appendix, Table A.1). Although relative poverty rates at aggregate level are caused by a multitude of factors besides social policy (e.g. the functioning of labor markets and demographic changes), it is worth recapitulating that Austria substantially increased parental leave benefits over this period. Income distribution developments have been quite exceptional also in the United Kingdom, where poverty rates describe somewhat of an inverse U-turn pattern. Poverty increased dramatically in the 1980s, foremost as a consequence of developments in the incomes of families with children, but also as



Note: The poverty threshold is 50 percent of median equivalized household disposable income. New Zealand is excluded due to missing data. Japan is not shown since we only have data for one single cross-section.

Source: The Cross-National Data Center in Luxembourg (LIS) and the Social Policy Indicators Database (SPIN), own calculations.

Figure 5.2 Poverty rates in 16 OECD countries 1980–2010

a result of increased poverty among childless persons of working age and the elderly. For the period 1990–2010, this trend in poverty is reversed, partly due to improvements in the relative income position of families with children. Our institutional data for the United Kingdom also shows that benefits for families with children were substantially strengthened from the mid 1990s.

Generational Welfare Contracts and Poverty

Although it would be exaggerated to expect perfect symmetry; based on our previous institutional analysis of the generational structure of social citizenship we expect policy to be reflected in poverty outcomes. Figure 5.3 shows income replacement in social insurance and poverty disaggregated by type of age-related social risk, corresponding to childhood, working age and old age. For ease of presentation, averages for the 17 OECD countries in 1980–2010 are shown.

Note: The poverty threshold is 50 percent of median equivalized household disposable income. New Zealand is excluded due to missing data. Income replacement is measured on the left axis, poverty on the right.

Source: The Cross-National Data Center in Luxembourg (LIS) and the Social Policy Indicators Database (SPIN), own calculations.

Figure 5.3 Income replacement in social insurance and poverty in three age-related risk categories (averages of 17 countries 1980–2010)

Without overstressing the causal ties between social policy and poverty, it is interesting to note that data lends evidence to our theoretical expectations. More extensive income replacement in social insurance is related to lower poverty rates. Although the generational structure of social citizenship has changed in many countries over the last decades, the overall pattern for the

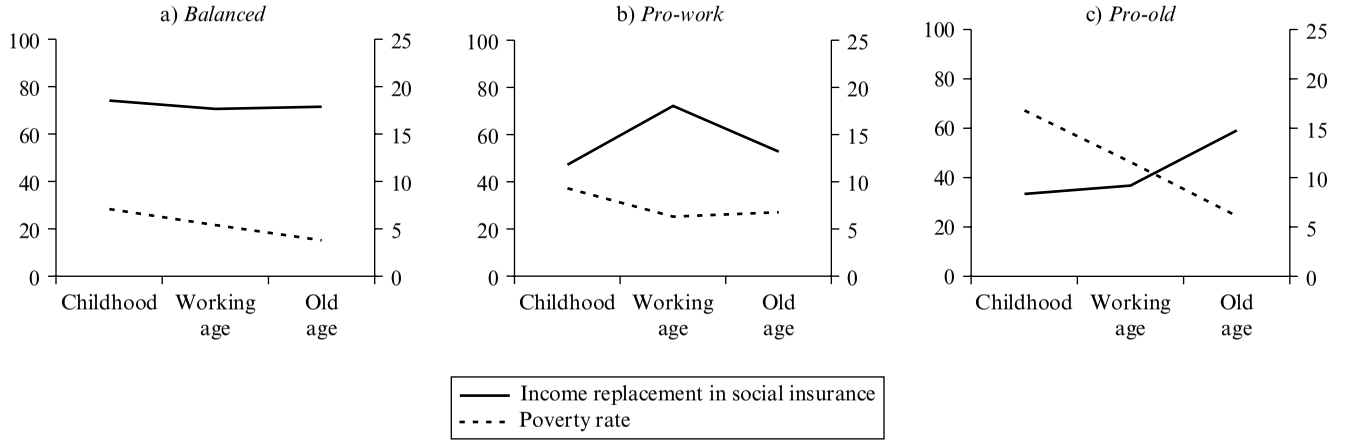
period shows that income replacement in social insurance for families with children for a long time lagged behind protection for other age-related risk groups. Income distribution data also shows that poverty has been highest among families which children.[6] Childless people of working age have typically been granted less extensive income replacement than the elderly, which consequently is reflected in higher poverty risks.

Our analysis above on links between social policy and poverty is quite elementary, but nevertheless motivates us to further explore how the generational structure of social citizenship is mirrored in income distribution statistics. Figure 5.4 shows income replacement in social insurance and poverty in different age-related risk categories disaggregated by type of generational welfare contract. Only country averages for the years 1980–2010 are shown. Based on our empirical findings in Chapter 4 we distinguish between countries with balanced, pro-work and pro-old generational welfare contracts. Countries with balanced contracts have relatively flat profiles, with fairly small differences in age-related income replacement and in poverty (Figure 5.4a). In these particular countries, poverty is comparatively low in all three age-related risk groups. France is a notable exception, where poverty rates among families with children, childless persons of working age and elderly people are closer to those observed in countries with pro-work contracts (Figure 5.5).

In countries with pro-work generational welfare contracts, peak-shaped income replacement in age-related social insurance is mirrored in slight valley-shaped age-related poverty rates. Poverty is not only lower among childless people of working age than among families with dependent children, but also somewhat lower than among the elderly (Figure 5.4b). However, this pattern is largely explained by poverty rates in Japan (Figure 5.5). In both Germany and Switzerland, there is hardly any difference in poverty between childless persons of working age and the elderly. In the Netherlands, poverty rates among the elderly are even slightly lower than among working-age people without dependent children. It is worth noting that both the Netherlands and Switzerland have universal basic pensions, which are otherwise only found in countries with balanced generational welfare contracts. In countries with generational welfare contracts of the pro-old subtype, income replacement in social insurance tends to increase with each age-related risk category, something that is reflected in income statistics by successive reductions in age-related poverty risks (Figure 5.4c).

Regression Analysis

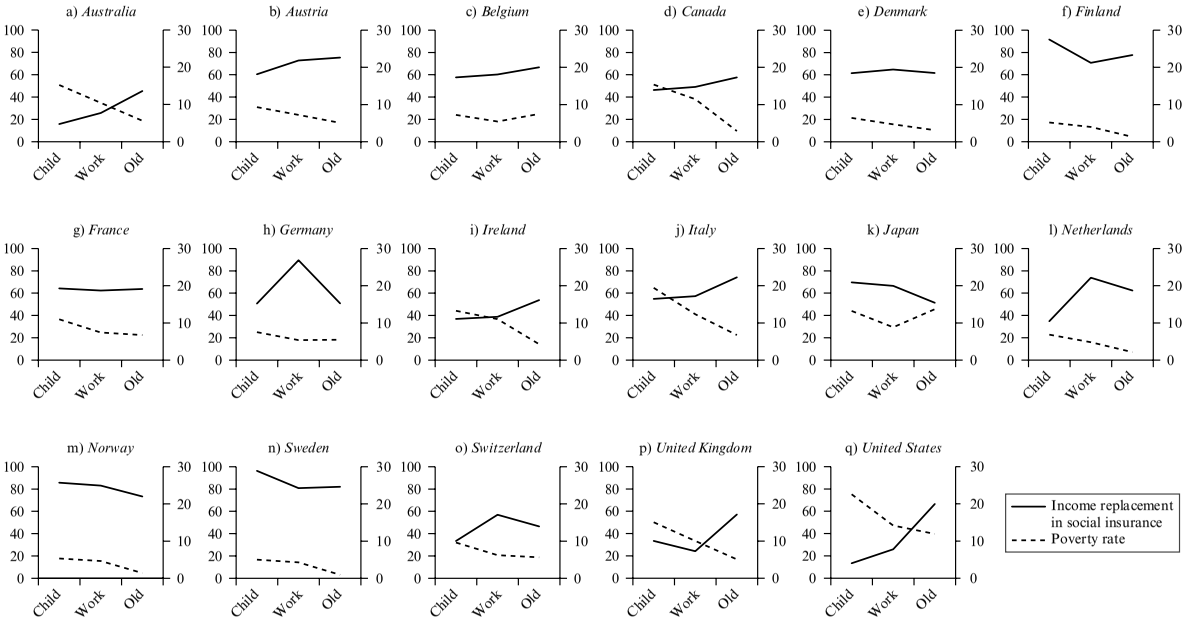
The descriptive analyses above provide important clues about how welfare states and social policy is related to age-related poverty risks. Yet, when



Note: The poverty threshold is 50 percent of median equivalized household disposable income. New Zealand is excluded due to missing data. The balanced contract includes Austria, Belgium, Denmark, Finland, France, Sweden and Norway. The pro-work contract includes Germany, Japan, the Netherlands and Switzerland. The pro-old contract includes Australia, Canada, Ireland, Italy, New Zealand, the United Kingdom and the United States.

Source: The Cross-National Data Center in Luxembourg (LIS) and the Social Policy Indicators Database (SPIN), own calculations.

Figure 5.4a–c Income replacement in social insurance and poverty in three age-related risk categories by type of generational welfare contract (country averages for the period 1980–2010)



Note: The poverty threshold is 50 percent of median equivalized household disposable income. New Zealand is excluded due to missing data. Child = childhood, Work = working age, Old = old age.

Source: The Cross-National Data Center in Luxembourg (LIS) and the Social Policy Indicators Database (SPIN), own calculations.

Figure 5.5a–q Income replacement in social insurance and poverty in three age-related risk categories in 17 OECD countries (averages 1980–2010)

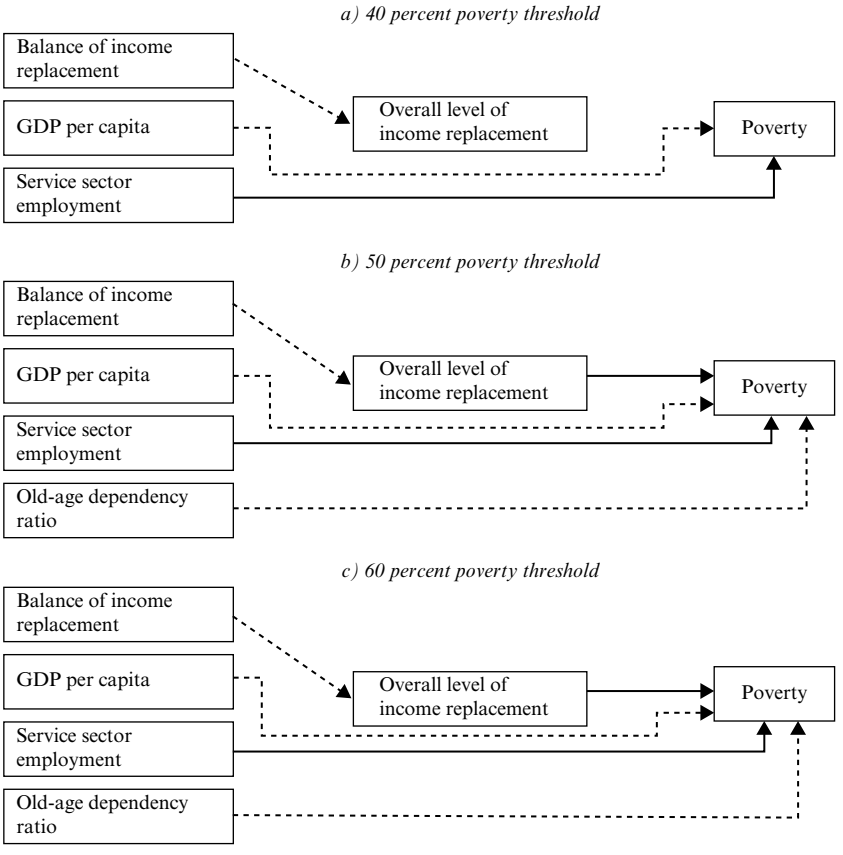
exploring our overall hypothesis about generational balance in the institutional structure of social citizenship, a further question concerns whether the relationship between income replacement in social insurance and poverty holds when we move beyond descriptive statistics and control also for other relevant confounding factors. Thus, we next carry out a regression analysis where the link between income replacement and poverty is analysed in greater detail. Because we expect the generational structure of social citizenship to play a key role for the anti-poverty effects of the welfare state, not directly but rather indirectly through increased levels of income replacement in social insurance, we are essentially interested in possible mediating effects. We have therefore estimated a series of Structural Equation Models (SEMs).

The degree to which income replacement in social insurance is balanced across age-related risk categories constitutes our central explanatory variable. The overall level of income replacement in age-related social insurance is our main mediating variable. These two explanatory institutional variables are defined and measured in the same way as in Chapter 4, and we include the same set of confounding variables: the GDP per capita, the civilian labor force, the unemployment rate, the old-age dependency ratio and service sector employment. Some of the confounding variables may be interpreted as fairly straightforward structural factors, while others are more or less closely related to political economy, something that we will return to below.

Figure 5.6 shows SEM models of pathways between income replacement in social insurance and poverty in 17 OECD countries in 1980–2010.[7] For ease of interpretation, we graphically illustrate these results in the form of so-called path diagrams. Single-headed arrows show the direction of observed relationships, solid arrows for negative associations and dashed arrows for positive associations. All direct and mediating effects are analysed, but only statistically significant paths are depicted graphically with arrows. Separate SEM models are estimated using poverty thresholds of 40, 50 and 60 percent. Complete regression results are shown in the Appendix, Table A.2.

The results confirm our theoretical expectation of an indirect association between the generational structure of social citizenship and poverty – with levels of income replacement in social insurance as mediator – in particular when higher income thresholds are used in poverty measurement. Social insurance systems that are less balanced and thus differ in their treatment of different age-related social risks tend to exert a downward pressure on the overall level of income replacement, with higher poverty rates as a consequence. Conversely, more balanced systems are associated with a higher overall level of income replacement, thus contributing to lower poverty rates.

Although confounding effects are not our primary concern, some results deserve brief comments. Since our income replacement variables



Note: New Zealand is excluded from analysis. All models include the full set of confounding factors, including the unemployment rate, GDP per capita, the old-age dependency ratio, civilian labor force and service sector employment. Only statistically significant paths are shown. Solid arrows indicate negative associations, dashed arrows positive ones.

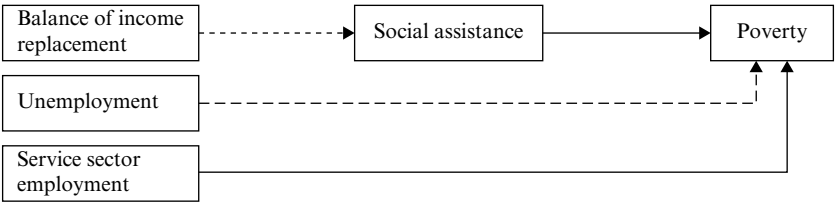
Figure 5.6a–c *Pathways between balance and overall level of income replacement in age-related social insurance and poverty at various income thresholds after confounding adjustment. Country-fixed effects structural equation models of 17 OECD countries 1980–2010*

are included among the independent variables, any associations between confounding factors and poverty are net of policy effects and thus difficult to interpret. This applies to the positive relationship between the old-age dependency ratio and poverty at higher income thresholds. Here it can be

noted that while redistribution within families tends to go from older to younger persons (Kohli, 1999; Lindh et al., 2005), our results in Chapter 4 showed that population ageing is unrelated to levels of income replacement in age-related social insurance at societal level. Also, GDP per capita and service sector employment are statistically associated with poverty. Surprisingly, GDP per capita is positively associated with poverty in this analysis and service sector employment is negatively associated. Further analyses of the data (not shown) indicate that these results appear foremost in country-fixed effects models, suggesting that impacts are mainly short term in character.[8]

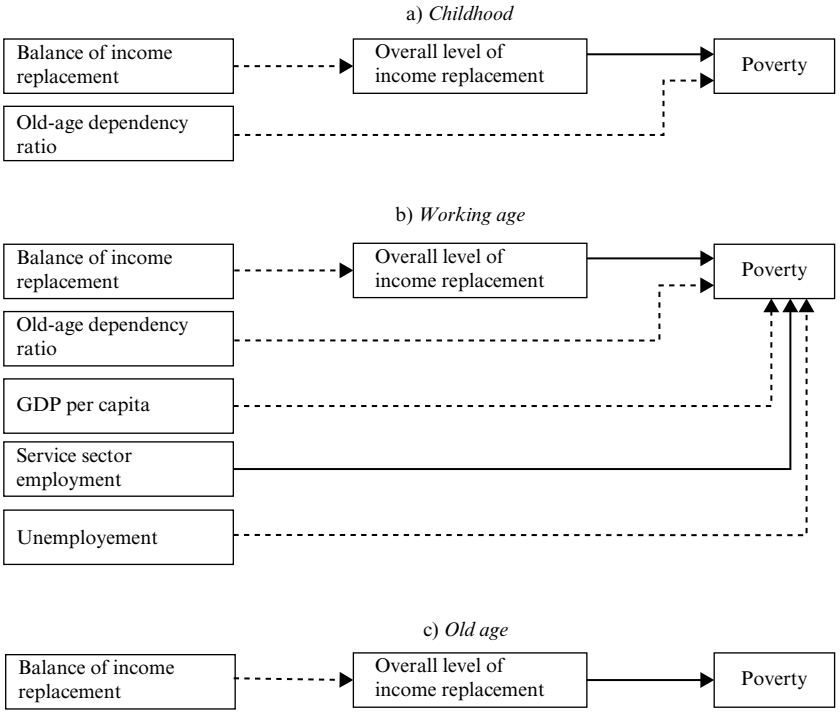
The lack of a statistical association between income replacement in social insurance and poverty at the lowest 40 percent threshold may at first glance seem surprising. However, at these low poverty thresholds it is likely that the institutional analysis needs to be complemented by an investigation of more targeted forms of income protection, such as means-tested social assistance. Social assistance rarely provides an income level that makes it possible for poor families to reach the 50 percent poverty threshold, at least on a yearly basis, and they almost never reach the 60 percent threshold (Palme et al., 2009). However, in most countries, social assistance (together with other forms of minimum income benefits) is often sufficient to lift poor families above the 40 percent poverty threshold (Marx and Nelson, 2013; Nelson, 2013).

In the previous chapter we showed that the institutional structure of social insurance is closely tied to the ways in which countries have



Note: Italy and New Zealand are excluded from analysis. All models include the full set of confounding factors, including the unemployment rate, GDP per capita, the old-age dependency ratio, civilian labor force, and service sector employment. Only statistically significant paths are shown. Solid arrows indicate negative associations, dashed arrows positive ones.

Figure 5.7 Pathways between balance of income replacement in age-related social insurance, social assistance and poverty (40 percent income threshold) after confounding adjustment. Country-fixed effects structural equation model of 16 OECD countries 1990–2010



Note: The childhood risk category includes families with dependent children. The working-age risk category includes childless persons in working age. The old-age risk group includes people 65 years and older. New Zealand is excluded from analysis due to missing data. All models include the full set of confounding factors, including the unemployment rate, GDP per capita, the old-age dependency ratio, civilian labor force and service sector employment. Only statistically significant paths are shown. Solid arrows indicate negative associations, dashed arrows positive ones.

Figure 5.8a–c Pathways between balance and overall level of income replacement in social insurance and poverty (50 percent income threshold) in different age-related risk categories after confounding adjustment. Country-fixed effects structural equation models of 17 OECD countries 1980–2010

organized their minimum income benefits. In Figure 5.7 we have therefore exchanged our mediating variable. Instead of using the overall level of income replacement in age-related social insurance, we include the level of social assistance, the same variable used in the previous chapter. Italy

is excluded from analysis because it lacks a national framework for social assistance. All regression coefficients are shown in the Appendix, Table A.2. Now, an association between generational balance in social insurance and poverty also appears at the lowest poverty threshold, mediated by the level of social assistance.

So far we have analysed poverty rates in total populations. To check how sensitive our results are to differences between age-related risk groups, we performed separate regressions on poverty among families with children, childless persons of working age and elderly persons. In Figure 5.8 we show these structural equation models of pathways between income replacement in social insurance and age-specific poverty rates in 17 OECD countries in 1980–2010. Social insurance is modeled as above, with the overall level of income replacement as the mediating variable linking balance in age-related institutional structures and poverty. The full regression models with all coefficients are shown in the Appendix, Table A.4. Notably, the age-related structure of income replacement in social insurance is indirectly related to poverty in each risk category. In terms of poverty risks that people face in different periods of life, all our age-related risk groups (families with children, childless persons of working age and elderly persons above 65 years) seem to be financially better off and have lower poverty rates in social insurance systems that are generationally more balanced.

CONCLUSION

In this chapter we focused on poverty risks from a generational perspective, thereby commencing our empirical analysis on generational welfare contracts and outcomes of immediate relevance to our discussion about generational justice. A main question has been whether generational welfare contracts are linked to relative poverty. The empirical analyses in this chapter clearly show the answer to this question being in the affirmative.

The institutional structures shaping generational welfare contracts are to a large extent mirrored in poverty statistics. Poverty tends to be lower in countries with balanced generational welfare contracts. Differences in poverty between our three age-related risk categories – families with children (childhood), childless persons of working age (working age) and elderly persons (old age) – are also comparatively small in this particular group of countries with balanced generational welfare contracts.

The degree to which social insurance is balanced and provides for similar levels of protection for different age-related social risks appears to be crucial for the anti-poverty effects of welfare states. At higher poverty thresholds, age-related imbalances in social insurance exert a downward

pressure on levels of income replacement, with higher poverty rates as a consequence. This pattern is observed both in analyses of poverty in total populations and in analyses of poverty in each age-related risk category. At the lowest poverty threshold, the mediating factor is shifted from levels of income replacement in social insurance to more targeted forms of means-tested social assistance.

NOTES

1. The Gini coefficient is a measure of statistical dispersion and probably the most widely used measure of income inequality. Mathematically, the Gini coefficient indicates the proportion of total income earned in different parts of the income distribution. Gini decompositions show how much a specific source of income contributes to inequality (Shorrocks, 1982).
2. Analyses on the concentration of transfers in an income distribution are often based on so-called concentration coefficients or concentration indices (Kakwani, 1977).
3. Each country data file includes a representative sample of national populations, ranging from around 2900 households in Germany in 1981 to 34,000 households in Canada in 1997.
4. The following countries and LIS data waves are used in our empirical analyses: Australia (1981, 1985, 1989, 1995, 2001, 2003, 2010), Austria (1987, 1995, 2000, 2004), Belgium (1985, 1992, 1995, 2000), Canada (1981, 1987, 1991, 1997, 2000, 2004, 2010), Denmark (1987, 1992, 1995, 2000, 2004, 2007, 2010), Finland (1987, 1991, 1995, 2000, 2004, 2010), France (1978, 1984, 1989, 1994, 2000, 2005, 2010), Denmark (1981, 1984, 1989, 1994, 2000, 2004, 2007, 2010), Ireland (1987, 1995, 2000, 2004, 2007, 2010), Italy (1986, 1991, 1995, 2000, 2004, 2008, 2010), Japan (2008), the Netherlands (1983, 1987, 1990, 1999, 2004, 2010), Norway (1979, 1986, 1991, 1995, 2000, 2004, 2010), Sweden (1981, 1987, 1992, 1995, 2000, 2005), Switzerland (1982, 1992, 2000, 2004), the United Kingdom (1979, 1986, 1991, 1995, 1999, 2004, 2010), the United States (1979, 1986, 1991, 1994, 2000, 2004, 2010).
5. In comparative research it has become increasingly common to divide household income by the square root of household size instead, partly because of its simplicity. It is well known that different scales of equivalence affect poverty measurements (Buhmann et al., 1988), particularly when analyses are disaggregated by population subgroups. Equivalence scales that assume very high economies of scale within households, such as the square root of household size, seriously underestimate poverty particularly in larger families. The old OECD scale is based on a more solid ground about economies of scales within households, particularly in analyses on child poverty. Sensitivity analyses using the square root scale do not alter our main findings of policy impacts (see the Appendix, Table 9A.3).
6. The focus here is on country averages for the whole period 1980–2010. In 2010, income replacement for childhood risks (as an average of our 18 OECD countries) was slightly higher than income replacement for working-age and old-age risks (see Chapter 4). Such age-related patterns in social citizenship are only found in a few countries in earlier years.
7. All SEM models include country-fixed effects and are estimated using cluster robust standard errors (methodology further explained in Chapter 4).
8. Random effects models take into consideration long-term effects and cross-country differences in levels, but increase the possibilities of omitted variable bias. As explained in Chapter 4, bias is the difference between the expected value of an estimate and the true value of the parameter being estimated.