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CHAPTER 8. SOCIAL EXPENDITURES ON CHILDREN AND THE ELDERLY IN OECD COUNTRIES, 1980-1995: SHIFTING ALLOCATIONS, CHANGING NEEDS

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1. Introduction

In the middle 1980s, two interrelated areas of inquiry emerged within the field of comparative welfare state research, and both are ongoing. First, after three decades of theory-building and empirical research on the initiation and expansion of the welfare state, scholars began to focus on social policy restructuring and retrenchment (Rein, Esping-Andersen, and Rainwater 1987; Munday 1989; Mishra 1990; Pierson 1994; Ploug and Kvist 1996). At the same time, new questions arose about intergenerational differentials, i.e., about the well-being of the elderly versus children, especially in relation to the relative allocation of resources between these two groups (O'Higgins 1988; Smeeding, Torrey, and Rein 1988; Pampel 1994). To a large degree, the second inquiry emerged from the first, in that concerns about welfare state cutbacks motivated questions about which groups' interests would prevail as public resources grew increasingly scarce.

This chapter assesses the allocation of public social welfare expenditures on the elderly versus children during a 15-year period—1980-1995—a period widely understood to be one of social policy restructuring and change across the industrialized countries. The analysis takes as its starting point a 1984 article by the American demographer Samuel Preston. In an influential article, Preston argued that, in the two prior decades, as the elderly share of the U.S. population grew and the child population fell, public resources shifted toward the elderly, because the elderly's swelling numbers granted them increased political leverage—or as popularly coined, "gray power." In this study, I revisit the Preston thesis, by considering trends in social expenditures on the elderly and children, against the backdrop of graying populations in a group of 14 industrialized countries, including the United States.

In the next section, I briefly review the literature on welfare state retrenchment and on shifting allocations between the elderly and children. In Section 3, I present my analytic approach and lay out a series of five research questions. Section 4 summarizes data and methods. Empirical results are presented in Section 5, and conclusions in Section 6.

2. Background and Literature

A renewed focus on social policy retrenchment followed the tumultuous 1970s, when oil price shocks catalysed widespread increases in unemployment across the western industrialized democracies, in turn putting pressure on welfare state efforts. The burden of increasing unemployment was compounded by other factors—especially a rising old-age dependency ratio (i.e., elderly persons to nonelderly adults), increasing transnational competition, and a rash of conservative electoral victories. As a result, welfare state restructuring, along with labour market deregulation, was pushed onto political agendas across the industrialized countries, especially in Europe. In the last two decades, much comparative welfare state research has been preoccupied with the question of current and future welfare state reversals.

A primary focus of retrenchment scholarship has been the identification of causal factors that underlie social policy rollbacks and/or resilience (for a comprehensive review, see Pierson's edited volume, *The New Politics of the Welfare State*, 2000). Overall, scholars working in this area operate within the frameworks of earlier literature on the determinants of welfare state expansion, including, initially, economic development, industrialization, and urbanization and, later, the political dominance of social democratic and labour parties. At the same time, a central insight in the retrenchment literature is that the determinants of growth and decline are not necessarily the same; in other words, the downward path is not a mirror image of the upward path. Pierson (1994), especially, has stressed the resilience of many welfare state programs, explaining their staying power in largely political terms; politicians want credit for program growth but seek to avoid blame for program cutting. Furthermore, policy provisions often create their own constituencies, rendering many social policies, in effect, self-perpetuating, as they are no longer dependent on the original catalytic factors.

A core question—one that is fundamentally descriptive but crucial—underpins this literature: to what extent *have* welfare states actually been altered, and in what way? In short, while public discourse, especially in the United States, stresses widespread retrenchment across the major welfare states of Europe (see, e.g., Gornick and Meyers 2001), the dominant conclusion in the academic literature has been that real policy change since the 1970s has actually been fairly limited. While total social expenditure growth has slowed and considerable reform has taken place—several countries have enacted a range of programmatic rule changes—overall, the research literature concludes that the welfare state is far from dismantled and the essential architecture remains intact (Pierson 1994, 2000; Daly 1997; Esping-Andersen 1999; Kamerman and Kahn 1999; Myles and Pierson 2000; Ploug 1999).

While the finding of overall welfare state resilience is widespread, the process of measuring and analysing recent welfare state changes up through the end of the 1990s remains unfinished. In particular, there are two principal weaknesses in the literature on shifting social policy outputs. One is that little research has taken into account changing levels of underlying need. As cross-national welfare state outputs have shifted over time, an array of demographic and economic factors have changed in tandem. In most of the Organization

for Economic Cooperation and Development (OECD) countries,¹ after the 1970s, populations “grayed,” unemployment rose, and market wages stagnated or fell; at the same time, married women's labour-force participation increased and, in some countries, family market income rose as a result. Yet, the extent to which welfare state outputs have changed relative to various indicators of underlying need—with some needs rising and some falling—remains largely unexplored.² While welfare state investments may be resilient, relative to total public spending or GDP or even per capita, it is possible that when we account more fully for changes in economic well-being (e.g., family market income) that social welfare efforts relative to need may have fallen, perhaps in some subgroups if not overall.

A second weakness in the retrenchment literature is the lack of research on shifting allocations, across groups, within welfare states. While much research focuses on trajectories in total outputs (i.e., the size of the pie), few studies assess changes in allocations among groups being served (i.e., how the pie is being re-sliced). Although many questions about welfare state rollbacks remain unanswered, there is little doubt that the postwar era of rapid welfare state growth is over, and that public social investments are under scrutiny and constrained. That raises the logical question: are some recipient groups holding their ground, or gaining, relative to others? In particular, are the elderly—whose population share is growing—gaining at the expense of families with children?

2.1. INTERGENERATIONAL RESOURCE ALLOCATIONS: THE POWER OF THE ELDERLY

Nearly two decades ago, Preston (1984) launched this question in the United States in his foundational article, “Children and the elderly: Divergent paths for America's dependents.” Preston argued that in the years after the United States' War on Poverty, up through the early-middle 1980s, America's elderly population grew while its child population fell; simultaneously, resources shifted from children to the elderly, and their relative well-being changed as a result. Most notably, elderly poverty rates fell while child poverty grew more prevalent. Preston notes that the ballooning elderly population relative to the shrinking child population could have produced the reverse—fewer resources per elderly person and more per child—if each group's resources were, in fact, somehow fixed. “[T]his view would be characteristic of those who see the world through a Malthusian lens and find the main social drama to be the pressure of numbers on some kind of inelastic resource (p. 435).”

¹ The OECD is an intergovernmental organization with 30 members—primarily, the market-based economies of Europe, Australasia, and North America. Its primary purpose is to support information sharing and consultation across these countries.

² One exception is Clayton and Pontusson (1998), who studied the ratio of social expenditures to the pre-tax-and-transfer poverty rate; they also captured the ratio of expenditure to the sum of the number of elderly and unemployed persons. In the four countries they analyse—Germany, Sweden, the United Kingdom, and the United States—they find a greater degree of change in social welfare commitments than has been reported by other scholars: the growth of social spending per poor person, for example, failed to keep up with the growth of GDP per capita.

But, as Preston documents, a Malthusian drama did not unfold, surely not in the United States during the 1970s and early 1980s. As the elderly's population share grew, investments per elderly person did not fall nor did they simply remain constant—in fact, they grew. The elderly's slice of the social welfare pie expanded more quickly than did its population share. Preston concluded that, during the years in question, "many public programs benefiting children have been rolled back while programs targeted to the elderly have been maintained or expanded (p. 437)." His explanation is political: "... the changing numbers of young and old have altered the environment for public policy decisions. In a modern democracy, public decisions are obviously influenced by the power of special interest groups, and that power is in turn a function of the size of the groups, the wealth of the groups, and the degree to which that size and wealth can be mobilized for concerted action. In all of these areas, interests of the elderly have gained relative to children (p. 446)." In a powerful example, Preston reports that, during the 1970s—across the 50 U.S. states—the growth rate of the elderly population was negatively associated with the growth rate of teachers' salaries; in other words, where elderly populations grew the most, investments in children, via investments in teachers, grew the least.

2.2. CROSS-NATIONAL RESEARCH

While Preston's argument was forged with respect to the United States, it clearly had implications for other industrialized countries, because populations were graying in many countries. Not long after Preston's 1984 article, comparative researchers reported that similar shifts in relative well-being, and in resource allocation, were underway in other countries as well. Several contributions in a 1998-edited volume, *The Vulnerable*, addressed the question from a cross-national perspective. Smeeding, Torrey, and Rein (1988) reported that in Canada and the United Kingdom, between 1970 and 1984 the post-tax-and-transfer income of the elderly increased faster than that of the general population, while the incomes of single-parent families increased more slowly or fell. O'Higgins (1988) analysed per capita public spending on pensions and family allowances across the OECD countries between 1960 and 1984, and found a varied pattern: in some countries, family allowances rose in relation to pensions, while in others they fell. When he considered spending in other categories as well—especially public education—he concluded that, overall, resources were shifting toward the elderly in most countries. Like Preston, he noted that resources per elderly person grew alongside elderly population shares: i.e., rising investments in pensions were "not simply due to the fiscal consequence of demographic pressures; it also reflect[ed] decisions to increase pensions (p. 225)."

In her recent review of the literature, Lynch (2001) observes that research on the question of public investments in the elderly versus children has been fairly limited since Preston (1984) and *The Vulnerable* (1988). "While the concept of intergenerational justice has proved fertile ground for political and social theorists, very few empirical studies exist that would allow comparisons of how social provisions for different age groups vary across welfare state types, across countries, or across time." Nevertheless, a small cross-national literature focuses on this question and, overall, empirical support for Preston's prediction that elderly spending would crowd out spending on children is mixed at best.

Pampel (1994) studied spending trends in 18 countries between 1959 and the middle 1980s and concluded that, in many countries, ageing populations did not drive up spending relative

to children. In a paper originally titled "Do the old eat the young?", Ghilarducci (1997) assesses the elderly/child tradeoff via a cross-sectional regression analysis of spending in 47 countries; she also finds that generous pension spending, as of the late 1980s, did not, in fact, lead to lower spending on children. Esping-Andersen and Sarasa (2000) considered social spending trends in 12 OECD countries, between the middle 1980s and middle 1990s. Adjusting for population shares, they found that in the majority of countries, transfers to families with children rose, while transfers to aged families fell—clearly not a story of elderly dominance in policy development.

A related literature analysed trajectories in public spending on children. While they did not address expenditure on the elderly, Gornick and Meyers (2001) assessed public expenditure on cash benefits for families in 14 European countries between 1980 and 1995, and found an overwhelming pattern of increase; per-child spending rose, on average, by over 50 percent during those years. They also found that per-child spending (via cash benefits) even rose sharply in Preston's central case, the United States, during that 15-year period.³

A growing *qualitative* literature on recent and ongoing policy reforms (i.e., rule changes) across the major welfare states lends further support to the possibility that children-related programs are, in fact, growing, while elderly targeted programs are being trimmed. During the 1980s and 1990s, old age pensions, along with disability and unemployment benefits, were reformed in nearly all of the OECD countries. Myles and Pierson (2000) report, for example, that since 1980 at least six countries—Australia, Canada, Denmark, Finland, New Zealand, and Sweden—have adopted some form of targeting to reduce formerly universal flat-rate benefits for the high-income elderly.

In contrast, there is accumulating evidence that programs targeted on families have been protected or expanded in the last two decades. Gauthier (1996, 1999) and Kamerman and Kahn (1999) conclude that cash benefits for families (typically, family allowances) were largely unchanged and, in many cases, increased during the 1980s and 1990s. Gauthier finds that, in general, the value of family allowance benefits, for those who received them, rose slightly between 1975 and 1990. Kamerman and Kahn (1999) concur with these conclusions about the 1980s and report additional evidence of the resilience of family allowances since that time. "In the 1990s," they note, "when many countries actually set out to curtail social expenditures, and targeted pension policies especially, ... child and family benefits appear to have been protected in most countries" (Kamerman and Kahn 1999:24).

3. Analytic Approach and Research Questions

This study assesses public social expenditures between 1980 and 1995 across a group of 14 OECD countries. I aim, specifically, to address two of the weaknesses in the retrenchment literature outlined above: the lack of attention paid to allocations across groups, and the neglect of shifting levels of underlying need. Using Preston's work as a starting point, I consider his contention that as population composition has shifted, the elderly and children,

³ In the United States, per-child spending increased from \$304 to \$575 (in 1990 dollars), as a result of expansions in the Earned Income Tax Credit.

as groups, have experienced "divergent paths." For both subgroups, I assess welfare state changes in the context of population ageing as well as shifts in mean family income—two measurable dimensions of need.

I extend Preston's 1984 findings by assessing a group of welfare states—including Preston's case, the United States—and by considering a subsequent time period. For most of the analyses, I emphasize change in these countries *as a group*, rather than cross-national variability among them, as preliminary analyses revealed more commonality than variation across countries (including the United States) on several indicators, especially on the direction of change (see Appendix 2). I turn to variation across countries to test two predictions that flow from Preston: one, that public resources would shift to the elderly (per elderly person) more in countries where the ratio of the elderly to child population grew the most; and two, that public resources would shift to the elderly (again, per elderly person) more in countries where total social spending resources became relatively more scarce (as competition would be heightened).

3.1. RESEARCH QUESTIONS

The empirical analysis of shifting allocations to the elderly and children during the 1980s and first half of the 1990s is organized around a series of five research questions. The first four questions concern these countries as a group, focusing on cross-national averages. The final question assesses variation across these countries in order to explore two predictions based on Preston's thesis that the elderly's growing population share will shift policy trajectories in directions that favour the elderly at the expense of children.

First, what happened to total social spending (i.e., the size of the pie) in relation to national economic capacity? And how did expenditures on the elderly and children change in relation to that total (i.e., their slices of that pie)? This opening question addresses the direction and magnitude of overall welfare state change during the study period, as well as the shifting shares of our two subgroups.

Second, how has spending targeted on the elderly and children fared relative to *other* spending categories that faced expansion pressures during these years, such as active or passive labour market programs and/or health expenditures? While we often frame this intergenerational equity question as one of the elderly versus children, it is also the case that investments targeted on both groups could grow (or shrink) as a share of the whole, if other expenditure categories change substantially.

Third, what happened to social spending *per capita*—in particular, spending on the elderly per elderly person, and spending on children, per child? Specifically, how are the findings about changing expenditures on the elderly and children, as shares of the whole, altered when we incorporate the ongoing ageing of the population? As Preston predicted, did elderly outlays rise *per elderly person* and child outlays fall *per child*—presumably, as the elderly's political power grew in relation to children's?

Fourth, what happened to spending on both the elderly and children, relative to shifting levels of economic need among elderly headed families and families with children? During

the 1980s and 1990s, household earnings in both elderly families and families with children were subject to contradictory pressures. In elderly headed families, employment rates rose in some countries and fell in others. In Europe, several countries actively lowered the retirement age, mostly to free jobs for younger workers, while other countries aimed to increase elderly employment, under the rubric of social inclusion for all age groups.⁴ At the same time, nonelderly families—for whom earnings constitute the lion's share of the income package—faced a range of deteriorating conditions. Household earnings were diminished by both high unemployment, especially in Europe, and stagnant wages, although those were counterbalanced to some extent by rising maternal employment nearly everywhere.

As Preston laid out, several change scenarios are possible with respect to public resources targeted on these two groups. The share of resources allocated to the elderly (or to children) could be fixed over time; it could keep pace with changes in the population share; or it could outpace changes in the population share. Preston reported that the third scenario had taken place in the United States—to the advantage of the elderly and the disadvantage of children—and he interpreted that as evidence that the elderly were influencing redistribution in their own favour, through their increased political power. By extension, a scenario in which resources per elderly person increased relative to the economic needs of the elderly—especially if need is falling—could be interpreted as further evidence of the elderly's political strength.

Fifth, did public resources shift to the elderly (per elderly person) more in countries where the elderly-to-child population ratio grew the most? And, did public resources shift to the elderly (again, per elderly person) more in countries where total social spending resources grew relatively more scarce?

Preston contended that the elderly will command more public resources relative to children where their relative population share increases the most (as he found vis-à-vis teachers' salaries in the United States). His framework also suggests that the elderly would exercise their growing political power vis-à-vis children more intensely where resources are growing more scarce; where social welfare outlays are the least constrained, the elderly face less need to compete with (and draw resources away from) children. Both of these predictions can be assessed, using variation across these 14 countries in rates of change in (1) elderly to child population ratios, (2) total social expenditures, and (3) social outlays to these subgroups.

4. Data and Methods

4.1. EXPENDITURES AS AN INDICATOR OF SOCIAL WELFARE EFFORTS

Policy change can be studied by tracking policy via social expenditures, or policy reforms (rule changes), or both. In this study, I rely on the expenditure approach, as it allows quantified measures of state effort, and is best suited for comparing policy shifts across

⁴ See, for example, a recent European Commission (1999) report, *Towards a Europe for all Ages*, which lays out a strategy aimed at raising the employment rate of older workers. Kalisch et al. (1998) summarize recent policy reforms aimed at promoting longer employment.

subgroups as well as to changing levels of need. While the use of expenditure data to capture welfare state effort provides a parsimonious cross-national portrait, it does have several important limitations (see Dixon 1998 for a discussion). First, expenditure changes are a blunt measure of effort, in that they mask institutional changes; specifically, it is difficult to separate changes driven by demographic and economic factors from those put in place intentionally. And, since Preston's main contention concerns the effect of elderly political power, which would be exercised by influencing policy rules, it is necessary to capture intentional changes, if only indirectly. Furthermore, all expenditure datasets suffer from inevitable cross-national incomparabilities. In addition, expenditure data may be further limited by lags between rule changes and program spending levels. For example, changes in old age programs, such as decreases in pension benefits for future recipients, may not have measurable effects on social spending for a number of years. In this study that could cause a bias, in that changes in family cash programs would be expected to show up in expenditures almost immediately; as a result, the relative resilience of policies that serve the elderly could be overstated.

Although these limitations are important, social spending does provide a valuable vantage point on welfare state development. As Swank (2000) argues, aggregate spending—across locales and over time—is in fact highly correlated with theoretically and substantively important outcomes, such as income distribution. In addition, some of the core limitations are overcome to some extent in this study. As Dixon (1998) notes, the limitations of cross-country incomparability are much lessened when spending indicators are used to track change over time. Furthermore, the use of per-person measures of annual social spending (as a proxy for per-recipient) allows us to capture changes in annual expenditures that, in general, signal rule changes. Controlling for measures of need further allows us to infer rule changes from expenditure trends.

4.2. EXPENDITURE DATA: OECD SOCIAL EXPENDITURE DATABASE

The data on social welfare expenditures are from the first edition of the OECD *Social Expenditure Database: 1980–1996* (SOCX). The database contains annual data from 27 of the 29 OECD⁵ countries, for the years 1980 up to and including 1995 (in some cases, 1996).

The present study, which covers the time period 1980–1995, includes 14 countries: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Luxembourg, Netherlands, Norway, Sweden, the United Kingdom, and the United States. The selection of countries was driven by the availability of corresponding microdata for the appropriate years (for the market income and poverty analyses) through the Luxembourg Income Study (LIS).

While a second edition of SOCX (2001) brought spending data up to 1997 in most countries, the LIS data were available, for the most part, only up to and including 1995. Fortunately, the observed period contains the years during which social welfare retrenchment would be expected to be the most severe. After 1995 many of these economies shifted toward recovery and, in several cases, labour or social democratic governments replaced conservative governments.

⁵ Hungary and Poland are not included in SOCX.

The SOCX database includes social expenditures paid and controlled by central, state, and local governments, including social insurance funds. A cross-country file provides *total social spending* data in 13 categories: (1) old-age cash benefits, (2) disability cash benefits, (3) occupational injury and disease benefits, (4) sickness benefits, (5) services for the elderly and disabled, (6) survivors benefits, (7) family cash benefits, (8) family services, (9) active labour market programs, (10) unemployment benefits, (11) health benefits, (12) housing benefits, and (13) assistance for contingencies (such as benefits for immigrants). Moreover, individual-country data files provide detailed spending breakdowns within these 13 program areas.

To assess overall welfare state trends, I begin by analysing *total social spending* (the sum of the 13 spending areas), and then turn to two particular components: expenditures on *old-age cash benefits* and *family cash benefits*. *Old-age cash benefits* include old age pensions, old age civil service pensions, veteran's old age pensions, early retirement pensions, and other old-age cash benefits. *Family cash benefits* include traditional cash transfer programs targeted on families (family allowances for children, family support benefits, and lone parent cash benefits), as well as paid family leave and refundable tax credits for families. Expenditures are captured in 1990 US dollars, adjusted for variation in purchasing power parities (PPPs).⁶

The SOCX data have some well-known limitations for comparing social expenditures on the elderly versus children (see Kamerman and Kahn 1997 for a discussion of OECD spending data). The key weakness is that programs not specifically associated with the elderly or with families—such as unemployment insurance, disability compensation, public health insurance programs, and programs for low-income persons—clearly serve the elderly and children as well as the working-age population; but it is not possible to separate those expenditures into elderly and child components. At the same time, fortunately, in countries where large means-tested programs are targeted on the elderly (e.g., old age pensions in Australia) or on families (e.g., the Aid to Families with Dependent Children (AFDC) program in the United States), OECD typically allocates those expenditures to the two focal categories: old-age cash or family cash spending. The most substantial problem lies in the inability to separate health spending between the elderly and children, as it constitutes, on average, a quarter of total social expenditures in these countries.

A second weakness concerns data on services for the elderly and for children. Spending on services for the disabled (of all ages) and the elderly are combined and cannot be disaggregated: so to include services for families—a separate item—would create a problematic incomparability. As a result, I omit services and focus on expenditures on cash benefits only. Fortunately, services represent a relatively small share of public investments for these two groups. That is especially true for the elderly, where—on average, across these 14 countries—only 4 percent of total social spending goes to services (for the elderly and disabled combined) compared to nearly 30 percent for old-age cash benefits. When we

⁶ The use of PPP-adjusted dollars means that expenditure levels across countries should correspond to equivalent levels of aggregate purchasing power. The use of constant PPP-adjusted dollars thus controls both for cross-national variation in the cost of living and for inflation.

turn to families with children, less than 3 percent of total social spending goes to services, compared with 7 percent allocated to cash programs.

A third weakness of the SOCX data is the exclusion of most tax expenditures, which provide crucial benefits in some countries. At the same time, refundable tax credits, such as the United States' Earned Income Tax Credit (EITC), are generally included, either under family cash benefits or elsewhere in the database (e.g., in the "other contingencies" category). In this study, family cash benefits in the United States were adjusted to include expenditures on the EITC.

4.3. POPULATION INDICATORS

To capture changes in expenditures in relation to population shifts, the SOCX data are combined with population data, from OECD's *Labour Force Statistics* (various years). In the population-based indicators, the elderly are defined as aged 65 or older, and children as below age 15.

4.4. INCOME INDICATORS: THE LUXEMBOURG INCOME STUDY

Country-level indicators of market income and post-tax-and-transfer poverty, for the elderly and children, come from the LIS, an archive of comparable microdata from a large number of industrialized countries. The LIS datasets, primarily based on household surveys, contain demographic, labour market, and income data at the individual and household level. This study uses two datasets from each of these 14 countries, one from the "second wave" of the LIS data (1984–1987) and one from the "fourth wave" (1994–1997).⁷

For the poverty analysis, the poverty rate is defined as the percentage of persons living in families with post-tax-and-transfer income (what LIS calls "disposable personal income" or DPI) falling below 50 percent of their country's median, with family income adjusted for family size.⁸

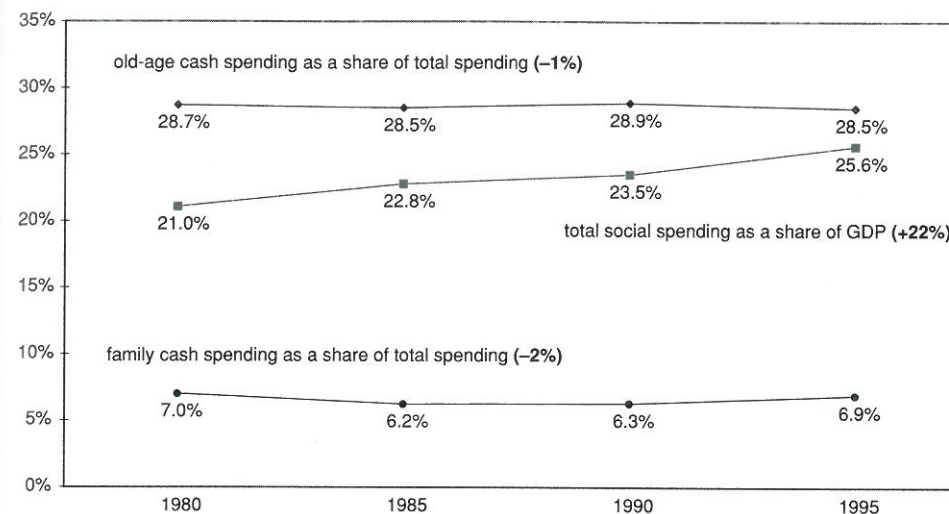
In the analyses of families' mean market income, elderly headed families are defined as those with household heads aged 65 and older, and families with children include those with dependents below age 18. "Market income" is defined as the sum of gross wages and salary, self-employment income, and cash property income; LIS terms this "factor income" or FI.

5. Empirical Results

The first research question—what happened to magnitude of the pie, and the slices allocated explicitly to the elderly and children?—is addressed in Figure 1. On average, total social

⁷ For information and documentation about the LIS microdata, visit the LIS web site: <http://www.lisproject.org>

⁸ Disposable personal income includes all market income plus all social transfers, less employee payroll contributions and income taxes. As is standard in cross-national comparisons, families are defined as poor if their income falls below 50 percent of the median income in the country in which they reside. Income is adjusted for family size, where adjusted income equals income divided by the square root of family size.



Note: Numbers in parentheses refer to percent change between 1980 and 1995.

Figure 1. Social spending as shares: total social spending, old-age cash spending, family cash spending (14-country averages, 1980–1995).

spending as a share of GDP grew substantially during the study years, from 21 to 26 percent of GDP—a remarkable 22 percent increase. As reported in Appendix 2, there was an overwhelming pattern of commonality across these countries. Total social spending grew everywhere with one exception, the Netherlands, where expenditures relative to GDP fell by 3 percent. The answer to the opening question—were total social welfare outlays rolled back during these years?—is clearly no.

Figure 1 also reports the shares of total spending allocated to old-age cash spending and to family cash spending during the study years. Spending on cash benefits for the elderly and families were remarkably stable, i.e., they were virtually unchanged between the beginning and end of the study period. Expenditures on cash benefits for the elderly remained about four times as high as cash benefits for families—29 percent versus 7 percent of total spending, respectively. The far higher share of social spending distributed to the elderly is not surprising. Although there are more children than elderly persons everywhere (with the exception of Italy as of 1995), public income transfers constitute a much larger share of the elderly's income package; families with children rely far more on market income. In any case, we see no evidence that the elderly gained at children's expense during the 1980s and early 1990s, at least not from this vantage point.

The second research question—what about the remainder of the pie?—is assessed in Figure 2, which reduces the 13 SOCX spending categories into seven. Clearly, three categories of spending constitute the other "big ticket items:" labour market programs (which include active labour market programs and unemployment compensation); health benefits; and a "catch-all" category that includes low-income, disability, occupational injury, sickness,

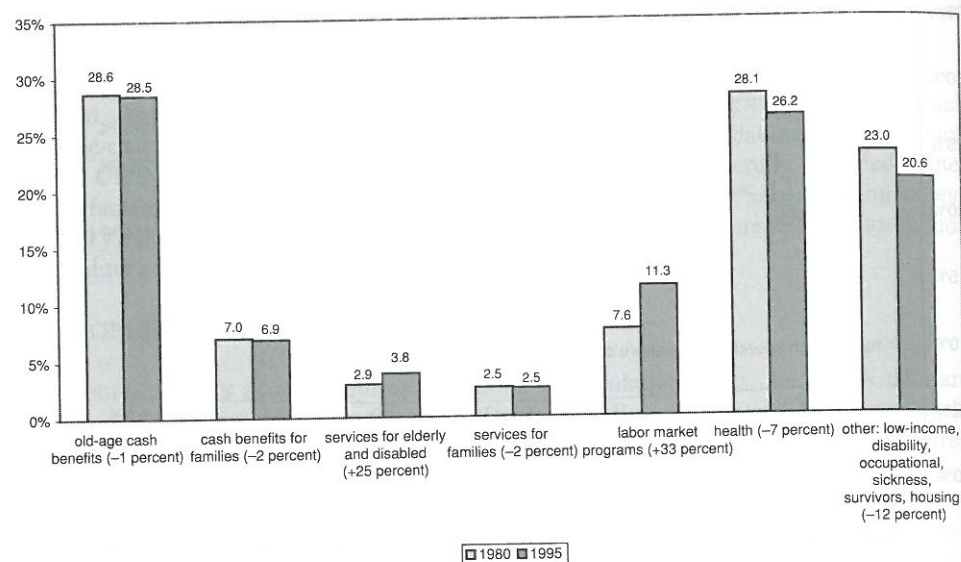
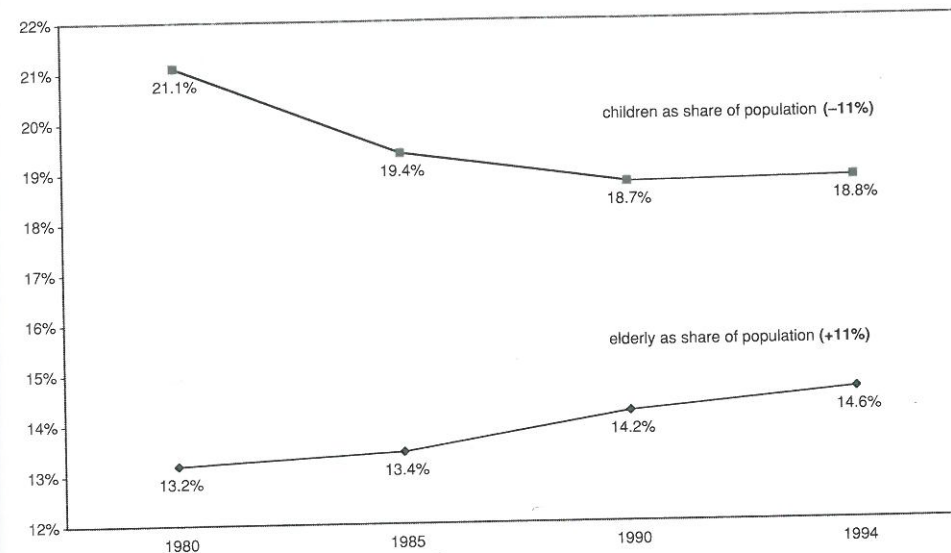


Figure 2. Major categories of spending as a share of total social spending (14-country averages, 1980 and 1995).

survivors, and housing programs. During the study years, spending on labour market programs grew substantially (by one-third, on average): that result is not surprising because unemployment rates, on average, doubled across these countries. Average spending in the other two large categories fell, such that average total spending on the three categories together remained unchanged (totalling 53–54 percent). The two focal categories—old-age cash benefits and family cash benefits—were, overall, the most stable program categories, along with services for families.

Further results indicate, again, an overall pattern of commonality, although the United States is somewhat of an outlier. Unlike the common pattern, the unemployment rate in the United States fell during the study years; accordingly, it was one of the few countries where the share of spending allocated to labour market programs did not increase. The United States is also an exception with respect to health spending: among these countries, during the study years, health spending substantially increased only in the United States.

Figure 2 also shows that spending on services for the elderly and disabled rose markedly (by 25 percent), although from a low base (3 percent of total social spending). Nevertheless, this finding is meaningful in a particular way. As noted earlier, when we use expenditures to compare changes in public supports for the elderly versus families, we face the problem that there may be a long lag time between the policy change and the point at which its consequences are evident in spending levels. That is more likely to be true with programs for the elderly (where changes often affect future recipients) than for families (where changes generally affect current recipients). This means that old age programs would



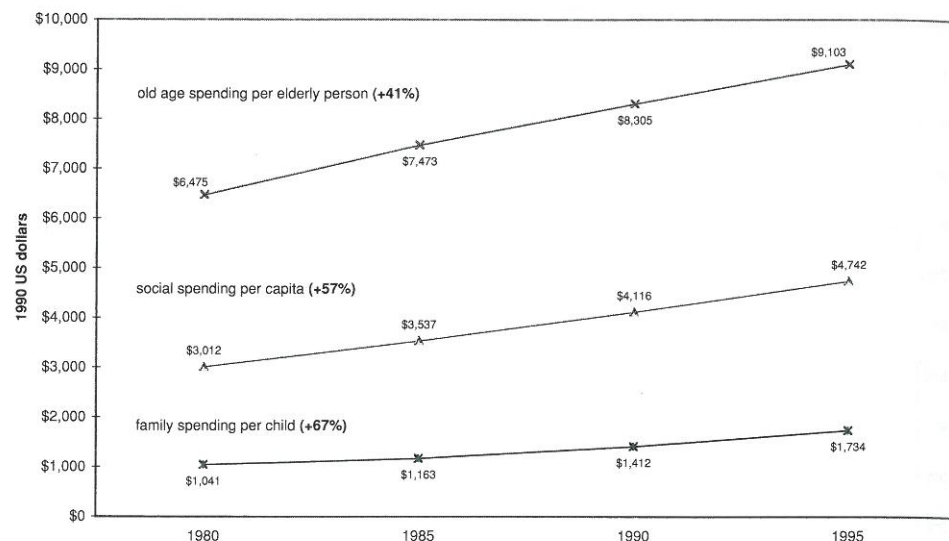
Note: Numbers in parentheses refer to percent change between 1980 and 1995.

Figure 3. Population shares: under age 15 and over age 64 (14-country averages, 1980–1995).

appear more stable than they are, relative to current policy activity; in other words, the stability that we see may mask underlying cuts that are not yet apparent. The results in Figure 2 suggest that our omission of services that are provided for the elderly works in the counterbalancing direction: i.e., their omission understates growth in programs that serve the elderly during the study period.

The third research question—what happened to social spending when we take population ageing into account?—is addressed in Figures 3 and 4. During the study years, total populations increased in all 14 countries, and by 11 percent on average (results not shown). Overall, there was relatively little variation in total population growth, with the exception of Germany, where unification increased the total population by a third. Furthermore, nearly everywhere, the working-age population (aged 15–64) grew at nearly the same rate as the total population.

Population ageing characterized all of the countries studied. The elderly share of the population (aged 65+) increased in all of them; the average increase was 11 percent (Figure 3). Simultaneously, the average child share of the population (less than age 15) fell by the same amount: 11 percent. (The child share fell in all countries, except in the United States, where it remained constant.) The ratio of elderly-to-children rose substantially everywhere, increasing, on average, from 0.64 to 0.80. Clearly, throughout this group of welfare states, the elderly population grew and the child population fell, resulting in a clear pattern of graying, albeit at somewhat varying rates. (We return to that variation later.)



Note: Numbers in parentheses refer to percent change between 1980 and 1995.

Figure 4. Social spending per person: total social spending, old-age cash spending, family cash spending (14-country averages, 1980–1995).

Figure 4 reveals the interaction of Figures 1 and 3. Recall that, on average, total social spending increased as a share of GDP (by 22 percent). Because GDP growth outpaced population growth everywhere, social spending *per capita* grew even more sharply—by an average of 57 percent, as shown in Figure 4. Undoubtedly, despite all the demographic and economic pressures facing these welfare states, social investments per capita continued to rise substantially after 1980.

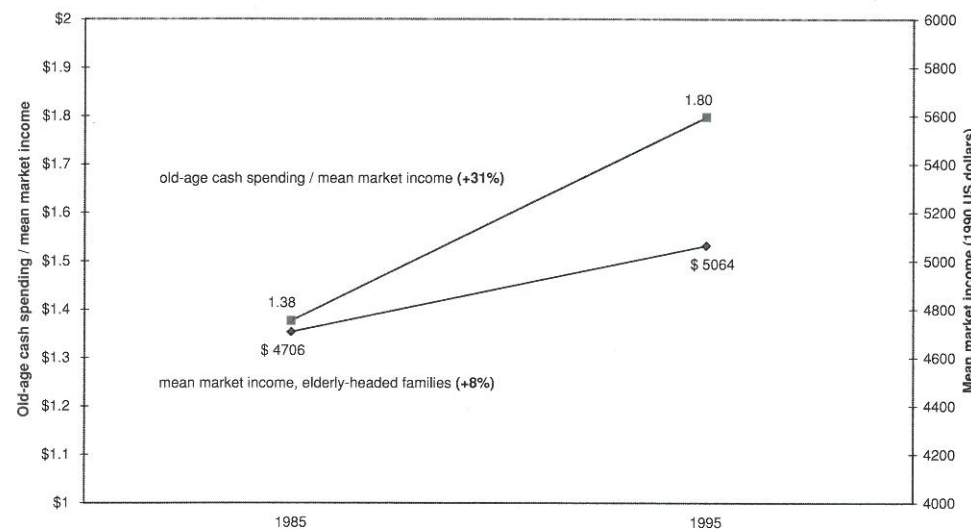
On average, what happened to our focal categories of spending—old-age and family cash benefits—per potential recipient, i.e., per elderly person and per child, respectively? Although old age spending held steady as a share of the total pie, the expanding pie meant that real old-age cash layouts increased. What is important for our purposes is that, as Preston predicted, real expenditures on the elderly increased more than did the elderly population. Thus, old age spending *per elderly person* increased—and by a substantial 41 percent. (Per elderly spending grew in all countries, with one exception: Australia, where it declined slightly; see Appendix 2.)

And what about children? Similarly, children's share of the pie remained constant, but the expanding pie, combined with the falling child population, meant that family cash expenditures per child rose even more sharply than did old age expenditures per elderly—by an extraordinary 67 percent. Considering these welfare states as a group, the graying of the population did not set in motion a process that resulted in a reduction of real public resources for children—as Preston predicted—surely not as captured by this indicator. Furthermore, as shown in Appendix 2, old age spending per elderly person and family

cash spending per child *both grew* in 10 of the 14 countries. The exceptions were Australia (where elderly spending declined slightly), and Germany, Italy, and the Netherlands (where family spending declined).

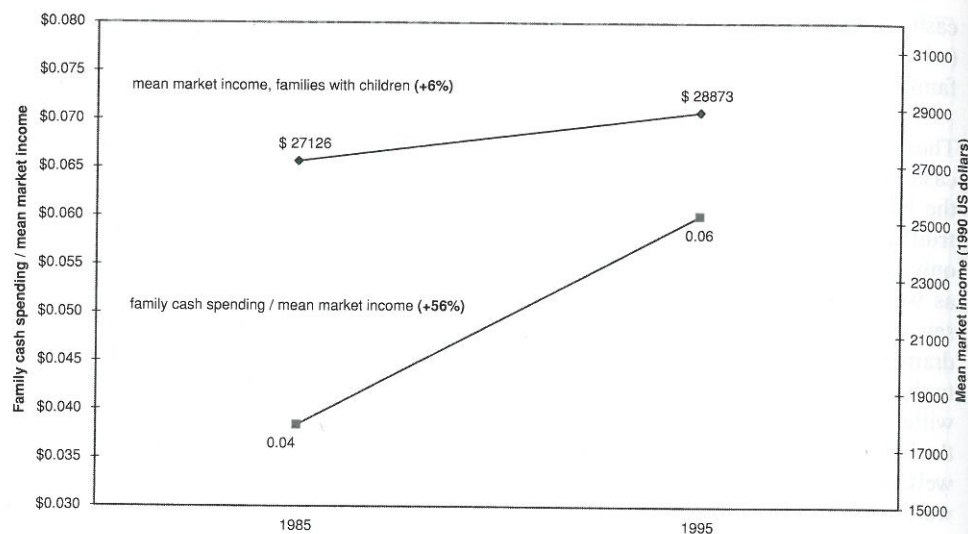
Thus, the “Preston scenario”—where old age spending per elderly grew while family cash spending per child fell—was seen in 3 of the 14 countries: Germany, Italy, and the Netherlands. Further study of these three continental European countries would be fruitful. Particularly interesting is the contrast between Germany and Italy. Germany is the only country that experienced an absolute *increase* in the child population (+16 percent) as well as in the elderly population (+35 percent)—due to unification—whereas Italy saw the largest decrease in the number of children (–25 percent), the consequence of its dramatically declining fertility rate. Thus, the per-child decline in Germany may be specific to that historical transition; while the decline in investments in Italy reflects a substantial withdrawal of public resources allocated to family cash programs. Orsini (2001) describes the Italian case as unusual, relative to Europe as a whole, as well as relative to fairly similar welfare states. “Italy differs from the other ideal-typical examples of the conservative welfare regime (principally France and Germany): the extremely high percentage of total social transfers allocated to pensions crowds out social expenditure targeting younger households.” The question of why the intergenerational outcome in Italy is so unusual, in cross-national terms, identifies it as a valuable case for further study.

The fourth research question—what happened to spending relative to shifting levels of underlying economic need?—is addressed in Figures 5 and 6. Need is captured here in



Note: Numbers in parentheses refer to percent change between 1985 and 1995.

Figure 5. Old-age cash spending relative to mean market income (14-country averages, 1985 and 1995).



Note: Numbers in parentheses refer to percent change between 1985 and 1995.

Figure 6. Family cash spending relative to mean market income (14-country averages, 1985 and 1995).

terms of mean family market income, i.e., pre-tax-and-transfer income.⁹ The figures indicate that across these countries, as a group, mean market income increased modestly, signalling small reductions in pretransfer need, in both elderly headed families and in families with children (with two-parent and single-parent families combined). In 1990 US dollars (PPP-adjusted), on average, elderly families' mean market income rose from \$4,706 to \$5,064 (an 8 percent increase), whereas the mean market income of families with children rose from \$27,126 to \$28,873 (a 6 percent increase). Results (not shown) indicate that, for the elderly, increases in market income were mostly due to rising average numbers of earners in elderly headed families, whereas, in families with children, the numbers of earners tended to rise as did average income per earner.

Figures 5 and 6 also show that, in both groups, growth in cash benefit expenditures per person grew much faster than did market income. Old-age cash expenditures per elderly person (which increased by 41 percent) also increased per dollar of market income received by elderly headed families (by 31 percent). Likewise, family cash expenditures per child (which grew by 67 percent) increased per dollar of family market income (by 56 percent). In other words, for each dollar earned in an elderly headed family in 1985, public expenditures on old-age cash benefits (per elderly person) amounted to \$1.38; by 1995, that rose to

⁹ Market income is post-taxes in a few countries: Belgium, France, Italy, and Luxembourg. That diminishes average family market income in these countries and, in turn, in the 14-country average. At the same time, these analyses are largely over time, so this incomparability has virtually no effect on the results.

\$1.80.¹⁰ For each dollar earned in a family with children, family cash benefits (per child) totaled \$.04 in 1985, rising to \$.06 in 1995.

These findings have two implications. First, on average, these two categories of welfare state expenditure grew during the study years—per potential recipient in both age groups, and on top of modestly rising family market income in both age groups.

Second, although cash benefit expenditures *per dollar earned* are far less for families with children than for elderly families, expenditures per market dollar increased in both groups—and somewhat more so for children and their families. The resilience of family cash spending, relative to market income, is somewhat surprising, because—unlike most old-age cash benefits—a substantial share of family benefits in all countries are income-tested with respect to current income. On the other hand, some family cash benefits, such as paid maternity and parental leave, would increase as more women enter the labour market; rising female employment would both raise family income and push social expenditures up as well. In any case, across these countries as a group, there is scant evidence that the elderly's increasing advantage squeezed out spending on children, even when we take into account shifting levels of need.

A core component of Preston's argument rested on intergenerational poverty trends. He reported that during the 1970s and early 1980s, elderly poverty fell while child poverty rose; and, noting rising maternal employment, he attributed that largely to a withdrawal of public resources from children. Figure 7 reports average poverty rates for the elderly and children, across these countries, at 1985 and 1995. These are post-tax-and-transfer poverty rates, so they reflect a combination of market income and income from the public cash benefits programs at the core of this study. Here we see that—very much as Preston predicted—elderly poverty fell during the study years and child poverty rose, until they met in the middle, at 11.2 percent.

How is the finding of rising child poverty, alongside decreasing elderly poverty, reconcilable with the accumulating evidence that public expenditures on family cash benefits grew during the same years (by 67 percent), as did mean market income among families with children (by 6 percent)? Rising child poverty can be reconciled with these other trends for several reasons. First of all, post-tax-and-transfer income in families with children is primarily shaped by employment patterns and labour market conditions, rather than by public cash benefits; that is not the case for most elderly, who are far more shielded from current market conditions. And two trends during the 1980s and early 1990s raised children's risk of poverty in several of these countries: an increasing share of children lived with one parent, which reduced family market income, and labour market conditions declined, as joblessness rose and wages stagnated or fell. At the same time, in several of these countries, the bottom of the earnings distribution fell further away from the middle. That could result in rising child poverty rates—both absolute poverty, as Preston reported,

¹⁰ The elderly have two other substantial sources of income as well—income from assets, and from private pensions and annuities. While the LIS data do not include the former, they do include the latter, constituting a fruitful area for further study.

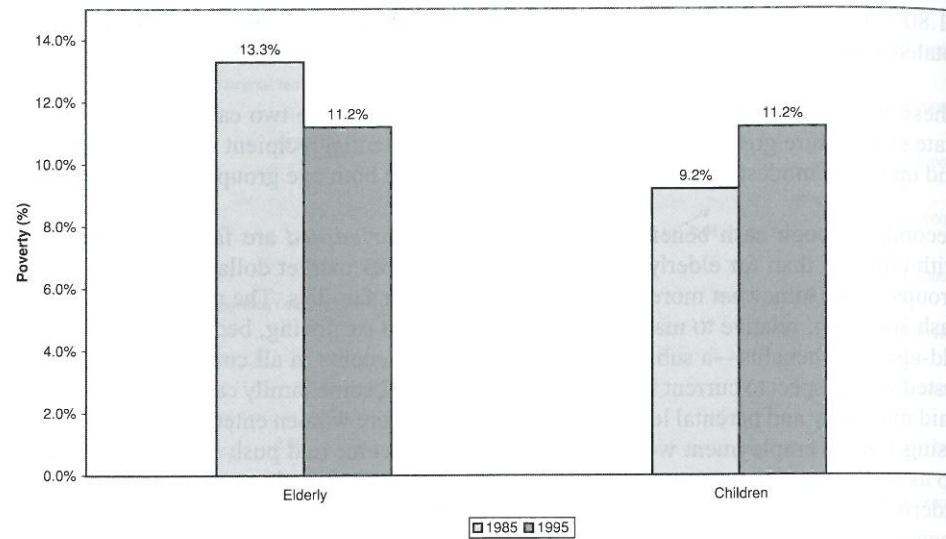


Figure 7. Post-tax-and-transfer poverty rates: elderly versus children (14-country averages, 1985 and 1995).

and relative poverty, as reported here—alongside rising market income at the mean and growing expenditures on family cash benefits (much of which goes to nonpoor families). The implication of this is that the poverty trajectory that Preston reported, and seen here as well, may be driven more by declining labour market conditions and changing family structures than by intergenerational competition and its effect on the allocation of public social welfare resources.

Figures 8 and 9 address the fifth and last research question, actually a pair of questions: Did public resources shift to the elderly (away from children) more in countries where the elderly-to-child population ratio grew the most? And, did public resources shift toward the elderly more where competition for resources was the most heightened? Preston's scenario of demographic "crowding out" would predict that children would lose the most (in resources per child) where the elderly gained the most in population, and he reported evidence of that result across the 50 U.S. states. Furthermore, his framework would suggest that as public social investments grew relatively scarcer, the elderly's gains would come more at the expense of children.

The first of these questions is addressed in Figure 8; the horizontal axis reports change in the ratio of the elderly population to the child population, and the vertical axis reports change in the ratio of old-age cash spending per elderly person to family cash spending per child.¹¹ (See Appendix 1 for a key to the country abbreviations that appear in Figures 8 and 9.) The

¹¹ For example, in Belgium, the ratio of the number of elderly to the number of children rose from 0.72 to 0.88, an increase of 23 percent [the x-axis]; the ratio of old-age to family cash spending, per person, increased from 2.95 to 3.96, an increase of 34 percent [the y-axis].

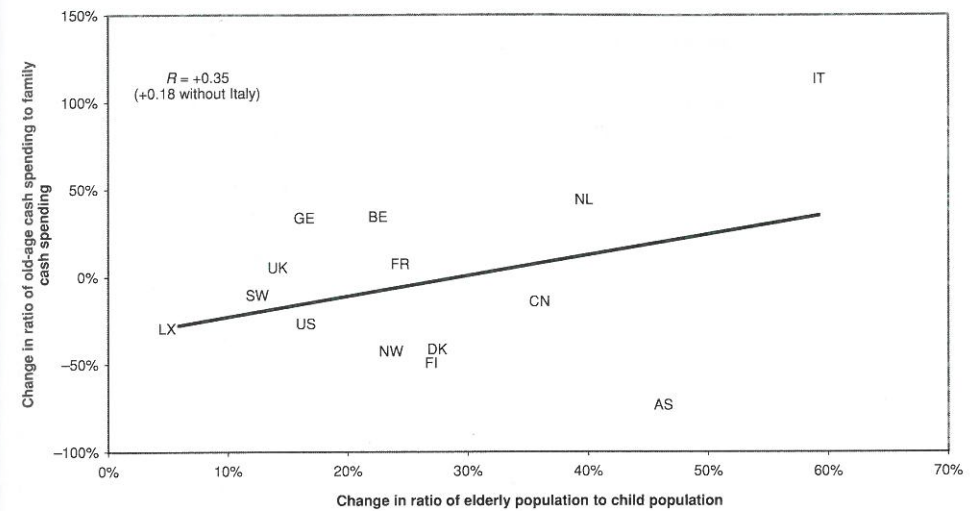


Figure 8. Change in ratio of elderly population to child population and change in ratio of old-age cash spending per elderly person to family cash spending per child (1980–1995).

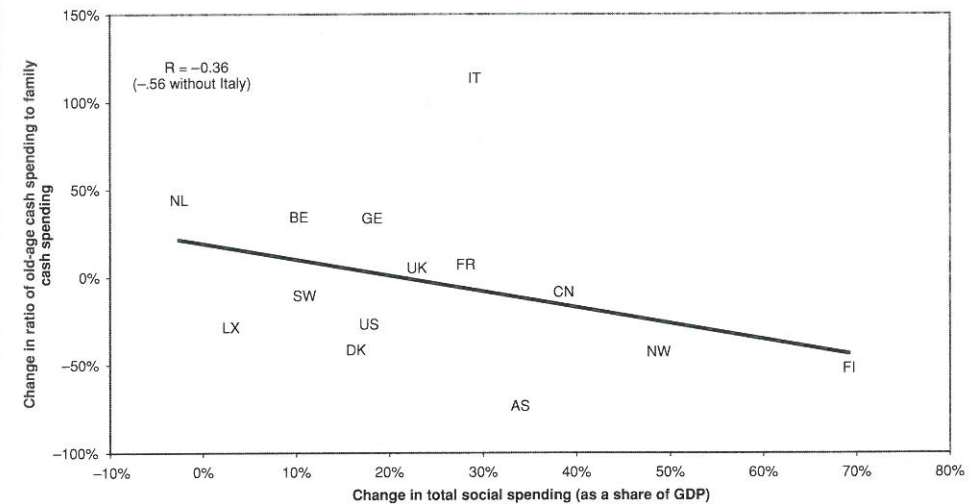


Figure 9. Change in total social spending (as a share of GDP) and change in ratio of old-age cash spending per elderly person to family cash spending per child (1980–1995).

Table 1. Effects of change in population ratio and in total spending on change in ratio of elderly-to-child expenditures.

Dependent variable:	Change in the ratio of old-age cash spending per elderly person to family cash spending per child	coefficient (SE)
Independent variables:	Change in the ratio of the elderly population to the child population	+1.574 (0.648)*
	Growth in total social spending as a share of GDP	-1.208 (0.845)*

* $N = 14$, $p < 0.10$, $R^2 = 0.34$.

upward slope in Figure 8 lends some support to Preston's underlying thesis: spending per elderly person did, in fact, increase more, relative to spending per child, in those countries where the elderly gained the most in population. (Italy, in the upper right corner, might be the extreme "Preston case"; its elderly-to-child population ratio skyrocketed as did its elderly-to-child spending ratio.) The overall pattern seems, to some extent, to reflect the exercise of political power in the distribution process, as these spending changes reflect changing resources *per person*. While each group's share of total spending might increase more or less automatically with population share, per person spending is more likely to reflect changes in policy rules.

Did public resources shift to the elderly—again, per elderly person—more in countries where total welfare resources grew relatively scarcer, and thus competition was more intense? In Figure 9, the horizontal axis indicates growth in total social spending (as a share of GDP), and the vertical axis is the same as in Figure 8: change in the ratio of old-age cash spending per elderly person to family cash spending per child. The downward slope indicates that spending on the elderly did, in fact, increase more (relative to per child spending) where total social spending was more constrained (i.e., where it grew less).

An ordinary least squares (OLS) regression suggests that the two factors (in Figures 8 and 9) have independent effects (see Table 1).

Furthermore, the two together explain a third of the variation across these 14 countries in the change in elderly-to-child spending ratios ($R^2 = 0.34$).¹²

6. Conclusion

During the 1980s and early 1990s, the industrialized countries of Europe, North America, and Australasia saw their populations age rapidly. Elderly populations grew both relatively and absolutely while child population shares fell, in many cases so sharply that the absolute number of children actually declined. At the same time, these countries' social welfare

¹² Clearly, with an N of 14, regression results are suggestive at best. This regression was also estimated without Australia and Italy, two of the more unusual cases, and the results were largely the same. The coefficient on change in total social spending was again negative and significant ($p < .05$) and the coefficient on change in population ratios was again positive, but no longer significant.

systems operated under tremendous political and fiscal pressure, set in motion during the economic downturn of the early 1970s. According to Preston, the American demographer, when a similar scenario was played out within the United States in the 1970s and early 1980s, the elderly exercised their political power effectively—so effectively that public resources per elderly person increased while expenditures per child fell. Each group's resources turned out not to be fixed but instead elastic, and the elderly's share of resources rose with their population share, in fact *more than* their population share.

This chapter assessed whether a "Preston scenario" unfolded, across a group of 14 welfare states, during a subsequent time period, 1980–1995. Overall, these 14 countries were assessed *as a group*, parallel, to some extent, to Preston's treatment of the United States: he assessed trends in the nation as whole and then turned to variation across its 50 states. Clearly, working with cross-national averages is less standard, but I chose it as an analytic strategy because preliminary analyses revealed more commonality than variation across these countries, even including the United States.

A core finding of this study is that, during the 1980s and early 1990s, a "Prestonian scenario" unfolded—but only partially—across this group of welfare states as they negotiated dramatic population ageing alongside multiple economic and political challenges to their welfare states. On the one hand, there is evidence in favour of such a scenario. Spending on cash benefits for the elderly increased *per elderly person*, even as their numbers rose so sharply. In addition, spending targeted on the elderly gained on child spending more where elderly populations grew the most (and presumably their political power as well), and more where the need to compete for resources was higher. Furthermore, elderly post-tax-and-transfer poverty decreased while child poverty increased.

On the other hand, other findings argue against the conclusion that the elderly pulled resources away from children. On average, spending on family cash benefits *per child* grew as well—and quite dramatically—even as mean market family income rose modestly. In half of the countries, the ratio of old-age cash spending to family cash spending *fell*. Furthermore, while there is evidence that the magnitude of the population shift matters, as well as the overall degree of spending constraint (see Table 1), the majority of the variation in spending patterns remained unexplained.

Another central finding partially accounts for the absence of a clear distributional shift from the elderly to children. Despite widespread perceptions that welfare state rollbacks have been severe in recent decades, total social expenditures actually grew steadily throughout the period across the industrialized countries—both as a share of GDP (by 22 percent) and per capita (by 57 percent). During the study years, social expenditures continued to expand, allowing the elderly to gain more resources—perhaps as their numbers inflated their political power—while state spending on children grew as well.

6.1. FUTURE RESEARCH

Several interrelated lines of inquiry would be especially fruitful for demographers and welfare state researchers. First, while this paper stressed trajectories within this group of welfare states as a whole, much remains to be understood about variation across welfare

state models, as well as across individual welfare states. Pampel (1994) concluded that a growing elderly population will be able to translate its numbers into advantageous policy shifts only in relatively pluralist political systems; in more strongly class-based systems, including several in place in Europe, universalist social policy principles blunt the power of the elderly cohort. At the same time, later research finds no consistent relationship between extant welfare state models and the age-orientation of social policies—perhaps due, in part, to the weakening of class-based social welfare politics over time in several welfare states. Lynch (2001) concluded that while countries tend to demonstrate consistent age biases across policy areas, “the age-orientation of social policy as a dimension of distributive politics . . . is not captured by other welfare state typologies, suggesting a need to develop new accounts of the development of welfare states that include the dimension of age.” Further research on the interplay of welfare state model and resource reallocation would also be enhanced by comparative, historical research focused on the outlying cases—beginning with, perhaps, Italy and Australia, as suggested by Figure 8 in this chapter.

Second, scholars have yet to adequately integrate conclusions about the demographic and political effects of ageing on public resource allocations with new lessons from the welfare state retrenchment literature. As Pierson (1994, 2000) and others have demonstrated, social policies are resistant to change and in complex ways. As a result, welfare state restructuring, and benefit and eligibility cuts in particular, operate under logics unlike those operating during expansionary periods. How the politics of ageing interacts with the dynamics of retrenchment—especially politicians’ need to avoid taking blame—remains an open question. It is possible that the two key constituencies exercise a different balance of power in times of contraction than they did during more expansionary years.

Finally, since the 1980s, an extensive theoretical and empirical literature has developed that seeks to integrate gender into welfare state research. Most of it assesses the effects of welfare state features on women and families; a more limited strand analyses the role that gender has played in welfare state development. What is relevant here is that the gendered aspects of intergenerational competition for resources remains largely unexplored—which is particularly problematic, given that women are not only the key actors in family politics, they are also disproportionately represented among the elderly in all industrialized countries. Welfare state scholars working on gender and those concerned with intergenerational competition should move toward inquiries that aim to integrate these two areas of study.

Appendix 1. Notes on Figures.

All Figures: Country abbreviations are as follows: AS = Australia; BE = Belgium; CN = Canada; DK = Denmark; FI = Finland; FR = France; GE = Germany; LX = Luxembourg; NL = Netherlands; NW = Norway; SW = Sweden; UK = United Kingdom; US = United States.

Throughout this study, Germany refers to West Germany from 1980 through 1990, and unified Germany after 1990.

Percent change always calculated as: $(\text{Time 2} - \text{Time 1}) / \text{Time 1}$.

All currency amounts are expressed in 1990 U.S. dollars, adjusted for purchasing power parities (PPPs). OECD PPPs are available in the SOCX database.

Appendix 1. (Continued)

Figure 1: Source: SOCX database. Total social expenditures include old-age cash benefits, disability cash benefits, occupational injury and disease benefits, sickness benefits, services for the elderly and disabled, survivors benefits, family cash benefits, family services, active labour market programs, unemployment benefits, health benefits, housing benefits, and assistance for contingencies (such as benefits for immigrants).

Old-age cash spending includes old age pensions, old age civil service pensions, veterans’ old age pensions, early retirement pensions, and other old-age cash benefits.

Family cash spending includes traditional cash transfer programs targeted on families (family allowances for children, family support benefits, and lone parent cash benefits), as well as paid family leave and refundable tax credits for families.

Figure 2: Source: SOCX database.

Figure 3: Source: *Labour Force Statistics*, various years.

Figure 4: Source: Expenditures from SOCX database; population from OECD *Labour Force Statistics*, various years.

Figures 5, 6: Source: Expenditures from SOCX database; mean market income from Luxembourg Income Study (LIS), various datasets.

In the LIS database, time points within the waves vary slightly across countries. The data points presented in Figures 5 and 6 (both the SOCX expenditure data and the LIS microdata) are as follows:

	approximately	
	1985	1995
AS	1985	1994
BE	1985	1996
CN	1987	1994
DK	1987	1995
FI	1987	1995
FR	1984	1994
GE	1984	1994
IT	1986	1995
LX	1985	1994
NL	1987	1994
NW	1986	1995
SW	1987	1995
UK	1986	1995
US	1986	1994

Figure 7: LIS, various datasets. Poverty is defined as household income below 50 percent of the median, where a single median is applied for both the elderly and children. Income adjusted for family size is computed as family income divided by the square root of family size.

Denmark is excluded from Figure 7 due to data irregularities.

Figure 8, 9: Source: Expenditures from SOCX database; population from OECD *Labour Force Statistics*, various years.

Appendix 2. Percent Change, 1980–1995, Four Outcome Variables

	Social spending as a share of GDP (%)	Social spending per capita (%)	Old-age spending per elderly person (%)	Family spending per child (%)
Australia	34	71	-4	259
Belgium	10	37	36	1
Canada	39	66	44	68
Denmark	16	54	61	174
Finland	69	109	73	240
France	28	55	49	39
Germany	18	32	13	-16
Italy	29	70	65	-23
Luxembourg	3	83	76	145
Netherlands	-3	23	9	-24
Norway	49	112	69	193
Sweden	11	30	31	46
UK	23	65	62	54
US	18	51	16	59
change in cross-country average	22	57	41	67

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CHAPTER 9. CONSEQUENCES OF EDUCATIONAL CHANGE FOR THE BURDEN OF CHRONIC HEALTH PROBLEMS IN THE POPULATION

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Changes in the public and individual burden of chronic health problems have significant implications for the allocation of public and private resources across generations. Preston (1984) noted almost two decades ago that population ageing in the United States was accompanied by the rapid expansion of public programs benefiting the health of elders while public programs benefiting children's education contracted. Health care is the principal public service provided to the elderly while education is the counterpart for children.

Within a historical time period, political choices about the funding of age-targeted service programs have an urgency that oftentimes sweeps aside the fact that investments in children's well-being pay substantial dividends decades later when children become the elders of a population. In large part, this reflects a lack of attention both by policy makers and by demographers of these long-run associations. Here, we provide new insights into the long-run consequences of investments in children for the burden of chronic health problems by conducting a thought experiment in which we simulate how sweeping historical changes in a population's educational achievement potentially alters active life expectancy and the prevalence of functioning problems in the population.

Our thought experiment is based on a multistate life table model that first documents the educational disparities in active life expectancy for males and females with 0-6 years of education compared to persons with 12 years of education. We use morbidity and mortality data from a major longitudinal study of morbidity experience in a population, the Health and Retirement Study (HRS), as inputs for the life table model. An advantage of the model is that it explicitly takes into account how education shapes active life expectancy, as well as the prevalence of functioning problems, through its associations with functional