

1 Mapping At-Risk-of-Poverty Rates, Household Employment and Social Spending

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In this chapter we present stylized facts concerning at-risk-of-poverty rates for the non-elderly population, household employment and social spending for the 27 EU Member States, Norway and Iceland.² In order to set the scene for the following chapters of this book, we focus on the correlation between poverty risks on the one hand and household employment and social spending on the other. The central question that is thus introduced refers to the notion of *employment-centred welfare reform*, and it may be summarized as follows: is it possible to structurally replace spending on cash benefits for working-age adults and their families with employment creation and to simultaneously reduce poverty among working-age adults and their children? Since this book explores the poverty-employment nexus, we focus on the non-elderly population. In the present chapter, individuals below the age of 60 constitute the 'non-elderly' group. Throughout, we use 'population' as a short-cut for 'non-elderly population'; at-risk-of-poverty rates should be understood to refer to the non-elderly population.

The at-risk-of-poverty rate applied here is a rather crude headcount: it simply measures the share of individuals in the non-elderly population considered to be at risk of financial poverty, and takes no account of the depth or severity of the poverty faced. Being at risk of poverty means living in a household with an equivalized net disposable income below 60 per cent of the national median equivalized net disposable household income (see text box on p. 70 for a detailed explanation). Thus conceived, the poverty headcount defines poverty in relation to the level of income at a given moment in the nation state where an individual happens to be living. In other words, the poverty threshold is a national measure that changes over time. In Chapter 2, Decancq *et al.* explain that the particular indicator on which we focus here is part of a larger class of poverty indicators, thereby highlighting limitations and possible pitfalls of our approach. They also illustrate the difference between observations that are statistically significant and observations *as such*. In Chapter 10, Cantillon argues that a relative at-risk-of-poverty indicator nonetheless constitutes an important benchmark for assessing the performance of welfare states. Below we present data that we consider essential for the inquiry underlying this book, without entering into any of the substantive or methodological discussions that follow. Our purpose is, first, to show that the income and employment data gathered in the European Statistics on Income and Living Conditions (SILC) suggest both stability and change in the second half of the previous decade, and, second, to introduce and justify the research agenda that is developed in this book.

Underscoring 'stability and change' is not redundant in this context. *A priori*, one might expect that this at-risk-of-poverty headcount is, by its nature, rather inert: since it is a relative measure, it might fail to register a general increase (or decrease) in incomes, including in

those of the poor. Moreover, important developments in the income distribution above or below the poverty threshold may also go unnoticed. However, the facts contradict that expectation to some extent. Even over a relative short time span of six years, the poverty headcount turns out not to be inert, as will be illustrated below: in a subset of countries, important evolutions are observed. Against this backdrop, the overall stability of the poverty headcount in another set of countries becomes a relevant observation *per se*: in a survey that registers change *and* stasis, stasis is as interesting as change. Moreover, even in countries where the overall evolution is suggestive of stasis, important changes occur within subgroups of the population.

Most at-risk-of-poverty and employment data presented in this chapter are based on SILC, the main data source for measuring income and living conditions in Europe. For the 1990s, we rely on the European Community Household Panel (ECHP), while some calculations for Germany are based on data from the German Socio-Economic Panel (SOEP); more detailed information on these data sources is provided in Chapter 2. Data with regard to social spending are taken from Eurostat. The income data in SILC refer to the year prior to the survey, except in Ireland and the United Kingdom. Our definition of ‘work-poor’ and ‘work-rich’ households refers to the same 12-month period as the income data. Below, we introduce a definition of individual employment that refers to realities observed immediately before the survey. To summarize this complex construal accurately, one ought to label the timeframe covered by, say, SILC 2005 as ‘2004/5’. We generally avoid this complexity by referring to the SILC survey years (such as ‘SILC 2005’) rather than the actual timeframe covered by the survey. For the same reason, we associate observations in SILC T with spending data for the year $T-1$. Hence, the reader should be aware that a comparison of, for example, SILC 2008 and SILC 2005 informs us about changes in *income* and *household employment realities* between 2004 and 2007, except in the case of the UK and Ireland.

Chapters 3 and 5 in this book analyze the change (or lack of change) in poverty rates in European welfare states. They focus on the favourable economic years covered by SILC 2005-2008; Chapter 5 also examines the years covered by ECHP 1995-2001, which was, generally speaking, a period of economic recovery and declining unemployment. In the first section of this introductory chapter, we provide basic facts with regard to at-risk-of-poverty rates in Europe, from SILC 2005 to SILC 2011, i.e. up into mid-crisis years. In the second section, we further broaden the timeframe and provide some context by the addition of summary data on employment, economic dependency and social spending for the period 1995-2010. In the third section, we examine the correlation between poverty outcomes, employment (with a focus on household employment, a concept developed in that section) and social spending. We do not pretend to provide causal explanations for cross-country differences in levels of poverty; we rather propose a mapping of levels of poverty based on their association with social spending on the one hand and levels of household employment on the other. Section four elaborates upon the observation that spending does not seem as ‘efficient’ in some welfare states as in others, and formulates a number of *caveats* with regard to this important but tricky notion. Section five introduces the concept of ‘poverty reduction by transfers’, which is an important parameter for describing the dynamics of change in welfare states. Having discussed the concept of ‘poverty reduction’, our attention shifts in section six from mapping *levels* of poverty, spending and employment (in essence on the

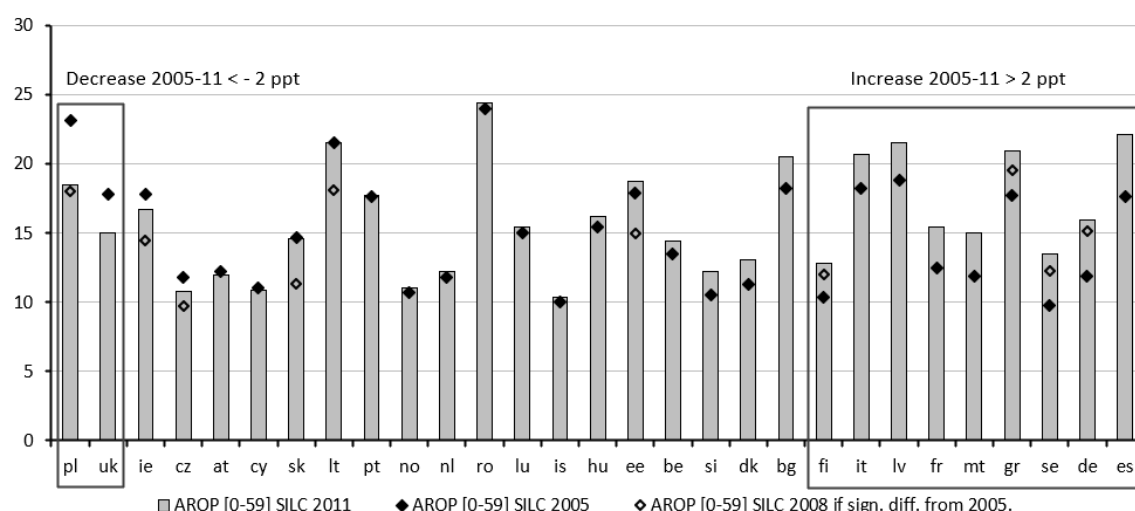
basis of regression techniques) to mapping how these variables *change over time* in each of the European welfare states (in essence on the basis of decomposition techniques). One should be aware that analyzing changes in poverty risks in single countries, in an intertemporal perspective, and making a cross-country analysis of poverty levels are two quite different exercises. Much confusion, both in the academic and in the policy debate, is caused by the unwarranted conflation of these two perspectives. By way of example, perhaps we ought to explain how contemporary Sweden can continue to rank quite well in terms of poverty in a cross-country perspective and yet, as a country, has clearly followed an inequalitarian course in the second half of the past decade. Factors accounting for the Scandinavian ‘superiority’ in terms of social inclusion and employment (relative to performance levels across Europe) are not preventing some Scandinavian welfare states from shifting to less outstanding outcomes (more so than is the case in other European welfare states).

Although we are able to discern some common features, there are no general ‘laws’ that uniformly explain the dynamics of poverty in European welfare states in the previous decade. Therefore, in the seventh section, we provide an overview of eight different trajectories of welfare states, comparing changes in the United Kingdom, Sweden, Spain, Belgium, Ireland, Poland, Norway and Germany.

1.1 The Evolution of Poverty Risks for the Non-Elderly Population

Several chapters in this book focus on comparisons of SILC 2005 and SILC 2008, as they examine income and employment evolutions in the good economic years 2004/5-2007/8. In order to put the developments during these years in a broader timeframe, Figure 1-1 and Table 1-1 summarize the evolution of the national at-risk-of-poverty rates from SILC 2005 to SILC 2011 and simultaneously focus on significant evolutions between SILC 2005 and SILC 2008.

Figure 1: At-risk-of-poverty rates, population [0-59]



Source: EU-SILC 2005, 2008, 2011. Bulgaria: EU-SILC 2006 instead of EU-SILC 2005. Romania: EU-SILC 2007 instead of EU-SILC 2005. Ireland: EU-SILC 2010 instead of EU-SILC 2011. Data for SILC 2008 are shown only when the difference between SILC 2008 and SILC 2005 is statistically significant. Ranked according to change from SILC 2005 to SILC 2011.

Figure 1-1 ranks European welfare states according to the change in the at-risk-of-poverty rates between SILC 2005 and SILC 2011: Poland is on the extreme left, with a decline of 4.6 percentage points (ppt). Next to Poland, the only country with a substantially lower poverty in SILC 2011 than in SILC 2005 was the United Kingdom (- 2.8 ppt). As will be shown in section 6, our interpretation of the poverty decrease in the United Kingdom should be qualified, as it is to a large extent the upshot of decreasing median incomes during the crisis. This leaves only Poland as an unambiguous case of diminishing poverty during the Lisbon era (unambiguous, that is, with regard to the non-elderly; poverty among the elderly increased considerably in Poland in the period under consideration). In contrast, poverty was Table substantially higher in SILC 2011 than in SILC 2005 in a considerable number of Member States. Starting from the extreme right side of Figure 1-1, these countries are: Spain (+ 4.5 ppt), Germany (+ 4 ppt), Sweden (+ 3.7 ppt), Greece (+ 3.2 ppt), Malta (+ 3.1 ppt), France (+2.9 ppt), Latvia (+ 2.7 ppt), Italy (+ 2.5 ppt) and Finland (+ 2.4 ppt).

Table 1.1: At-risk-of-poverty rates, population [0-59]

	2008-2005 ppt Δ	Sig. Δ	2008-2005 2011-2005 ppt Δ (*)	2011 % (*)
	(1)	(2)	(3)	(4)
Austria	-0,106		-0,2	12
Belgium	-0,282		0,9	14,4
Bulgaria	n.a.		2,3	20,5
Cyprus	0,244		-0,1	10,9
Czech Republic	-2,131	**	-1	10,8
Germany	3,377	***	4	15,9
Denmark	-0,233		1,8	13,1
Estonia	-2,85	***	0,8	18,7
Spain	0,447		4,5	22,1
Finland	1,214	*	2,4	12,8
France	1,009		2,9	15,4
Greece	1,857	*	3,2	20,9
Hungary	-0,908		0,8	16,2
Ireland	-3,149	**	-1,1	16,7
Iceland	-0,355		0,4	10,4
Italy	0,305		2,5	20,7
Lithuania	-3,323	**	0	21,5
Luxembourg	0,146		0,4	15,4
Latvia	1,442		2,7	21,5
Malta	n.a.		3,1	15
Netherlands	-0,939		0,4	12,2
Norway	0,593		0,3	11
Poland	-5,124	***	-4,6	18,5
Portugal	-0,115		0,1	17,7
Romania	n.a.		0,4	24,4
Sweden	2,621	***	3,7	13,5
Slovenia	0,078		1,7	12,2
Slovakia	-3,426	***	-0,1	14,6
United Kingdom	-0,856		-2,8	15

Source: (1) & (2) Calculations by Tim Goedemé, on EU-SILC udb, building on Goedemé (2013). (3) & (4) EUROSTAT. (*) Ireland: SILC 2010 instead of SILC 2011. Bulgaria: SILC 2006 instead of SILC 2005. Romania: SILC 2007 instead of SILC 2005. Standard errors take as much as possible account of the EU-SILC sample design.

*** = sign. at 1%; ** = sign. at 5%; * = sign. at 10%.

Figure 1-1 provides the at-risk-of-poverty rates from SILC 2008 for a selection of eight countries, for which there was a statistically significant change between SILC 2005 and SILC 2008. The underlying data are presented in Columns 1 and 2 of Table 1-1, which indicate that we observe a significantly declining at-risk-of-poverty rate between SILC 2005 and SILC 2008 for six countries (Poland, Lithuania, Slovakia, Ireland, Estonia and the Czech Republic) and a significantly increasing at-risk-of-poverty rate for four countries (Germany, Finland, Greece and Sweden). In all the other countries there was no significant change in the at-risk-of-poverty rates between SILC 2005 and SILC 2008. For most of the countries under review, these were years of economic boom. During the subsequent years of crisis, some of the latter group deviated from the stability observed between SILC 2005 and SILC 2008: in the United Kingdom, the initially moderate decline in the at-risk-of-poverty rate accelerated between SILC 2008 and SILC 2011, resulting in a significantly lower level of poverty in SILC 2011 than in SILC 2005. In other countries, such as Spain and Italy, the financial crisis led to significantly rising at-risk-of-poverty rates after the standstill during the good economic years.

In some countries the pattern of SILC outcomes is quite irregular for the first years under review, reflecting possible instability in the survey. For Sweden, the poverty headcount calculated on the basis of SILC 2005 is difficult to square with the results in SILC 2004 and SILC 2006, as it suggests a sudden but temporary drop in poverty. For this reason, we cannot exclude that comparisons between SILC 2005 and SILC 2008, which we develop below and in subsequent chapters of this book, overstate the poverty increase in Sweden. Nonetheless, the underlying trend between SILC 2004 and SILC 2011 is suggestive of a rather consistent pattern of increasing poverty rates, as illustrated in section 7. For Germany, the reliability of SILC 2006-2007 has been called into question: instead of the rather spectacular increase in poverty between 2005 and 2007 registered in SILC, the German SOEP is indicative of stability in the poverty headcount from 2004 onwards, after a considerable increase between 1999 and 2004 (Grabka, Goebel and Schupp 2012; Frick and Krell 2010; Hauser 2008). Therefore, in section 7, we present a separate analysis on the basis of the German SOEP.

When comparing SILC 2011 with SILC 2005, one should note that the picture with regard to poverty risks for the elderly population (60 years or over) is very different. While the weighted average of national at-risk-of-poverty rates of the non-elderly increased with 1.3 ppt for the EU27, poverty rates for the elderly decreased with 2.1 ppt. Consequently, the overall weighted average of poverty rates for the total population did not increase (the Eurostat estimate for the EU27 is an increase with 0.5 ppt). In many European welfare states, the at-risk-of-poverty rate for the elderly declined significantly. For instance, in Spain the decrease was -6.8 ppt; in Portugal -6.4 ppt; in Norway -5.6 ppt; in France -5.1 ppt; in Greece -3.1 ppt. In some countries, the decline started already before 2008, in other countries it was enhanced by the impact of the crisis, as the incomes of the elderly were better protected than the shrinking incomes of many the non-elderly. There are three important exceptions to this pattern: in Sweden the at-risk-of-poverty rate for the elderly increased with 7 ppt (from a low point of 8.4 per cent in SILC 2005); in Poland the increase was 6.4 ppt and in Germany 2.6 ppt.

Given the ambition of the Lisbon Strategy, launched in 2000, to eradicate poverty by 2010, this result is plainly disappointing. By 2007/8, when the financial crisis struck, only six

of the twenty-seven Member States were on a clearly discernible course of decreasing poverty among the non-elderly population. Using 2004/5 as a benchmark, by the end of the decade, poverty had declined only in Poland and the UK (with the aforementioned qualification); in at least half of the Member States it was higher; in one third of EU Member States, highlighted with the box on the right side of Figure 1-1, the increase in poverty risks was larger than 2 ppt. Should we interpret this outcome as a, possibly diverse, set of domestic policy failures? Or, does it reveal a common trend, associated with the dominant policy discourse in the Lisbon Strategy, with the crowding out of distributive programmes for working-age families by old-age programmes and health care, with the forces unleashed by European integration and intra-European migration? Or, has the complexity of ‘employment-centred welfare reform’ – the idea that employment creation can structurally replace social transfers – been underestimated? Or is it perhaps symptomatic of a combination of some or all of these factors? Are we witnessing an irresistible convergence in welfare state performance towards a more modest level, characterized by a lower degree of social inclusion than that attained in the 1990s in the best-performing European welfare states?

Scrutiny of Figure 1-1 and Table 1-1 shows that the first part of the period under review, covered by SILC 2005-2008, was indeed one of convergence in national at-risk-of-poverty rates. The group of countries displaying declining poverty rates, consisted mostly (but not entirely) in countries where poverty rates were initially high, such as Poland, Lithuania, Estonia and Ireland. The group recording growing poverty rates, consisted mostly (but not entirely) in countries where poverty rates were initially comparatively low, such as Sweden, Finland and Germany (at least on the basis of SILC). Overall, the data shown in Figure 1-1 are characterized by a process of ‘catching-up’ (beta-convergence) for the period SILC 2005-2008. Simultaneously, there are some notable exceptions, such as the Netherlands, the Czech Republic and Slovakia (low poverty rates, no increase) and Greece and Latvia (high and increasing poverty rates). In other words, there was no ‘iron law’ at play whereby relatively egalitarian welfare states were *all* destined to become less egalitarian, while inequalitarian countries were all set to become more egalitarian. Notwithstanding these exceptions, SILC 2005-2008 suggests growing cohesion on a pan-European level; in Chapter 2, Decancq, Goedemé *et al.* further develop this insight by considering a pan-European definition of poverty, based on a single European poverty threshold instead of national thresholds. However, between SILC 2008 and SILC 2011, there was no further convergence to be observed: the financial crisis brought a sudden halt to the trend towards greater pan-European cohesion so conceived. Overall, over the entire period of SILC 2005-2011, beta-convergence still persists, but less emphatically so than in the early part of this period.

We can summarize the same overall result in yet another way, by contrasting the weighted average³ of the national at-risk-of-poverty rates for the ‘old’ Member States (EU15) and the ‘new’ Member States (EU12). In the EU15 the at-risk-of-poverty rate for the population under the age of 60 increased from 14.9 per cent in SILC 2005 to 16.9 per cent in SILC 2011; in the EU12 the at-risk-of-poverty rate decreased from 20.1 per cent to 18.6 per cent. The overall result was an increase in the weighted average of estimated poverty rates in the EU27 from 16 per cent (SILC 2005) to 17.3 per cent (SILC 2011).⁴ In other words, national poverty rates converged, but there was no evidence of the ‘upward’ convergence previously experienced in the course of European integration, as documented by Lefebvre

and Pestieau with regard to the performance of European welfare states (Lefebvre and Pestieau 2012) or by the World Bank in respect of GDP per capita (Gill and Raiser 2012).

1.2 Changing Welfare States: Employment-centred Social Policy

A central consideration in this book is the relationship between policy achievements with regard to employment and policy achievements with regard to financial poverty. There is ample historic evidence that ‘employment success’ and ‘anti-poverty success’ are not mutually exclusive. On the contrary, a robust employment basis constitutes a precondition for the sustainability of a socially inclusive welfare state. Welfare states that historically have been successful in terms of both employment and poverty, notably the Scandinavian welfare states, typically have also been ‘big spenders’ on social protection. The question we will address goes beyond the familiar observation that employment and social inclusion are friends, not enemies. In a nutshell, it may be formulated as follows: is it possible to structurally *replace spending* on cash benefits for working-age adults and their families with *employment creation*, and to simultaneously *reduce poverty* among working-age adults and their children? This question pertains to the essence of welfare reform as it has been conceived over the last twenty years: already in the 1990s, employment-centred welfare reform was the key objective of the changing welfare states Hemerijck describes in Chapter 8 of this book. The Lisbon Council of March 2000 officially endorsed the view that an activating employment-centred social policy, based on investment in people, was the way forward towards reconciling social inclusion and the successful emergence of a new, knowledge-based economy.

With hindsight, the turn towards employment-centred welfare reform may be seen as a logical response to the steady increase in *economic dependency* (i.e. the number of individuals, of all ages, who are not employed divided by the number who are), a process that had been unfolding in the mature welfare states of the EU15 since the late 1970s. Therefore, the focus in this section is mainly on the EU15. In 1994, the economic dependency ratio for the EU15 stood at 1.46, i.e. for every ten persons in work, nearly fifteen were not, because they were either too young or too old, or unemployed, disabled or inactive for any other reason. From 1994 onwards, economic dependency steadily decreased, reaching a low of 1.20 in 2008, i.e. the number of persons not in work declined to twelve for every ten persons in work.⁵ These figures signal a considerable (positive) change, up until 2008, in the fundamental parameters determining how generous welfare states can be.

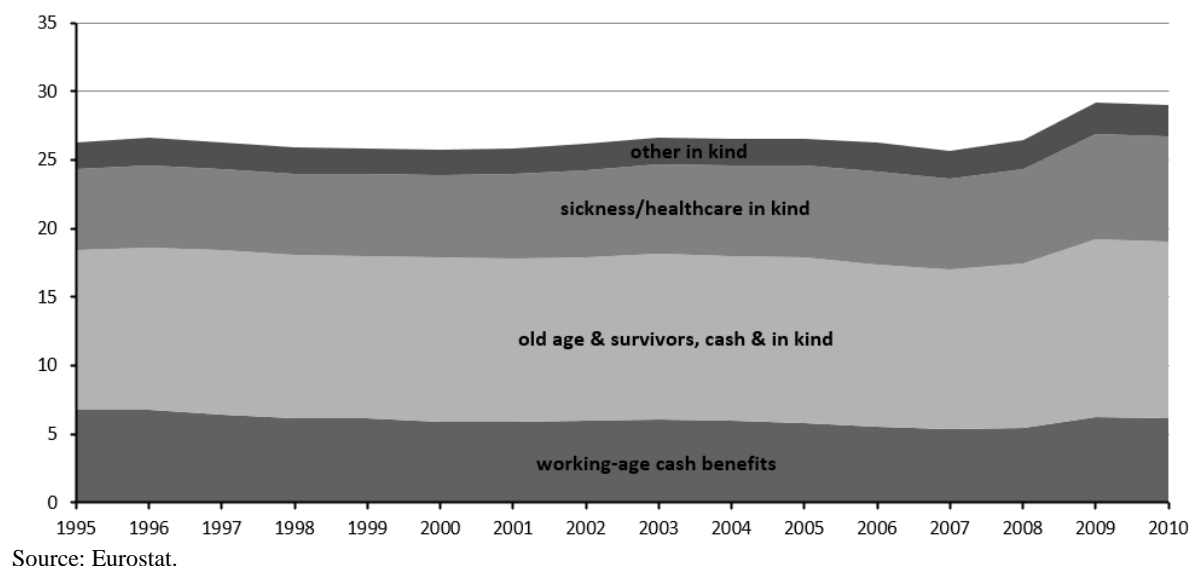
Prima facie, one might interpret the 1995-2008 period as one in which employment increasingly replaced social benefits as a means of sustaining individual and household incomes, making it possible to consolidate public budgets with a view to monetary unification *and*, if fiscal consolidation left room for manoeuvre, in order to enhance the quality of welfare states. However, for various reasons, a decreasing economic dependency ratio does not imply a proportionate decrease in the social policy caseload – which is essential for turning this optimistic *prima facie* expectation into reality. First, demographic ageing leads to more pensioners. Between 1994 and 2008, total demographic dependency (the number of individuals in the 0-14 and the over-65 age brackets, divided by the number of individuals in the 15-64 age bracket), was basically flat (0.49 in 1994; 0.50 in 2008). This

overall stability was the outcome of an increase in the old-age dependency ratio increased (from 0.23 to 0.27) and a decline in the child dependency ratio. Average old age pensions are obviously higher than average child benefits. Second, in a number of countries, a steadily growing number of women were entitled to pensions. Third, the feminization of the labour market, changing family structures and changes in social policy implied that more and more working-age individuals were entitled to social benefits. In the 1960s and 1970s, economic dependency among non-elderly adults was to a large extent an expression of the male breadwinner model: women depended financially on their husbands, without intermediation of social benefits. In the 1980s and 1990s, economic dependency increasingly implied benefit dependency. Fourth, decreasing economic dependency at individual level does not result in a proportionate reduction in economic dependency of households. Eurostat provides a rough-and-ready estimate of the share of non-elderly adults living in jobless households (i.e. household where none of the working-age adults were in work, not even for one hour, in the weeks prior to the survey) in the EU15: in 1995 it amounted to 11.5 per cent; by 2008 this share had declined to 9 per cent, while the individual non-employment rate had decreased from 39.9 per cent to 32.9 per cent.⁶ The observation that the percentage point decline in household joblessness is much lower than the percentage point decline in individual joblessness partly reflects a ‘mathematical truism’, as explained in Chapter 3. However, the analysis in Chapter 3 shows that declining family size, increasing female participation rates and other factors explaining increasing polarization of jobs over households also contributed to the gap between ‘household employment success’ and ‘individual employment success’ over these years. Notably in Southern Europe, the ‘household employment success’ was less than one might have expected on the basis of the ‘individual employment success’. In other words, southern welfare *states* were increasingly replacing *extended families* to cater for economically dependent working-age adults. A final reason why the social policy caseload did not diminish proportionately with economic dependency relates to the development of in-work benefits, which were seen as an important tool for enhancing labour market participation. All these factors, together with deliberate changes in social protection policy, explain why decreasing economic dependency did not convert into a decrease in the social policy caseload. As a matter of fact, the evolution of the social policy caseload was quite disparate in the EU15, with minor decreases or quasi-stability in some countries versus decreases in others. In the UK in 1994, 10.6 per cent of working age people were on either unemployment, social assistance, early retirement or work incapacity benefits; by 2008, that share had declined to 8.7 per cent. In Germany there was a more marked decrease, from 15.3 per cent to 10.6 per cent. By contrast, the 2008 social policy caseload was comparable to the 1994 caseload in Belgium, Spain and Sweden (although it should be added that, in Sweden, by 2008 the caseload was declining from the very high level reached in the early 2000s; all figures are calculated on the basis of De Deken and Clasen, 2011).

Nevertheless, applying a mid-term perspective and a highly aggregate level of analysis, one might say that the *decreasing economic dependency* ratios associated with growing employment up until 2008 enabled – or at least contributed to enabling – governments to *replace spending on cash benefits for working-age adults and their families by spending on pensions and health care*. Figure 1-2 displays the evolution of social spending as a percentage of GDP, distinguishing spending on (i) cash benefits excluding old-age and

survivor programmes (below, we will refer to this category of spending as ‘working-age cash benefits’), (ii) old-age and survivor programmes in cash and in kind; (iii) health care in kind, and (iv) other categories of in-kind expenditures. The data are weighted averages for the EU15.

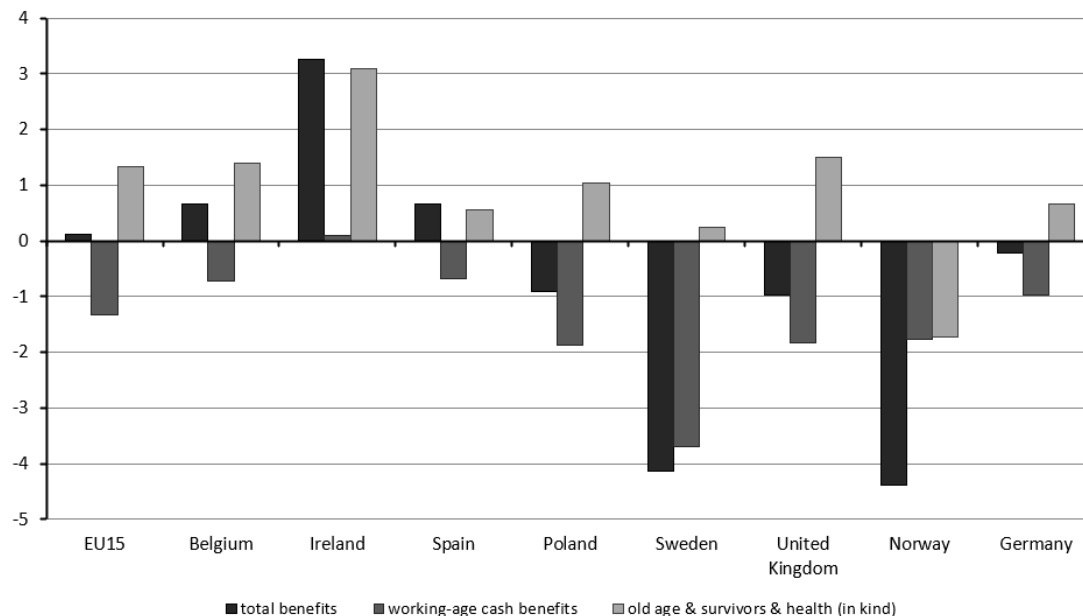
Figure 1.2: Social spending as a % of GDP, EU15, weighted average, 1995-2010



In 2008, total spending on social protection benefits in the EU15, expressed as a percentage of GDP, was at the same level as it had been in 1995. Spending on working-age cash benefits was 1.33 ppt lower; spending on old-age and survivor programmes was marginally higher (+0.34 ppt), while spending on health care benefits in kind was 1 ppt higher. So conceived, pension and health care spending substituted for working-age cash benefits. The crisis implied a considerable increase in all three categories of spending relative to GDP by 2010 (working-age cash: + 0.67 ppt; old age: + 0.93 ppt; health + 0.70 ppt, all compared to 2008), leading to an unprecedented level of social spending in 2010.

Obviously, not all EU15 welfare states followed this trajectory of substitution between 1995 and 2008. For some welfare states, this was a period of general retrenchment or general expansion; in some welfare states selective expansion also occurred in programmes other than old age and health care. Figure 1-3 provides some examples for a subset of EU15 countries and Norway and Poland. Substitution of working age cash benefits by old-age and health care programmes can be discerned in Germany (which represents a heavy weight in the EU15 weighted average), Belgium, Spain and the United Kingdom. However, such substitution did not occur in Ireland (where old-age and health care spending was much higher 2008 than in 1995, but not at the expense of working age cash benefits), or either in Sweden (where there was a considerable reduction in working-age cash benefits, but no increase in old-age and health care spending) or Norway (where both working-age cash benefits and old-age and health care spending declined).

**Figure 1.3: Changes in spending on social protection benefits, in % of GDP, 1995-2008
(Poland: 2000-2008)**



Source: Eurostat.

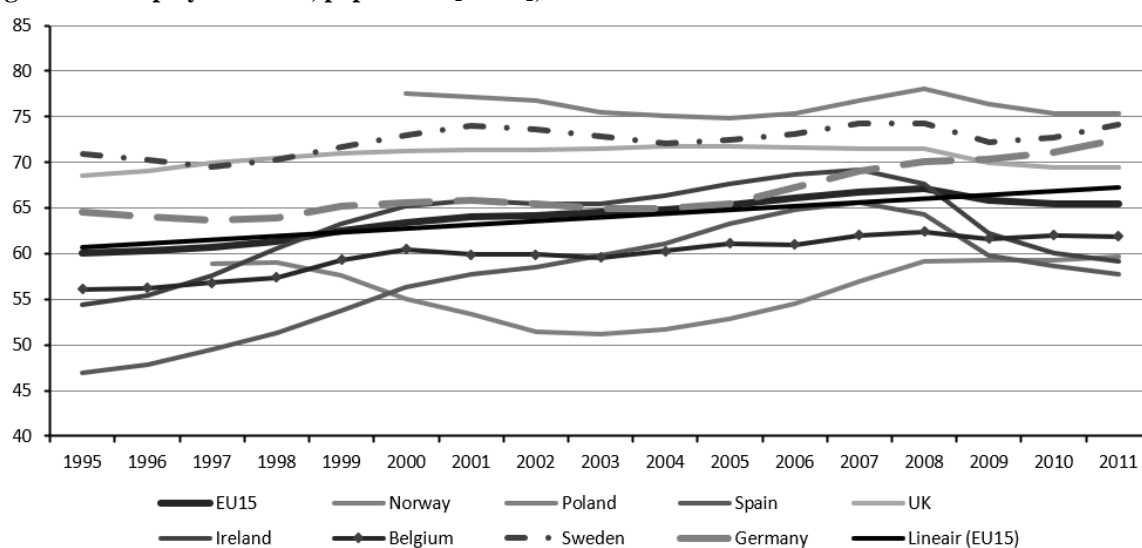
The structure of social spending gradually shifted towards relatively greater spending on services and relatively smaller spending on cash benefits. Hence, it may be the case that our assessment of poverty increasingly underestimates the redistributive impact of welfare states, since it does not take into account the value and distribution of growing public services when measuring the standard of living of households. On the other hand, it can be argued that a shift from cash benefits to benefits in kind implies less redistribution, *if* the counterfactual benchmark applied is more spending on cash benefits rather than on public services. In short, more spending on public services may imply more redistribution, if the counterfactual benchmark is less social spending *as such*; but more spending on public services may be seen to imply less redistribution, if the counterfactual benchmark is substitution of cash benefits for public services, with unchanged levels of social spending. In Chapter 6, Verbist and Matsaganis, examine this issue at greater length. In Chapter 7, Van Lancker and Ghysels further explore the shift from cash to service spending, with specific focus on family policy (i.e. child benefits, childcare services and parental leave benefits). Based on expenditure trends, the authors find little support for a generalized crowding-out process of cash benefits by service spending. Rather, there is evidence of overwhelming diversity across countries, in terms of policy effort, the balance between cash and in-kind spending, and the redistributive impact of family policy. A more detailed comparison of family policy in Flanders and Sweden provides indications of the importance of policy design in mediating the distributive impact of policy.

The data referred to in this section permit only a superficial description of spending trends. Would a more fine-grained analysis of expenditures allow us to assess whether or not there was a budgetary reorientation towards true ‘social investment programmes’ (such as active labour market programmes, childcare), rather than just a shift from working-age cash

benefits to old-age and health care programmes? In Chapter 9 and the Appendix to this book, the evolution of social spending is examined in further detail on the basis of the OECD Social Expenditure Database. In Chapter 9, De Deken offers a critical review of the concept of social investment and explores the possibilities and limits of operationalizing it on the basis of social expenditure data. He argues that the use of expenditure data to map the skeleton of the social investment state is fraught with conceptual and methodological problems. The Annex should be read with these *caveats* in mind, but it nonetheless offers some interesting additional insights into the dynamics of social spending.

Common trends with regard to social spending do not imply uniformity. In the same vein, one should be aware that the evolution of employment rates between 1995 and 2008 was far from uniform. Between 1995 and 2001 there was a spectacular increase in employment in Spain and Ireland, while the German employment rate was basically flat. Between 1995 and 2008, nearly one-third of the extra employment in the EU15 was created in Spain and Ireland. In Germany employment only started to increase in 2005. In other words, employment-centred welfare reform in Germany only ‘paid off’ in jobs after 2005. In the early 2000s, the Swedish and Norwegian employment rates declined, and did not return to their 2000 level until 2008. Thus, the overall pattern in the EU15 in the years 1995-2008 was one of upward convergence.

Figure 1.4: Employment rate, population [15-64], 1995 - 2011



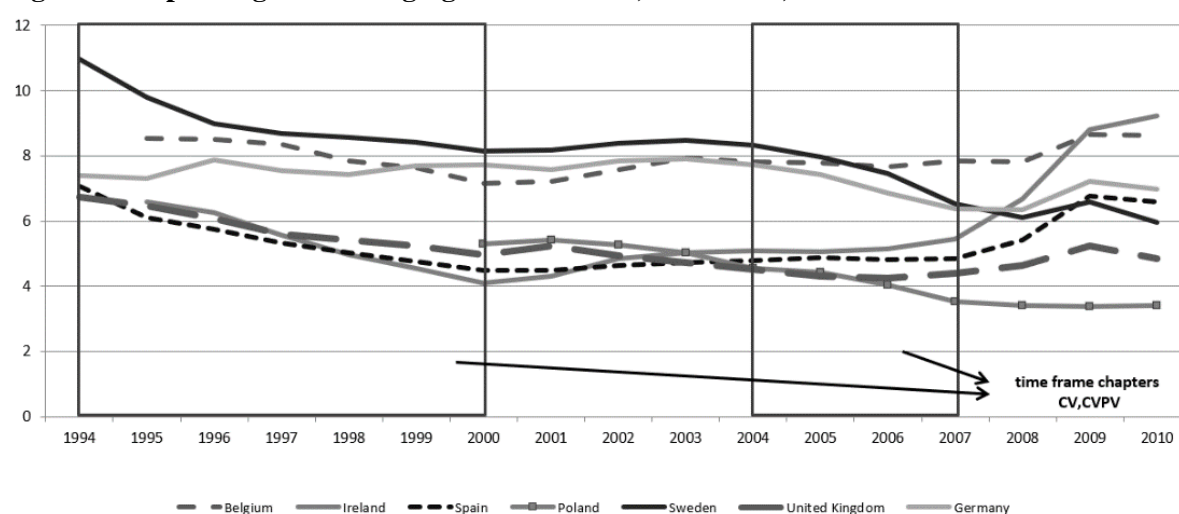
Source: Labour Force Survey, Eurostat.

The turn towards employment-centred welfare reform and the argument for activating social investment originated in the EU15, as policymakers tried to formulate answer to the dilemmas they perceived in those mature, market-based welfare states (see Chapter 10 and 8 in this book). It is less straightforward to associate this policy paradigm with the transition problems experienced by the former Communist countries. Moreover, identifying any common trends on the basis of spending patterns is difficult for the new European Member States (EU12), because the period for which comparable spending data are available is relatively short. For 2000-2008, no clear trend is observable; the pattern is rather one of

stability of spending relative to GDP. An important exception to this pattern is Poland, where spending on working-age cash benefits decreased from an already low level to be partially replaced by spending on old-age and survivors programmes. The Polish trajectory should be considered in its proper context though. Poland went through a deep economic crisis in the second half of the 1990s: the unemployment rate doubled between 1997 and 2002 to 20 per cent, after which it only declined again to its 1997 level by 2007. Poland's employment rate, which is added in Figure 1-4, illustrates the depth of the Polish crisis and the pace of recovery after 2003.

Notwithstanding the country-specific contexts, the common challenge confronting these changing welfare states can be summarized in this one question: is it possible to *replace* spending on cash benefits for working-age adults and their families by *employment creation*, in a structural way, and, simultaneously, to *reduce poverty* among working-age adults and their children? Or, to formulate it less ambitiously: is it possible to structurally replace spending on cash benefits for working-age households by employment creation *without increasing poverty*? We add 'structurally', because one should distinguish correlations between short-term changes in spending and employment during the business cycle from structural trends. The purpose of this book is not to arrive at a definitive verdict on that matter. In order to enhance our understanding of the issues at hand, we decompose changes in poverty outcomes in the European welfare states during the periods characterized, in general, by rather favourable economic conditions and, for many countries, diminishing spending on working-age cash benefits. These decompositions are based on a distinction between 'work-poor' and 'work-rich' households, introduced in the next section of this chapter. Chapter 3 focuses on the period covered by SILC 2005-2008; Chapter 5 examines both the period covered by SILC 2005-2008 and that covered by ECHP 1995-2001. Figure 1-5 shows the evolution of spending on working-age cash benefits during the periods examined in these chapters for a selection of countries. This selection contains countries conforming to the dominant pattern of diminishing spending on working-age cash benefits as well as some notable exceptions (such as Germany in the first period under review, and Belgium, Ireland and Spain in the second).

Figure 1.5: Spending on working-age cash benefits, % of GDP, 1994 - 2010



Source: Eurostat.

It is no exaggeration to say that the years under scrutiny in Chapters 3 and 5 (highlighted with the boxes in Figure 1-5) were economically quite favourable years. At the level of the EU15, overall unemployment diminished steadily between 1994 and 2001, then increased again to reach a new peak in 2004/5, after which it dropped to a low point in 2007/8. The fact that many welfare states cut their spending on working-age cash benefits, relative to GDP, during those years does not necessarily instantiate a long-term trend. It may be attributed at least in part to their role as ‘automatic stabilizers’ in relation to the business cycle; we return to this point in sections 6 and 7 below.

The main focus in this book is on *changes* in spending, employment and poverty outcomes in individual, path-dependent welfare states. However, in the following section we first look at *levels* of spending, employment rates and poverty rates, and how these parameters correlate with each other.

1.3 Mapping Poverty Levels on Levels of Social Spending and Employment Rates

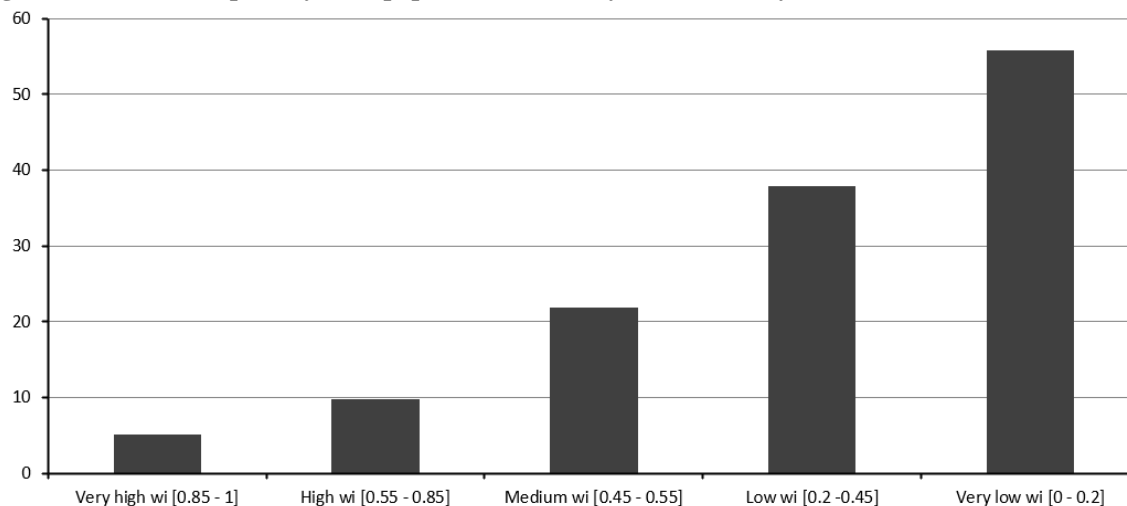
In contemporary Europe, it appears that poverty levels correlate negatively with levels of social spending (as a percentage of GDP) and individual employment rates. The first observation is not new and comes as no surprise. The second – the statistical association of high employment rates with low levels of poverty – is less self-evident. After all, we measure poverty at the household level, whilst employment rates are based on individuals. Therefore, associating employment rates with levels of poverty in a cross-country perspective may represent a *category mismatch*. Distinguishing individuals living in ‘work-rich households’ from individuals living in ‘work-poor households’ (which typically face much higher poverty risks) and measuring the share of individuals living in work-poor households may be more informative than counting the proportion of jobless individuals. This observation, too, has been made previously, and evidence has been tabled to suggest that the correlation between poverty and individual employment rates is quite weak, whilst the explanatory power of the share of individuals living in work-poor households may be stronger.⁷

What is a work-poor household anyway? Chapter 3 discusses different measures of *household employment* (as opposed to individual employment), implying different definitions of a ‘work-poor household’. In this introductory chapter, we base our presentation on the notion of ‘household work-intensity’, as defined by Eurostat. Work-intensity is conceptualized as the ratio between the total number of months worked by working-age household members (excluding students) and the total number of months that they could, in theory, have worked. For persons who reported having worked part-time, an estimate of the number of months in terms of full-time equivalents was computed on the basis of the number of hours habitually worked at the time of the interview.

In all European welfare states, at-risk-of-poverty rates of individuals correlate negatively with the work-intensity of the household to which they belong. Figure 1-6 shows the weighted average for the EU27 of the national at-risk-of-poverty rates for five different subsets of households, as registered in SILC 2008: we distinguish between households with very high work-intensity (work-intensity ranges between 85 and 100 per cent), households with high

work-intensity (between 55 and 85 per cent), households with medium work-intensity (between 45 and 55 per cent), households with low work-intensity (between 20 and 45 per cent), and households with very low work-intensity (20 per cent or less). The at-risk-of-poverty rate in households with very high work-intensity was 5 per cent; the at-risk-of-poverty rate in households with very low work-intensity was more than eleven times higher (56 per cent). *Hence, for individuals in Europe, the work-intensity of the household to which they belong is a crucial determinant of their (individual) poverty risk.*

Figure 1.6: At-risk-of-poverty rate, population [0-59], by work intensity (wi) of the household, EU27, 2008



Source: EU-SILC. AROP defined as at-risk-of-poverty rate (cut-off point: 60% of median equivalised income after social transfers).

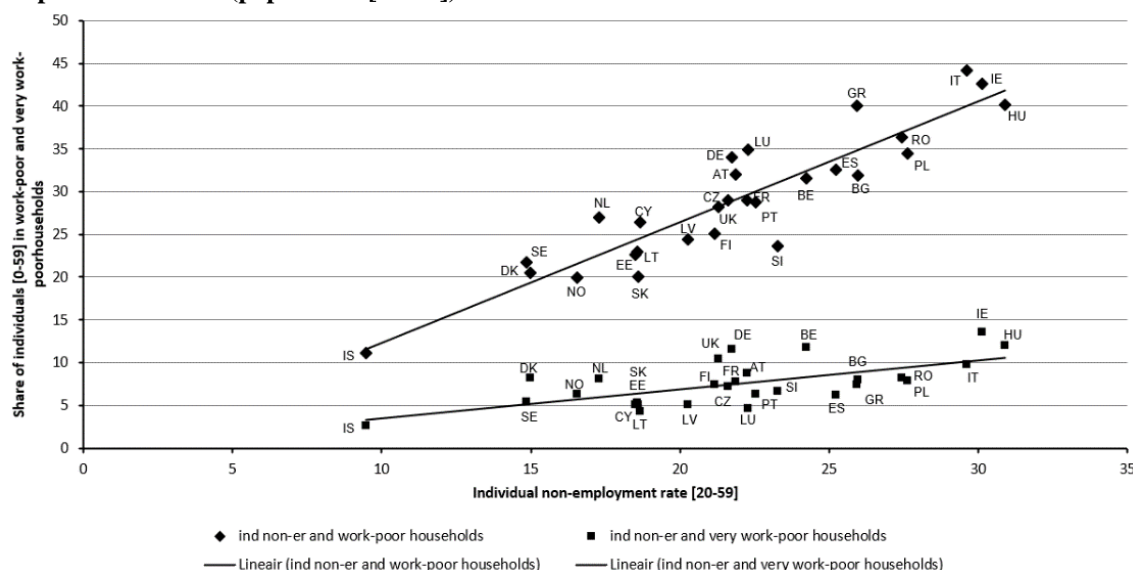
We now shift our attention from an analysis at the individual level to an analysis at the level of welfare states. To what extent is a welfare state's poverty record determined by spending on working-age cash benefits and the work-intensity of its households? We distinguish two indicators of the 'household employment' record of welfare states, based on the data on the work-intensity of households in SILC. The first indicator is the share of individuals living in households with very low work-intensity (between 0 and 20 per cent); we label these households as 'very work-poor'. The second indicator is the share of individuals living in households with medium work-intensity or less (i.e. 55 per cent or less); we label these households as 'work-poor'. We will use 'work poverty' as a shortcut for the share of individuals living in work-poor households, and 'severe work poverty' as a shortcut for the share of individuals living in very work-poor households. The reader should note that the expressions 'work poverty' and 'severe work poverty', as we use them here, refer to features of welfare states, not to characteristics of individuals or households.

Simple correlations on the basis of the SILC surveys from 2005 to 2011, which we do not show here, reveal the following pattern for most of the years under consideration: national at-risk-of-poverty rates correlate negatively with the level of spending on working-age cash benefits; they correlate positively with the individual employment rates and with work poverty, i.e. the share of individuals living in work-poor households. However, these positive correlations with individual non-employment rates and work poverty are not very strong. If we focus on *very* work-poor households the correlation with financial poverty

disappears. *Prima facie*, the latter observation may seem surprising, given the fact that, at the level of individuals, people living in households with such very low work-intensity are confronted with very high financial poverty risks (Figure 1-5). However, one should bear in mind that the share of individuals living in very work-poor households is small; this limits its impact on the overall poverty record of welfare states.

The values of correlation coefficients of poverty with work poverty and with the individual non-employment rate are quite comparable for many of the years under review; that should not come as a surprise either, since individual non-employment rates and work poverty, as defined by us, correlate strongly on a cross-country basis. Figure 1-7 shows the relationship between individual non-employment, work poverty and severe work poverty (i.e. the share of individuals living in very work-poor households). In some countries, notably Luxembourg, Germany and the Netherlands, work poverty is higher than what one might expect on the basis of a linear relationship between individual non-employment rates and work poverty. The prevalence of part-time work may be an explanatory factor in those countries. However, as visual scrutiny of Figure 1-7 reveals, the percentage deviation between the actual share of individuals in work-poor households and what one ‘might expect’ given the individual non-employment rates in those countries is not so substantial. The correlation between individual non-employment rates and severe work poverty is less. Figure 1-7 shows that Ireland, Belgium, Germany, the United Kingdom and Denmark have a higher degree of severe work-poverty than one ‘might expect’ on the basis of a linear relationship with individual non-employment rates. Hence, with regard to very work-poor households, more countries ‘deviate’ from a simple linear relationship with individual employment rates. Moreover, the percentage deviation between the actual share of individuals in very work-poor households and what one ‘might expect’ given the individual non-employment rates in those countries is important. Chapter 3 explains that household employment rates which ‘one might expect’ are not really what one should expect on the basis of individual employment rates. Chapter 3 further examines these deviations, which may be explained by the size structure of households or by the sociological phenomenon of ‘polarization’ in the distribution of jobs over households (in order to decompose polarization, Chapter 3 will focus on jobless households rather than on very work-poor households as defined here).

Figure 1.7: Individual non-employment rates (population, [0-59]) and the share of individuals in (very) work-poor households (population [20-59])



Source: EU-SILC 2008.

Table 1-2 introduces a subsequent step in the analysis. It displays the best results of a pooled time-series cross section analysis of national at-risk-of-poverty rates with spending on working-age cash benefits and individual and household employment indicators as independent variables. The analysis covers 29 European welfare states and uses the SILC surveys from SILC 2005 to SILC 2011.⁸ All models in Table 1-2 use a logarithmic transformation of spending as a percentage of GDP, since that yield a better fit: this specification implies that the marginal impact of additional spending on poverty diminishes when the level of spending increases. We focus on the two indicators of the ‘household employment’ record of welfare states, already mentioned: work poverty and severe work poverty. The *individual* non-employment rate is based on LFS and the so-called ILO concept of employment often used in the context of the European Labour Force Survey: an individual is considered to be ‘not employed’ if he or she was not employed for at least one hour in the week before the survey.

This analysis does not pretend to ‘explain’ poverty rates, but should contribute to a better understanding of the structure of the data reported in SILC. The first set of regressions has as dependent variable the at-risk-of-poverty rate of the whole (non-elderly) population. The second set of regressions focuses on the work-poor segment of the population, with the at-risk-of-poverty rate for individuals in work-poor households as a dependent variable. The third set of regressions uses the at-risk-of-poverty rate of the work-rich population as dependent variable. All models include time dummies, and for each model we present results with ‘country fixed effects’ and without ‘country fixed effects’, i.e. with country dummies or without country dummies. The choice between these alternative specifications (‘country fixed effects’, or not) is not straightforward. An approach without country fixed effects has the drawback that countries that spend more also tend to have a better ‘underlying fabric of society’ and/or a better architecture of spending, which is relevant for the poverty outcomes. Such country-level characteristics will be picked up by the coefficient on spending, leading to

an overestimation of the impact of the level of working age cash benefits on at-risk-of-poverty rates; so conceived, an analysis without country fixed effects provides a clear upper bound on the estimated impact of spending. Including country fixed effects implies that the analysis predominantly reflects the impact of changes of spending levels, rather than cross-country differences. This has the advantage that it focuses on what really is at stake (changes in levels of spending *per se*, rather than differences in the architecture of spending or the related social fabric), but, for the period under consideration, it may lead to an underestimation of the role of spending, since that period includes a deep economic crisis, during which public social expenditures automatically increase. For several reasons, we prefer the model with country fixed effects (see Vandenbroucke *et al.*, 2013). Simultaneously, however, the difficulty of the specification choices implies that one should not infer from such quantitative analysis simple and straightforward conclusions with regard to the impact of social spending and labour market conditions, on poverty.

Table 1.2: Effect of spending and work intensity on at-risk-of-poverty rates (AROP)

	COUNTRY FIXED EFFECTS				NO COUNTRY FIXED EFFECTS			
	WACB (logs)	Individual employment rates	Work poverty	Relative severity of work poverty	WACB (logs)	Individual employment rates	Work poverty	Relative severity of work poverty
AROP	-0.053				-6.61***			
1.1	(0.505)				(0.308)			
	-1.94***	-1.60***			-4.82***	-1.61***		
1.2	(0.612)	(0.316)			(0.299)	(0.088)		
	-1.70***		0.684***	0.909***	-5.95***		1.46***	0.705
1.3	(0.609)		(0.230)	(0.162)	(0.319)		(0.080)	(0.099)
AROP work-poor households	-9.16***				-11.19***			
2.1	(1.22)				(0.598)			
	-8.14***	-0.859			-9.25***	-1.04***		
2.2	(1.49)	(0.778)			(0.865)	(0.299)		
	-8.19***		-2.03***	2.62***	-15.30***		-0.338	2.66***
2.3	(1.40)		(0.533)	(0.409)	(0.801)		(0.252)	(0.214)
AROP work-rich households	-0.393				-2.68***			
3.1	(0.408)				(0.259)			
	0.172	0.580**			-2.79***	0.135		
3.2	(0.506)	(0.282)			(0.277)	(0.089)		
	1.23***		-1.08***	-0.074	-2.46***		-0.431***	-0.360***
3.3	(0.464)		(0.160)	(0.116)	(0.285)		(0.068)	(0.096)

Source: EU-SILC. Table shows the effect of spending in working age cash benefits (WACB) on post-transfer poverty rates (AROP) in the non-elderly population [0-59], for both a model with and without country fixed effects. Both models are GLS estimations with heteroskedastic error structure, and include time dummies. Controls are added for either individual employment rates or work poverty (the share of individuals living in work-poor households; i.e. with work intensity 0-55) and the 'relative severity of work poverty' (i.e. share of individuals living in very work-poor households within the subgroup of work-poor households; very work-poor households have work intensity of 0-20). Dependent variables are the poverty rate (AROP), the poverty rate for individuals in work-poor households (AROP_wp) for individuals in work-rich households (AROP_wr). Individual employment is based on LFS, and refers to the age bracket [15-64]. Spending data is retrieved from ESSPROS, comprising the period 2004-2010. All other data are based on SILC. For SILC 2004-2010, measures of poverty and work intensity are re-estimated by Tim Goedemé on the basis of the SILC udb. SILC 2011 data are retrieved from the Eurostat-site (1.2.2013). We include 29 European welfare states over these 7 time periods. The poverty data from the years

2007 until 2011 are complete for every nation. For 2006, poverty data is missing for Romania. For 2005, both poverty data for Romania and spending data for Bulgaria are missing. This gives a total of 232 observations.

Model 1.1 in Table 1-2 shows that the spending coefficient is insignificant, when we simply regress poverty on spending with country fixed effects. This is explained by the fact that the years under consideration encompass years of boom and crisis. Structural differences in spending are reflected in the country fixed effects. Changes in spending levels partially compensate for changes in the economic situation and dampen the impact of the business cycle on poverty, but are unrelated to the observed poverty rates. *Without* country fixed effects the spending coefficient is important and significant. However, in the model with country fixed effects the spending coefficient becomes significant when we add measures for individual and household employment, since they (partially) pick up the economic situation. Models 1.2 and 1.3 show that there is a sizable effect of spending on poverty levels, when we control for the level of individual employment or household work-intensity in addition to time and country fixed effects. In other words, time and, especially, structural background features of individual welfare states lead to an initial overestimation of the effect of spending on poverty, but the relation still remains strongly significant when this is controlled for by including country fixed effects in the model, provided we also control for some measure of employment.

When we add individual employment to the analysis (model 1.2), the coefficient for the log of spending on working-age cash benefits is -1.94, which means that the model suggests that, at the mean, a 10 per cent increase in spending reduces the poverty rate by 0.194 (defined from 0-100). Individual employment is standardized with a mean of 0 and a standard deviation of 1. Hence, the coefficient shows the effect on poverty of increasing individual employment by one standard deviation. This would reduce the poverty rate by -1.94 in this case. If we would convert employment back to percentage points, it appears that a 10 per cent increase in spending has a similar impact as an increase in the individual employment rate by 1 percentage point. Alternatively, in model 1.3 we use measures of household work-intensity as regressors. In order to make these different measures comparable, we also standardize them to all have a mean of zero and a standard deviation of 1. In order to explain at-risk-of-poverty rates, we employ two indicators of household work-intensity: work-poverty (the share of individuals living in work-poor households), and the share of individuals in very work-poor households *within* the subgroup of individuals in work-poor households; we will call this indicator ‘the relative severity of work poverty’. In general, using measures of household work-intensity rather than individual employment levels does not change the model with fixed country effects much. The model that provides the best fit is model 1.3, which includes *both* the share of the work-poor and the share of the very work-poor in the work-poor. The latter result is particularly interesting: it suggests that one should really study the country-specific distribution of household work-intensity over the population, and that the concentration of individuals in very work-poor households does play an independent role.¹⁰ This finding obviously matches the observation that the poverty rate for people in very work-poor households is typically higher than the corresponding poverty rate in households that are work-poor but not very work-poor. This regression result supports the attention paid in this book to both the share of individuals in work-poor households and the share of individuals in very work-poor or jobless households, and also to the concept of polarization, discussed in

Chapter 3. There is a strong correlation between the ‘relative severity of work poverty’, as we define it here, and the absolute polarization index introduced in Chapter 3.

Models 2.1-2.2-2.3 focus on poverty in the work-poor subgroup, i.e. individuals living in households with low work-intensity (0-55). The impact of spending on poverty for this group is much larger; in the specification with country fixed effects, it is already strong and significant without controls for employment or work-intensity. This is not surprising, since this is naturally a group that is more vulnerable and more dependent on benefits. Although restricting ourselves to this subgroup already partially controls for differences in work-intensity and changes in the business cycle, adding work poverty and the ‘relative severity of work poverty’ leads to significant coefficients on these indicators. Poverty in the work-poor segment is strongly driven by the ‘relative severity of work poverty’. On the other hand, the extent of work poverty (i.e. the share of individuals in work-poor households) has a negative impact on poverty rates within that group. This result may reflect the fact that the average person in a work-poor household is in a relatively better position when there are many work-poor households. Formulating it slightly bluntly, if work poverty is high, the average ‘work-poor’ is not at the very bottom of the distribution, because the composition of the group changes.

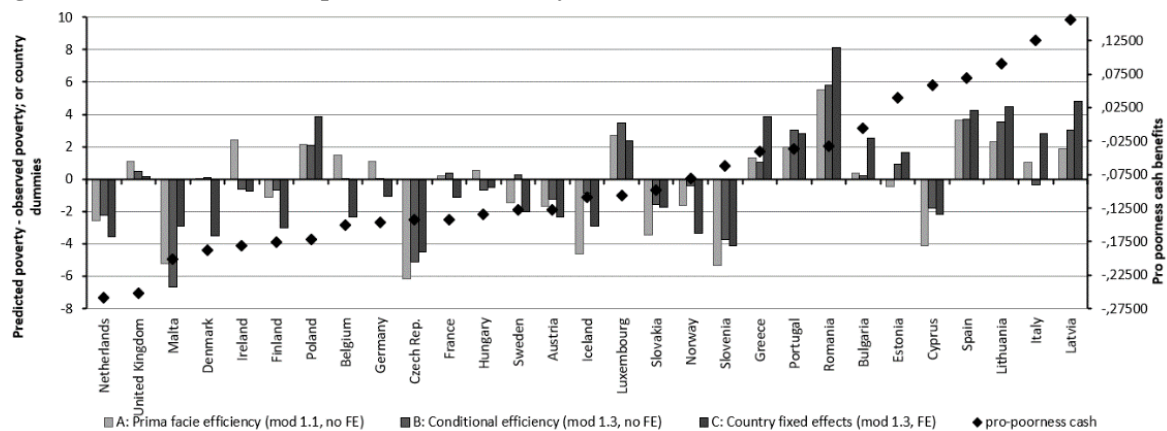
In contrast, the effect of working age cash benefits on poverty levels in the work-rich segment is insignificant, and even positive in some specifications, as shown in models 3.1, 3.2 and 3.3. In other words, whereas the level of spending and the pattern of participation in the labour market are clearly important factors in accounting for poverty in the work-poor segment of the population, differences in poverty within the work-rich segment are not readily explained. The analysis in chapter 3 does indicate that evolutions in poverty in the work-rich segment did play a significant role in the overall evolution in poverty in some European welfare states during the good economic years; explaining these evolutions in the work-rich segment, however, would appear to require explanations that go beyond basic parameters such as welfare state spending or crude employment patterns.

These observations justify the specific focus in the subsequent analysis in this book on levels of spending and work-intensity of households. Simultaneously, they indicate that one should dig deeper into the underlying fabric of welfare states and that a purely quantitative analysis will not suffice. Moreover, neither a correlation nor a decomposition provides an explanation, let alone a causal one; but they do at least apply structure to our understanding of the data.

1.4 The ‘Efficiency’ of Social Spending

Some welfare states display poverty outcomes that seem rather feeble given their level of social spending and their employment record. Other welfare states obtain poverty results that are better than one would expect on the basis of their social spending level and employment record. Figure 1-8 illustrates this observation on the basis of some of the regression models listed in Table 1-2.

Figure 1.8: Indicators of comparative (in)efficiency of welfare states



Source: Results of regression analyses on SILC en EUROSTAT spending data. Pro-pooriness is average value of age specific concentration coefficients for the non-elderly population on the basis of SILC 2005-2010 (see Vandenbroucke et al., 2013). Positive indicators measured on left axis signal comparative (conditional) inefficiency. Pro-pooriness indicators below the horizontal axis signal a higher degree of pro-pooriness than the average.

For each country, Figure 1-8 shows:

- the average residuals in model 1.1 without country fixed effects (indicator A). Positive values indicate that the observed levels of poverty are higher than what one would predict when using model 1.1 without country fixed effects, i.e. when only controlling for the level of spending on working-age cash benefits;
- the average residuals in model 1.3 without country fixed effects (indicator B). Positive values indicate that the observed levels of poverty are higher than what one would predict on the basis of levels of spending, work poverty and the relative severity of work poverty;
- the value of the country dummies in model 1.3 with country fixed effects (indicator C).

It is tempting to interpret the residuals in Figure 1-8 as alternative indications of the comparative ‘efficiency’ of different welfare regimes. The indicator A might be seen as a ‘*prima facie*’ measure of the comparative efficiency of spending on working-age cash benefits: countries such as the Netherlands, the Czech Republic, Slovenia, Slovakia, Cyprus, Ireland and Malta perform better than one would expect solely on the basis of their level of social spending; in contrast, countries such as Ireland, Belgium, Poland, Luxembourg, Portugal and Spain perform less well than one might expect. Next, the indicator B might be seen as an expression of ‘conditional efficiency’, i.e. the efficiency of spending, given the employment record of the country. So conceived, it appears that the *prima facie* efficiency of the Netherlands or the Czech Republic does not diminish when we control for employment: it must be explained by other factors. In the same vein, it appears that the *prima facie* inefficiency of Poland, Portugal, Spain and other comparatively inefficient countries is not

reduced when we control for their employment record. In contrast, the *prima facie* inefficiency of Ireland and Belgium is explained by their employment record.

The indicator C (the value of the country dummies) captures fixed institutional and sociological features of countries, in a model that explicitly allows for that and thus yields a much lower coefficient for spending. Because the level of spending has a lower impact on predicted poverty in this model, welfare states that are comparatively ‘big spenders’, such as Denmark, Finland and Belgium, now emerge as having comparatively efficient underlying features (with a view to preventing poverty) when we use indicator C. In general, because the influence of spending is more modest when estimated using country fixed effects, the residuals across nations become wider; high spending Northern states become more efficient, while low spending Southern and Eastern states become more inefficient. If we indeed perceive the model including the dummies as a more appropriate one when estimating the true impact of spending, this difference is made up of the fact that the effect of spending when measured across nations picks up on many other relevant country-level characteristics. If these effects are factored out, we would obtain the (in)efficiencies that are truly part of the underlying fabric of the nation (net of the variables included in the model) and (in)efficiencies will become more disperse again.

Both indicators B and C take into account the employment record of welfare states. In that sense, the usage of the word ‘efficiency’ might be misleading. A welfare state with a high level of work-poverty and a high level of social spending may appear ‘efficient’ according to indicator B, i.e. poverty may be lower than predicted on the basis of that combination of work-poverty and spending, but if inadequately organized social protection creates inactivity traps and increases work-poverty, such an assessment is misleading: given its level of social spending, this welfare state may in fact be rather inefficient.

It is interesting to combine the results of our regression models (indicators A, B and C in Figure 1-8) with the indicator of ‘pro-pooriness’ of cash benefits developed by Verbist and Matsaganis in Chapter 6. For that reason, in Figure 1-8 we also show a concentration coefficient that is similar to the one on which Verbist and Matsaganis’ ‘pro-pooriness’ indicator is based. Calculating concentration coefficients indicates how income components are distributed, irrespective of their size. To calculate these concentration coefficients, individuals are ranked according to their income. When the concentration coefficient has a value that is lower than the Gini coefficient of income, lower incomes benefit relatively more: individuals receive a higher share of the income component than their share of income. Thus, these concentration coefficients provide insight into the pro-pooriness of the various income components, independent of their size. (Verbist and Matsaganis’ indicator is based on an extended income concept and a needs-adjusted equivalence scale; here we use a concentration coefficient based on cash incomes only and with standard equivalence scales; it is also confined to the distribution of transfers in the non-elderly population; see Vandenbroucke *et al.*, 2013, for the calculation of age-specific concentration coefficients.) There is a positive correlation between the average value of this ‘pro poorness’-indicator in SILC 2005-2010 and the indicator C.. These observations justify not only the focus on ‘pro-pooriness’ in Chapter 6, but also the examination of the distribution of benefits over subgroups of the population, defined on the basis of work-intensity, in Chapter 5. However, one must not conclude from this positive correlation that the degree of pro-pooriness of

working-age cash benefits has *as such* a significant *direct* impact on poverty rates. A more fine-grained analysis shows that the unexplained disparity in the residual C reflects differences in the underlying societal fabric of welfare states, which correlate with differences in the level and architecture of social spending, GDP per capita and past investment in education, training, child care and active labour market policies; but these differences in the underlying societal fabric are not readily explained by any of these factors separately, since they correlate strongly with each other (Vandenbroucke *et al.*, 2013, show this for the analysis of child poverty, but this conclusion also holds for non-elderly poverty).

To conclude, there are several factors that shed some light on the poverty performance of European welfare states. Spending is a big factor explaining the dispersion of poverty rates, but its exact impact differs strongly across methods and samples. Work-intensity further equalizes the field, and mainly helps in explaining why good countries do well, rather than why bad countries do badly. Additional indicators that we believe are closely related to the ‘underlying fabric of the nation’ can provide additional insights. Past investments in education and the labour market help explain why Scandinavian welfare states have such good employment records, and, linked to that, good poverty records. The degree of pro-poorness of benefits may help explain why the Netherlands is a strong performer, and why Spain is a weak one. In general, the analyses provide answers to why good countries do well, but often leave unexplained why the poverty records of other nations are so poor. The same indicators that explain excellence do not help much in explaining weakness. But also on the side of the winners, there is a big puzzle in the excellent performance of especially Czech Republic and Slovenia that is left unsolved. Many weak performers have low spending levels, which can also call into question the right fit of the relation between spending and poverty. This can be much steeper for lower levels of spending. However, the success of the new central-European welfare states debunks this argument partly, since they achieve their low poverty levels with very modest levels of spending. In short, there is still an important research agenda with regard to these issues.

Despite these cautionary notes, the issue of ‘efficiency’ is important. Efficiency is not the *prime virtue* of welfare states: we may prefer a welfare state that spends a lot with average efficiency to a welfare state that spends very little with a high degree of efficiency. However, during our inquiry we were struck by the persistence of vast disparities in efficiency, so conceived, of cash benefits for working-age households across the EU. Since this indicates room for improvement, it should be high on the EU agenda (Vandenbroucke 2012, Vandenbroucke *et al.* 2013). However, in addition to some of the cautionary notes already indicated, a number of basic *caveats* apply with regard to this conceptualization of ‘efficiency’.

First, ‘efficiency’ must be defined in relation to an objective. In our analysis, the efficiency of spending refers to the objective of reducing poverty, not to any other, possibly equally legitimate, objective (such as reducing income insecurity or specific family policy objectives and/or promoting gender equality). More specifically, efficiency of spending is assessed here in terms of a poverty headcount, using 60 per cent of median income as the poverty threshold. Obviously, the choice of threshold matters. Theoretically, policy changes may reduce the efficiency of spending measured by the 60 per cent threshold and yet enhance efficiency measured by a threshold of 40 per cent of median income; increased targeting at

the very poor might yield such an outcome. In such an event, efficiency decreases with regard to the poor but increases with regard to the very poor. For this reason, the efficiency analyses proposed here and elsewhere in this book ideally ought to be repeated with different poverty thresholds (or with the FGT1 and FGT2 indicators, introduced in Chapter 2).

A second *caveat* concerns the fact that we measure efficiency only in a comparative sense: we construct a benchmark on the basis of the average performance of EU welfare states (that is what the regression does). This presupposes that it makes sense to benchmark welfare states vis-à-vis a hypothetical, uniform ‘European welfare state technology’, encompassing welfare states with very different histories and dimensions. The benchmark may however be quite sensitive to the inclusion or exclusion of outliers. This approach moreover raises a host of statistical problems: since this virtual EU average is calculated on the basis of point estimates with wide confidence intervals, we should be extremely cautious when drawing conclusions. Furthermore, Eurostat spending data, which are collected on an administrative basis, and the data on social transfers actually registered in the SILC surveys may be quite different.

The third *caveat* relates to the fact that all our measurements neglect the longer-term societal and individual return of welfare programmes. As Hemerijck explains in Chapter 8, the core argument advanced by proponents of the social investment turn is that spending on social investment programmes creates a return. The assertion that social spending may serve a productive purpose may be extended to some ‘traditional’ social programmes, as De Deken argues in Chapter 9. The indicators with regard to welfare state efforts presented in this book measure only the cost of programmes, not their return. In the case of education, for example, they measure how much it would cost for a household to provide education for its children without public subsidy, not the longer-term impact on individuals and society of providing education, neither in terms of macroeconomic consequences nor in terms of income distribution. Likewise, they do not measure the impact of childcare on female participation rates and labour market earnings associated with participation. Hence, what we provide here are static indicators of the short-term distributive impact (or rather merely the immediate impact) on household budgets of transferring cash benefits or subsidizing consumption of education, care, etc. We display no dynamic indicators of efficiency in this exercise, so that it does not settle disputes on the strengths and weaknesses of the social investment turn, so conceived.

The final *caveat* is that the efficiency notion examined here is static in yet another sense: it may be the case that a programme that is less efficient than the academic observer may wish nonetheless enjoys broad popular support because of the benefits it creates for middle-class households. The well-known argument by Goodin and Le Grand (1987) that universal programmes may be more politically robust, and hence more beneficial to the poor in the longer term, refers to a dynamic notion of efficiency that is not captured by our figures either. Cantillon *et al.* examine the viewpoint of Goodin and Le Grand in Chapter 5. The same observation might be made in relation to the development of social services when considering the findings of Verbist and Matsaganis in Chapter 6.

1.5 Poverty Reduction by Transfers and the ‘Poverty Stabilizing’ Role of Welfare States

In order to better contextualize the poverty records of welfare states, we use two additional notions of a counterfactual nature: the at-risk-of-poverty rate ‘before social transfers’ and ‘poverty reduction by transfers’. Pensions are not included in transfers. In the remainder of this chapter, we will use ‘pre-transfer poverty’ and ‘poverty reduction’ as shortcuts. Both counterfactuals should be interpreted with circumspection. Poverty reduction is defined as the difference between post-transfer poverty (i.e. the poverty rates actually observed) and pre-transfer poverty. Following the Eurostat methodology, we exclude social transfers except pensions transfers – but not taxes – from household incomes in the SILC survey results and then calculate ‘pre-transfer poverty rates’ using the same poverty thresholds as in the ‘post-transfer’ calculation. ‘Poverty reduction by transfers’ should not be read as ‘the level of poverty that would be obtained in the absence of social transfers’, for a combination of reasons. First, the poverty threshold is not adapted to what it would be without transfers. Second, the taxes funding social transfers are not added to incomes in the counterfactual. And third, this manipulation of the data does not take into account possible behavioural changes induced by the abandoning of transfer policies and concomitant reductions in taxation. Figures on ‘poverty reduction by transfers’ rather indicate the quantitative significance of social transfers in terms of a counterfactual poverty rate, in a particular equilibrium that is created by, among other factors, those same transfers and the taxes financing them, and with reference to the median income shaped by transfer and tax policies.

Table 1-3 presents the results of regression models, using pre-transfer poverty and poverty reduction as dependent variables and spending and household employment indicators as independent variables, and time dummies; results are presented with and without country fixed effects. The analysis covers SILC 2005 to SILC 2011.

Table 1.3: Effect of spending and work intensity on pre-transfer poverty and poverty reduction

	COUNTRY FIXED EFFECTS			NO COUNTRY FIXED EFFECTS		
Outcome	Spending	Work poverty	Relative severity of work poverty	Spending	Work poverty	Relative severity of work poverty
Pre-transfer Poverty	7.17*** (0.746)	1.30*** (0.287)	1.67*** (0.224)	2.36*** (0.464)	1.88*** (0.142)	2.04*** (0.160)
Poverty Reduction	7.96*** (0.508)	0.746*** (0.265)	0.449** (0.177)	7.87*** (0.411)	0.123 (0.119)	1.32*** (0.148)

Source: Analysis on the basis of EU-SILC and EUROSTAT spending data. Table shows the effect of spending in working age cash benefits (WACB) on pre-transfer poverty rates and poverty reduction through transfers, for both a model with and without country fixed effects. Both models are GLS estimations with heteroskedastic error structure, and include time dummies. Controls are added for either individual employment rates or work poverty and the ‘relative severity of work poverty’. Dependent variables are the overall pre-transfer poverty rate and poverty reduction.

There is a significantly positive relationship between pre-transfer poverty rates and levels of spending. Estimates without fixed effects yield weaker coefficients on spending; this presumably occurs through the fact that high spending is more prominent in egalitarian societies (such as in Scandinavia), which imposes a negative bias. The result either suggests that cash benefits provide strong disincentives to work and stay out of (pre-transfer) poverty, or that high spending is a reaction to high pre-transfer poverty. The coefficients on the measures of work-intensity are significant and have the expected positive sign.

The second model in Table 1-3 shows that the relationship between spending and poverty reduction is highly significant. Again, differences in poverty reduction are driven by work poverty and the relative severity of work poverty.

It is worth to emphasize that, in virtually all specifications of this kind, the relative severity of work poverty explains a substantial part of the variation in poverty rates, even when we control for country and time fixed effects, and even when we already include a measure of the share of the work-poor in the model. Hence, this specific measure of the distribution of work-intensity at the very bottom is highly relevant. That observation again supports the focus on jobless households and very work-poor households as a recurring theme in this book.

A high degree of poverty reduction is not necessarily a measure of quality of performance of a welfare state. In the same vein, one should not interpret the relationship between poverty reduction and the level of spending as an indicator of the efficiency of welfare states. It may appear that a welfare state performs ‘efficiently’ in terms of the relation between its level of spending and the extent of ‘poverty reduction’ attained, if the ratio ‘poverty reduction/spending’ is relatively high, compared with other welfare states. But if social benefits create inactivity traps to the effect that pre-transfer poverty is very high in that particular welfare state, describing this as comparative ‘efficiency’ may be misleading. This particular welfare state may merely be ‘efficient’ in remedying a problem of inactivity traps it has actually created itself.

In the next section, we proceed with the analysis of *changes* in the poverty record of individual welfare states on the basis of decomposition techniques. Decomposition analysis does not reveal causality: it is basically an accounting device. However, it yields interesting descriptions of country-specific trajectories of welfare state change. Obviously, in order to be relevant in a comparative perspective, the factors on which these decompositions focus – notably the work-intensity of households –, must also have some general explanatory power in a cross-country analysis. As already indicated, the regression result reported in this chapter do support that. Space forbids to elaborate here upon regression analyses on *changes* in poverty rates. But the results can be summarized as follows (Vandenbroucke, Diris and Verbist, 2013). There is an obvious and relatively strong positive correlation between changes in spending and changes in poverty reduction, which can be revealed by applying first difference regression models to the data we explored in the previous section, covered by SILC 2005-2011. This correlation is obvious for the reason that if poverty reduction by transfers increases, one may assume (absent important structural changes in the transfer system) spending on transfers also to increase. In a well-organized welfare state, one may also expect a correlation between changes in household employment and poverty reduction:

increasing employment reduces the need for poverty reduction by transfers, whilst decreasing employment fuels the need for poverty reduction. Yet, this relationship is less mechanistic, and may depend on the architecture of welfare states and, possibly, on the impact of ongoing policy changes. However, the positive relationship between changes in poverty reduction and changes in the share of individuals living in work-poor households also emerges in first difference regression models.

Welfare states absorb social risks, at the level of both the individual and society in general. Poverty ‘before transfers’ is linked to social risks that are, in part, of a cyclical nature or that may be the result of economic shocks, such as the risk of unemployment. When pre-transfer poverty increases, as in periods of rising unemployment, we expect increasing poverty reduction, as an endogenous mechanism. Welfare states function, to some extent, as automatic ‘poverty stabilizers’, just as, from a macroeconomic point of view welfare states act as Keynesian ‘automatic stabilizers’.⁹ Hence, one should distinguish between a welfare state’s *structural capacity* to reduce poverty through transfers, as a potential shock absorber, and the *actual* reduction of poverty by transfers at any one point in time, given a specific pre-transfer poverty rate and unemployment situation at that particular juncture. A precise assessment of a welfare state’s capacity to reduce poverty requires an examination of the actual poverty reduction at different points in time. If institutions change over time, a counterfactual microsimulation of poverty reduction on the basis of unchanged institutions is required in order to evaluate the impact of those changes on their poverty reduction capacity. Without such an analysis, it may be premature to infer from a decrease in actual poverty reduction in a given welfare state that that welfare state’s capacity to reduce poverty through transfers has diminished, or, more generally, that its redistributive capacity has decreased. This being said, the data used in this book, with their focus on household work-intensity, allow some *prima facie* judgements, as will be illustrated in the next section.

1.6 Analyzing Changes in Poverty Reduction and at-risk-of-poverty Rates by Means of Decomposition

How might we discern *structural changes* in the capacity of individual welfare states to fight poverty? In principle, there are two ways of approaching this challenge, based on *prima facie* evidence that the structural capacity of a welfare state to fight poverty is declining. Both rely on decomposition of changes.

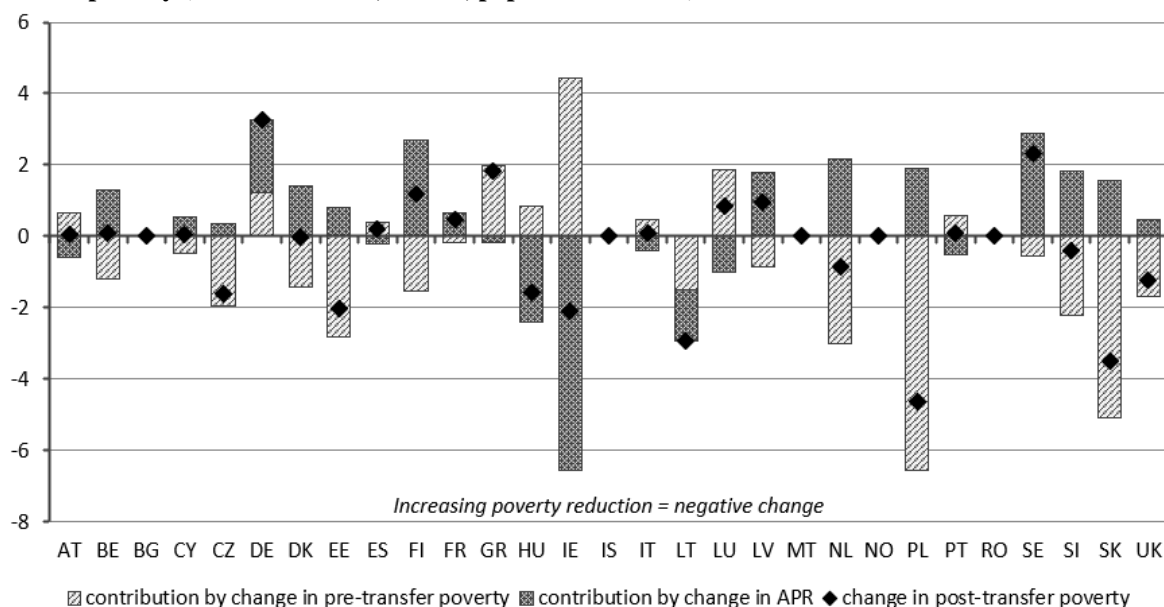
First, we may look for contradictory changes in pre- and post-transfer poverty that offer such *prima facie* evidence. If post-transfer poverty increases while pre-transfer poverty decreases, the expectation we hold with regard to the normal functioning of a welfare state on the basis of ‘unchanged policy’ is clearly contradicted. For the years covered by SILC 2005-2008, Finland provides such a clear-cut case, as shown in Figure 1-9a below. Our expectation with regard to the normal functioning of a welfare with ‘unchanged policy’ is also contradicted when poverty reduction decreases while pre-transfer poverty increases. Germany provides such a case (on the basis of SILC), also shown in Figure 1-9a below.

A *second* approach to looking for such *prima facie* evidence starts from the notion that, with unchanged policies, poverty reduction will automatically change over the course of the economic cycle because the share of the work-poor will change. Typically poverty reduction

by transfers is larger in the work-poor subset of the population than in the work-rich subset; an increasing share of individuals living in work-poor households implies an increasing level of poverty reduction for the total population. In yet other words, this approach sees poverty reduction for the total population as the weighted average of poverty reduction in the work-poor and the work-rich segment. A simple decomposition then allows one to calculate the extent to which changes in poverty reduction for the total population are (i) the result of changes in the share of the work-poor (which is the automatic, endogenous change one would expect), and/or (ii) the result of changes in poverty reduction within the work-poor and/or the work-rich segments. The latter may signal, *prima facie*, a change in policy, or, more generally, a change in a welfare state's structural capacity to fight poverty. However, we should emphasize 'may signal', since changes in poverty reduction within the work-poor and/or the work-rich segments can also be the result of changes in the work-intensity of households within these subgroups, i.e. they can also reflect endogenous countercyclical impacts within these subgroups. However, notwithstanding this *caveat*, such a mechanical composition yields interesting insights.

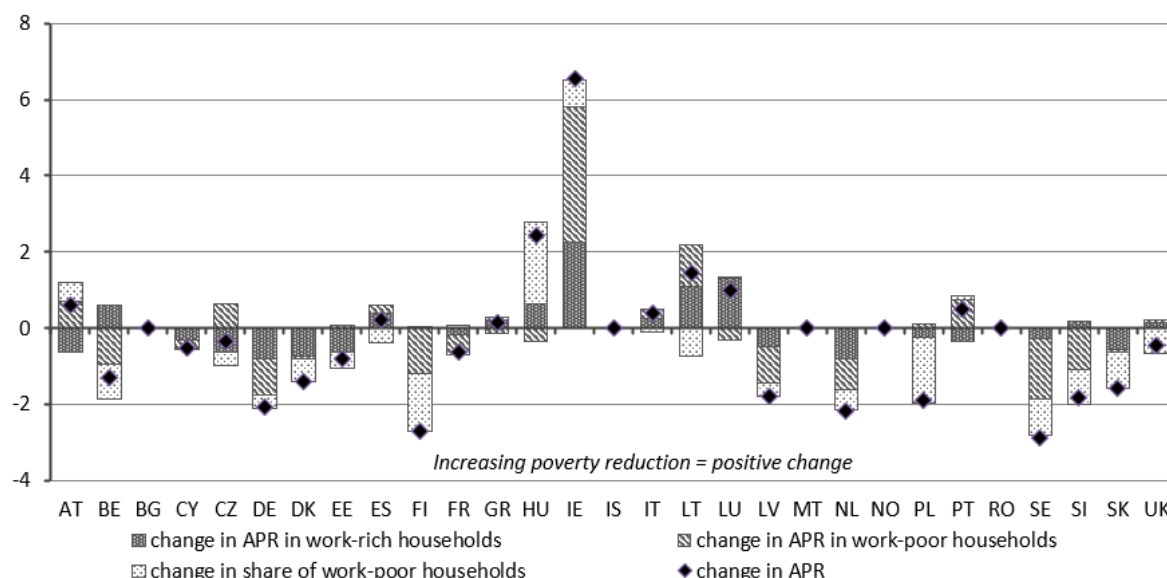
Figures 1-9a-b and 1-10a-b illustrate these approaches (here we focus on the population in the age bracket [20-59], as in Chapter 5, which further explores some of these issues). Figure 1-9a represents the changes in pre-transfer poverty, poverty reduction and post-transfer poverty between SILC 2005 and SILC 2008; the contradictory changes in Finland and Germany are easily recognized. Figure 1-9b thus illustrates the first *prima facie* approach. Figure 1-9b adds to this the decomposition of the changes in poverty reduction. It illustrates the second *prima facie* approach.

Figure 1.9a: Contribution of changes in pre-transfer poverty and poverty reduction to changes in post-transfer poverty (SILC 2005-2008, AROP, population [20-59])



Source: Calculations on data provided by Aaron Van den Heede, based on EU-SILC User Database. ARP = Absolute Poverty Reduction.

Figure 1.9b: Decomposition of changes in poverty reduction, AROP, population [20-59], SILC 2005-2008

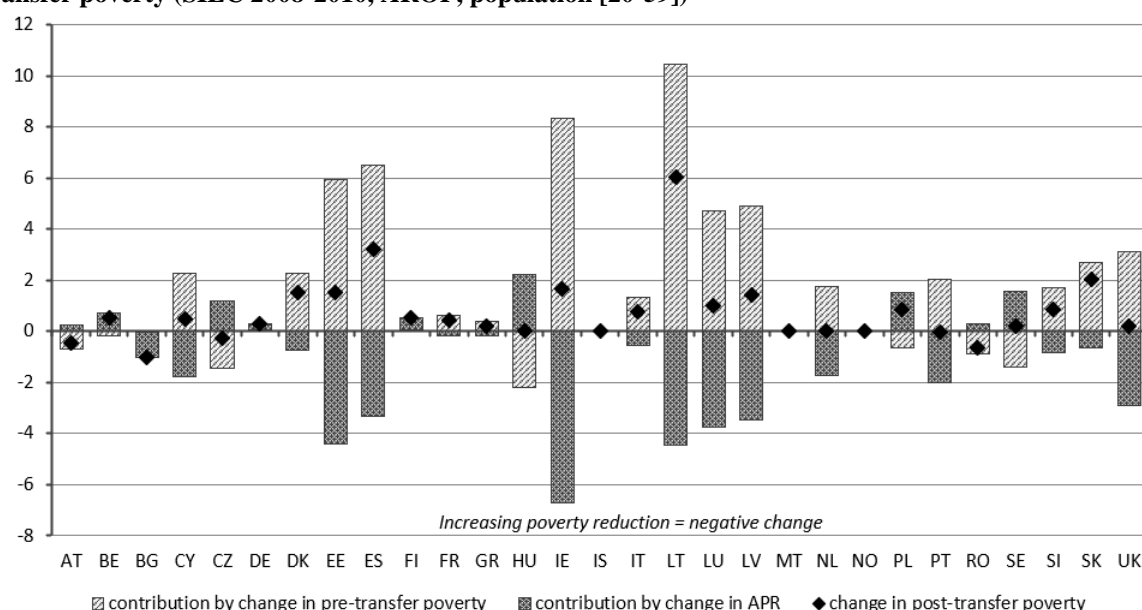


Source: Calculations on data provided by Aaron Van den Heede, based on EU-SILC User Database. ARP = Absolute Poverty Reduction.

Figure 1-9b shows that poverty reduction by transfers diminished with 2 ppt in Germany and Poland between SILC 2005 and SILC 2008. In Poland this is entirely accounted for by the decreasing proportion of individuals in work-poor households (i.e. the endogenous mechanism prevails); in Germany the decrease in poverty reduction is the result of the decreasing poverty reduction *within* both the work-poor and the work-rich segments, which suggests policy change. In Finland poverty reduction decreased both because of the decreasing proportion of work-poor households (the endogenous mechanism) and the decreasing degree of poverty reduction in the work-poor segment of the population. In Sweden the balance in our account of decreasing poverty reduction tilts even further towards the side of ‘policy change’: the decrease in poverty reduction within both the work-poor and the work-rich segments of the population overshadowed the endogenous impact of improving household employment. Ireland displays exactly the opposite scenario to that observed in Germany: poverty reduction increased in Ireland because it increased both within the work-poor and the work-rich segments, and because the share of the work-poor segment grew during those years (despite rising individual employment rates, according to LFS; see Figure 1-4).

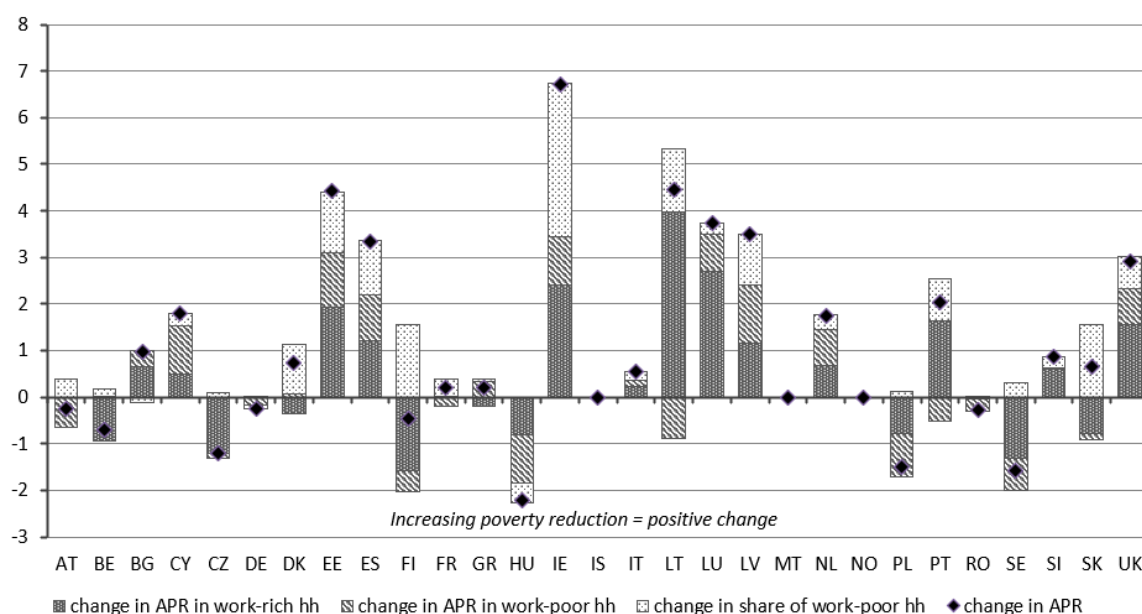
Figures 1-10a-b repeat the same exercise for changes between SILC 2008 and SILC 2010.

Figure 1.10a: Contribution of changes in pre-transfer poverty and poverty reduction to changes in post-transfer poverty (SILC 2008-2010, AROP, population [20-59])



Source: Calculations on data provided by Aaron Van den Heede, based on EU-SILC User Database. ARP = Absolute Poverty Reduction.

Figure 1.10b: Decomposition of changes in poverty reduction, AROP [20-59], SILC 2008-2010



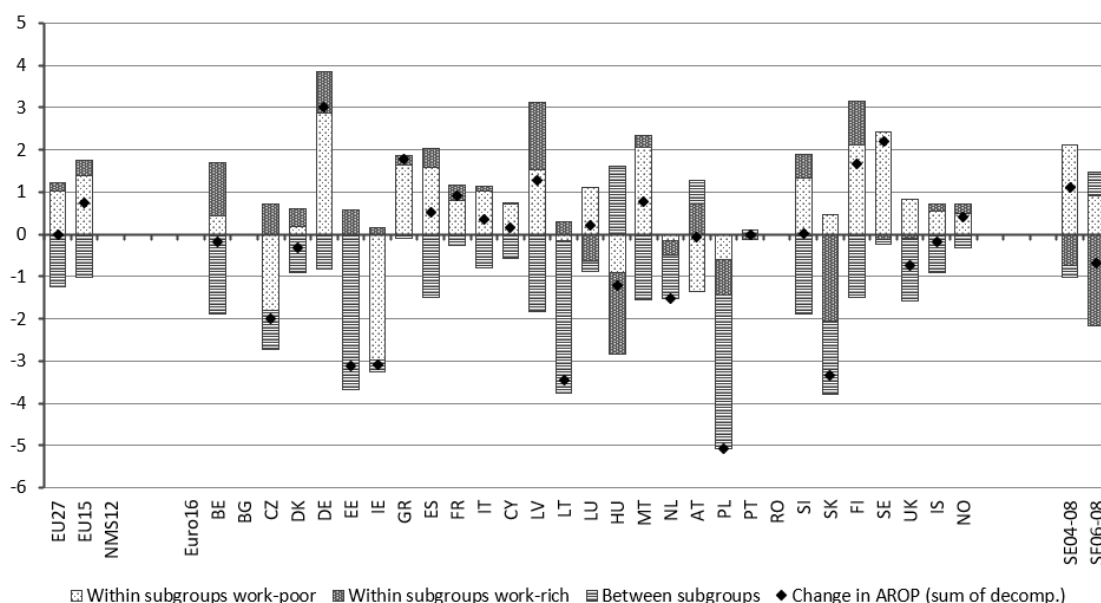
Source: Calculations on data provided by Aaron Van den Heede, based on EU-SILC User Database. ARP = Absolute Poverty Reduction.

Figure 1-10a clearly reveals the impact of the economic crisis: pre-transfer poverty increases in many welfare states, but this increase is partially offset by increasing poverty reduction. Figure 1-10b shows that increasing poverty reduction is partly attributable to the rising share of work-poor households, which illustrates what we called the ‘endogenous’ mechanism. But in many welfare states poverty reduction also increased within the subgroups of the work-rich and the work-poor. This corroborates our earlier *caveat* that an endogenous countercyclical mechanism may also be at play *within* the work-intensity subgroups we distinguish here.

Since SILC 2010 refers to incomes in 2009, our analysis only covers incomes in the first ‘full crisis’ year, 2009. Analysis of SILC 2011 suggests that the cushioning effect of increasing poverty reduction by transfers weakened in 2010. Probably, budgetary constraints and austerity measures explain the weaker impact of poverty reduction after 2009.

Although they cannot be conclusive, these decomposition analyses show that the countercyclical ‘poverty stabilizing’ character of welfare states in general still prevails, but simultaneously suggest that in some European welfare states the structural capacity to reduce poverty declined in the second half of the 2000s. There is yet another way to approach this question on the basis of decomposition, which is presented in Figures 1-11 and 1-12. Here, our attention returns to changes in post-transfer poverty rates.

Figure 1.11: Decomposition of change in AROP [0-59], SILC 2005-2008



Source: EU-SILC, data retrieved from EUROSTAT-site.

Figure 1.12: Decomposition of change in AROP [0-59], SILC 2008-2011

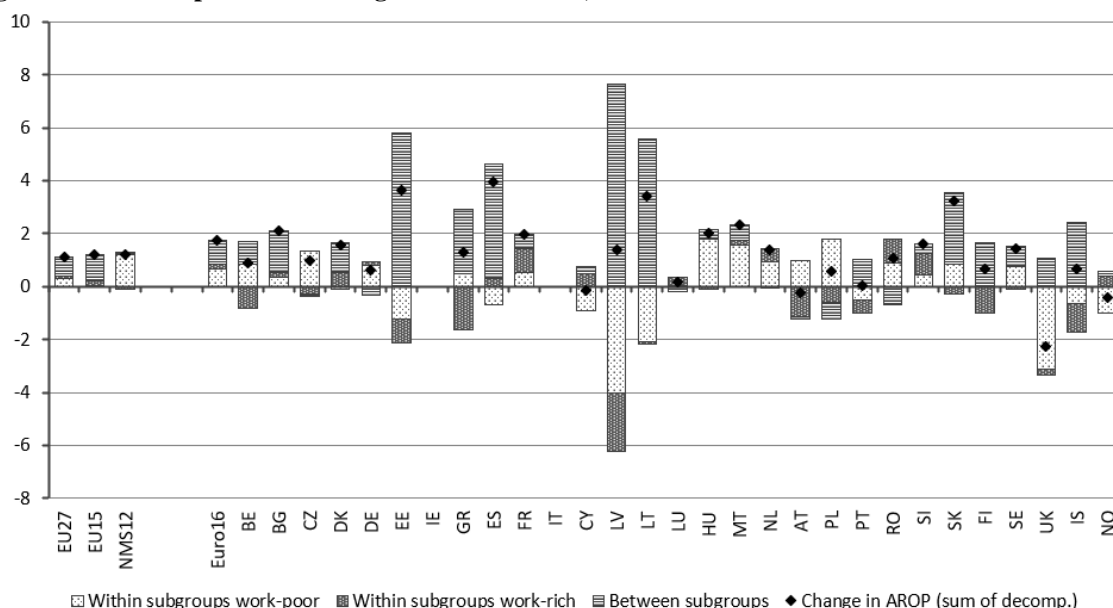


Figure 1-11 and 12 show the result of a decomposition of changes in at-risk-of-poverty rates, on the basis of five work-intensity subgroups, using the following work-intensity cut-offs: 20 per cent, 45 per cent, 55 per cent and 85 per cent. The population segment we label ‘work-poor’ encompasses the first three subgroups; the two other subgroups together constitute the ‘work-rich’. Changes in poverty are decomposed in ‘changes within’ and ‘changes between’ the five subgroups. ‘Changes within’ are attributable to changes in the at-risk-of-poverty rates within each of the subgroups (keeping their shares constant). ‘Changes between’ are attributable to changes in the relative shares of each of the subgroups (keeping the at-risk-of-poverty rates in each of the subgroups constant). To simplify the visual representation, ‘changes within’ are subdivided into ‘changes within’ in the segment of the ‘work-poor’ and ‘changes within’ in the segment of the work-rich. Thus, Figures 1-10 and 1-11 visualize three factors contributing to changing at risk-of-poverty rates: (i) changing poverty risks within each of the subgroups constituting the ‘work-poor’ segment; (ii) changing poverty risks within each of the subgroups constituting the ‘work-rich’ segment; (iii) changing shares of the five work-intensity subgroups.

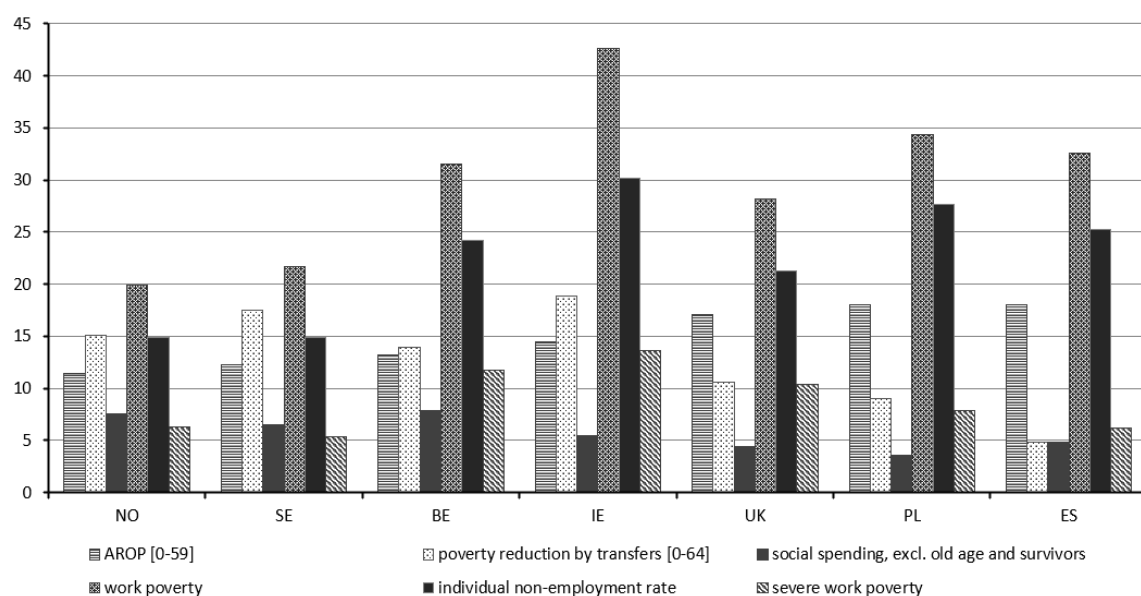
Figure 1-11 includes overall estimates for the EU27 and the EU15, based on Eurostat data. At the level of the EU27, the overall ‘gain’ in poverty rates due to improving household work-intensities between SILC 2005 and SILC 2008 was neutralized by the increase of poverty risks within the subgroups of the work-poor. For the EU15, the increase in poverty risks within the work-poor subgroups was more important than the positive contribution to poverty rates attributable to improving work-intensities.¹⁰ Between SILC 2008 and SILC 2011 the dynamics change, as shown in Figure 1-12: poverty rates increased in the EU27 and the EU15, and in many individual countries, mainly as a consequence of ‘changes between’, i.e. deteriorating household work-intensities. Figures 1-10 and 1-11 together illustrate that the overall increase in poverty rates by the end of the decade can be seen as the combined result of a boom without declining poverty in many Member States – as the gain in household employment was offset in many countries by increasing poverty risks within vulnerable subgroups of the population –, followed by a crisis with increasing poverty in many Member States.

1.7 Mapping Changes in at-risk-of-poverty Rates: Eight Trajectories

In this section we provide a ‘preview’ on individual trajectories of European welfare states during those years of boom and bust, which further illuminates the rationale of the inquiry presented in this book. This preview is based on a selection of eight welfare states. Two of those countries, Poland and Ireland, belong to the group of welfare states where poverty decreased between SILC 2005 and SILC 2008. Four welfare states, Spain, Norway, Belgium and the UK, belong to the group presenting a standstill in poverty between SILC 2005 and SILC 2008. Sweden and Germany belong to the third group, marked by increasing poverty (according to SILC) during the boom years. We will however analyse Germany on the basis of the German SOEP data. We have selected these eight welfare states not only because they illustrate divergent trajectories during the Lisbon era, but also because the observed relationships between poverty, poverty reduction by transfers and social spending are quite

different. Figure 1-13 displays the profile of the welfare states under review (excluding Germany), at the end of the boom period, on the basis of SILC 2008. We show levels of poverty, before transfers and after transfers (excluding pensions), levels of spending on cash benefits (excluding old-age and survivors programmes) as a percentage of GDP, the proportion of individuals living in work-poor households ('work poverty') and in very work-poor households ('severe work poverty'), and individual non-employment rates.

Figure 1.13: Profile of seven selected welfare states



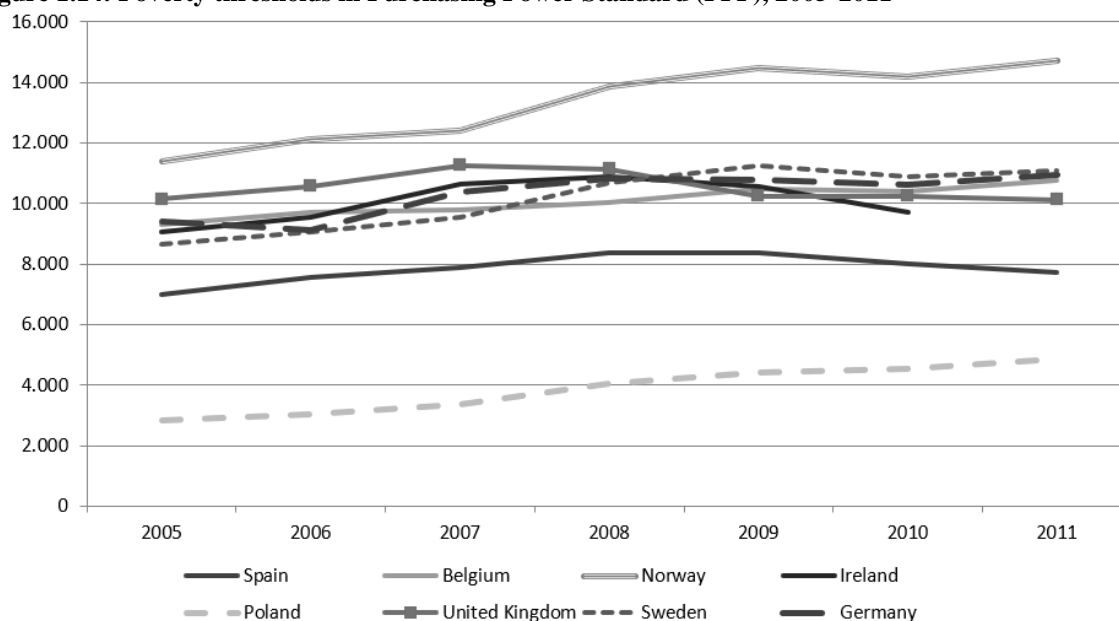
Source: EU-SILC 2008 & EUROSTAT for spending data; spending refers to 2007.

Figure 1-13 corroborates earlier observations about the 'map' of poverty, spending and employment in Europe. The negative correlation between levels of spending and post-transfer poverty appears to be very strong, as we gather countries with quite extreme scores on both counts. We also note a strong positive correlation between the proportion of individuals in work-poor households and individual non-employment rates, and the weaker correlation between the proportion of individuals in very work-poor households and individual non-employment rates (Belgium and the UK have a high proportion of individuals in very work-poor households, given their individual non-employment rates; this is illustrative of this weaker correlation). We also see a moderately positive correlation between the proportion of individuals in work-poor households and the level of poverty. Inspection of Figure 1-13, finally, reveals a positive correlation between social spending and poverty reduction by transfers, although it is less strong in this subset of welfare states than it is for the whole set of European welfare states. We deliberately included countries with very divergent profiles in this respect: poverty reduction by transfers appears to be very limited in Spain, given the country's level of social spending, and, by contrast, it appears to be high in Poland and Ireland, given their level of social spending. In short, our sample includes quite divergent welfare state architectures and labour markets.

This section will illustrate the disparity of changes over time in these welfare states and in Germany. However, before elaborating upon the specific trajectories of these welfare

states, we should consider one further *caveat*, in addition to the *caveat* with regard to efficiency and ‘poverty reduction by transfers’ mentioned earlier. We refer to the fact that changes in poverty rates conceal the movement of the poverty thresholds on which they are based. Figure 1-14 represents the evolution in the poverty thresholds for the seven welfare states under review. Thresholds are compared in Purchasing Power Parities (i.e. thresholds in Euros are corrected for price differentials between countries).

Figure 1.14: Poverty thresholds in Purchasing Power Standard (PPP), 2005-2011



Source: EU-SILC 2008 & EUROSTAT for spending data; spending refers to 2007. Years are equal to EU-SILC survey years.

The figure immediately reveals the huge differences in material prosperity across the EU27, but also a considerable dynamic of convergence: Norway’s poverty threshold was four times higher than Poland’s in SILC 2005; in SILC 2011, it was three times as high. Concurrently, we see striking differences in the evolution of the poverty thresholds. The poverty threshold increased dramatically in Poland (+70 per cent), but also considerably in Norway (+ 29 per cent) and Sweden (+28 per cent). By contrast, in Spain, the SILC 2011 poverty threshold had dropped to just 10 per cent above the SILC 2005 level and 8 per cent below the SILC 2008 level, reflecting the deep economic crisis and concomitant decline in median incomes. In the United Kingdom and Ireland, the crisis also reversed the upward trend in the poverty threshold; in the United Kingdom the SILC 2011 poverty threshold was identical to that in SILC 2005. Hence, the pattern of changes in relative financial poverty, calculated on the basis of these floating poverty thresholds, and changes in absolute material prosperity of the worst-off, is extremely disparate. The material deprivation indicator developed by Eurostat also illustrates this. Material deprivation is measured by an index of nine items relating to financial stress and the enforced lack of a list of durables. All persons living in a household that, at the moment of the interview, is deprived on at least three out of nine items are considered to be materially deprived. The contrast between Sweden and the United Kingdom provides a striking example of this disparate pattern: in Sweden, material deprivation diminished to an even lower level in the second half of the previous decade, whilst the at-

risk-of-poverty rate increased; in the United Kingdom, material deprivation increased (starting from an already high level), whilst the at-risk-of-poverty rate decreased. For Ireland, SILC 2010 shows a dramatic increase in material deprivation whilst poverty was still marginally lower compared to SILC 2005. In Poland, a boom in material prosperity went hand in hand with decreasing relative poverty.

These contrasting figures provide a warning against one-dimensional interpretations of the changes in poverty risks we consider in the remainder of this section. Below, we will underscore the argument that the increase in poverty reduction by transfers in the United Kingdom during the crisis years reflects the ‘automatically stabilizing’ pattern one might expect to observe in a welfare state, whilst the decreasing poverty reduction by transfers in Sweden casts doubt on the recent performance of the Swedish welfare state. The reader should bear in mind that the automatic stabilizers at work in the United Kingdom (and Spain) redistributed the impact of a deep economic crisis. While this is in line with what one might expect from a welfare state, it can hardly be regarded as a satisfactory state of affairs.

In this section we apply the conceptual apparatus developed in the previous sections to the trajectories of eight European welfare states during the Lisbon era. For seven countries, we sketch this trajectory on the basis of SILC, using data from SILC 2004 (or 2005) to SILC 2011. In the case of Germany, we rely instead on the German SOEP.

Figures 1-15 to 1-21 display nine key indicators concerning the non-elderly population during the years of boom and bust, based on SILC and Eurostat spending data, for the UK, Sweden, Spain, Belgium, Poland, Ireland and Norway:

- i. the at-risk-of-poverty rate;
- ii. the at-risk-of-poverty rate for individuals in work-poor households;
- iii. the at-risk-of-poverty rate for individuals in work-rich households;
- iv. work poverty, i.e. the share of individuals living in work-poor households;
- v. the at-risk-of-poverty rate for individuals in very work-poor households;
- vi. severe work poverty, i.e. the share of individuals living in very work-poor households;
- vii. the pre-transfer at-risk-of-poverty rate (pensions not included in ‘transfers’);
- viii. poverty reduction by transfers (pensions excluded);
- ix. spending on cash benefits (except old-age and survivor programmes), in per cent of GDP.

Because of the limited availability of data on SILC 2011 at the moment of writing, the indicators (vii) and (viii) do not refer to the age bracket [0-59], but to the age bracket [18-64]. Figure 1-23 provides a similar analytical grid for Germany but using SOEP and starting from SOEP 1995. We discuss this below.

Each of the graphs consists of three panels. Panel (a) shows the interaction of labour market developments, social spending and poverty reduction by transfers. Poverty reduction is defined here as post-transfer poverty minus pre-transfer poverty, i.e. the more negative the figure, the larger the reduction (when we refer to a ‘decrease in poverty reduction by transfers’, the corresponding figure becomes less negative). Panel (a) clearly illustrates the impact of the crisis, and the countercyclical trajectory of spending and poverty reduction by transfers (except in Sweden and Ireland). Panel (b) shows the evolution of poverty risks in the total non-elderly population, and in its two constituent parts as defined here: people living in

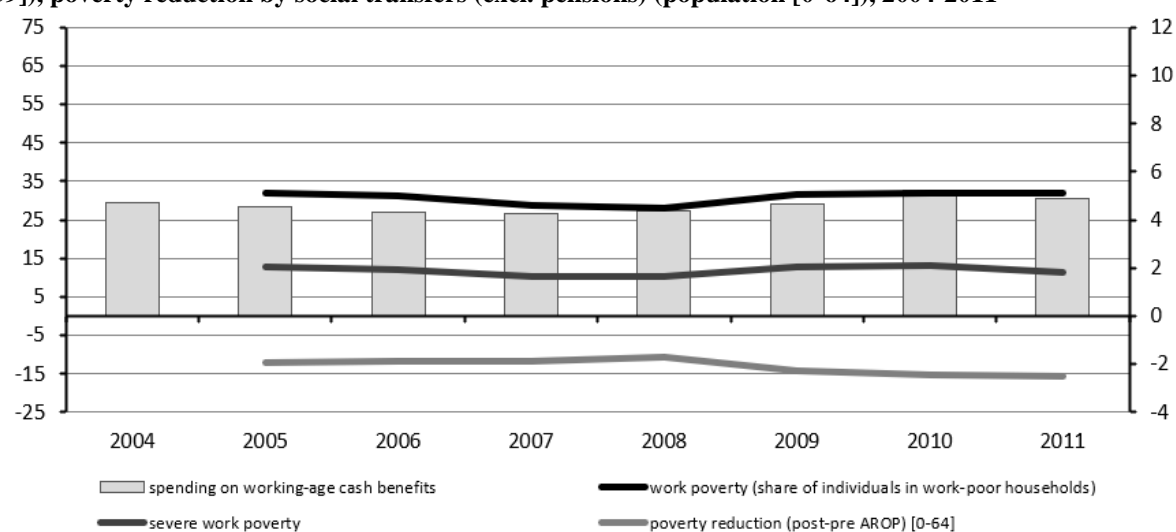
work-poor households and people living in work-rich households. In addition, panel (b) represents the poverty risk among very work-poor households, and, again, poverty reduction for the total population. The steady decline in poverty risks among the work-poor and the very work-poor in Ireland is mirrored in the steady increase in poverty reduction. By contrast, the steady increase in poverty risks among work-poor and very work-poor households in Sweden is reflected in the decrease in poverty reduction.

Panel (c) allows us to compare the evolution of post-transfer poverty risks and pre-transfer poverty risks, and the reduction in poverty through transfers. Norway provides a case where changes in pre-transfer poverty are completely neutralized by changes in poverty reduction. In the United Kingdom, the decrease in poverty reduction was less substantial than the decrease in pre-transfer poverty in the first half of the period under review (SILC 2005-2008), whilst the increase in poverty reduction was more substantial than the increase in pre-transfer poverty in the second half of the period under review (SILC 2008-2011). The net result is a steady decrease in post-transfer poverty. The Swedish figures display some irregularities that are hard to explain (and probably linked to sample problems), but, overall, the opposite pattern is observed: in the first half of the period under review, poverty reduction decreased more than pre-transfer poverty; in the second half of the period under review, again, poverty reduction decreased more than pre-transfer poverty (comparing SILC 2005 and SILC 2011). Hence post-transfer poverty steadily increased.

These graphs thus provide two ways to account for changes in the at-risk-of-poverty rate. First, the at-risk-of-poverty rate (indicator i, listed supra in our description of the graphs) is equal to the weighted average of the at-risk-of-poverty rate for individuals in work-poor households (indicator ii) and individuals in work-rich households (indicator iii), weighted by their respective shares in the population (indicator iv). Second, the at-risk-of-poverty rate is equal to pre-transfer poverty (indicator vii) minus poverty reduction by transfers (indicator viii). The evolution of poverty reduction correlates with the evolution of spending (indicator ix), as one might expect. Also, poverty reduction and pre-transfer poverty tend to correlate, though in different ways in different countries. The graphs also allow us to verify the extent to which the evolution of pre-transfer poverty and poverty reduction correlate with the evolution of the share of individuals living in work-poor households and very work-poor households, i.e. the extent to which welfare states interact with changing conditions in labour markets. As already explained in sections 5 and 6, a priori, and on a *ceteris paribus* basis, one might expect to see positive correlations here; however, this is not the case in all the countries under review. Figures 1-8b and 1-9b in section 6 explain why.

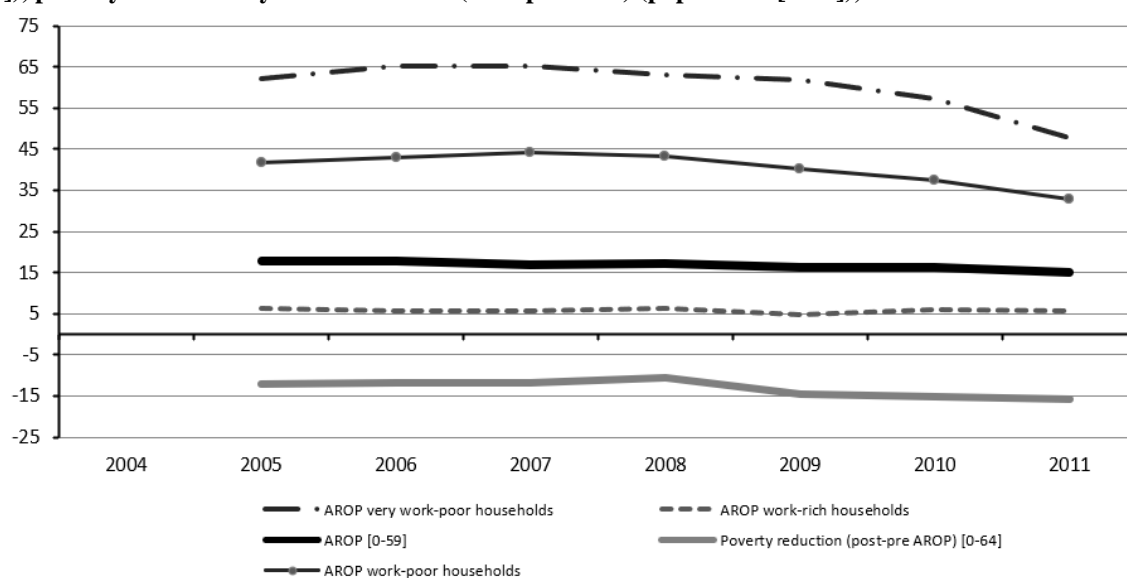
The at-risk-of-poverty rate of individuals in very work-poor households is added in the graphs, as this is where the most notable changes occur.

Figure 1.15a: United Kingdom, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



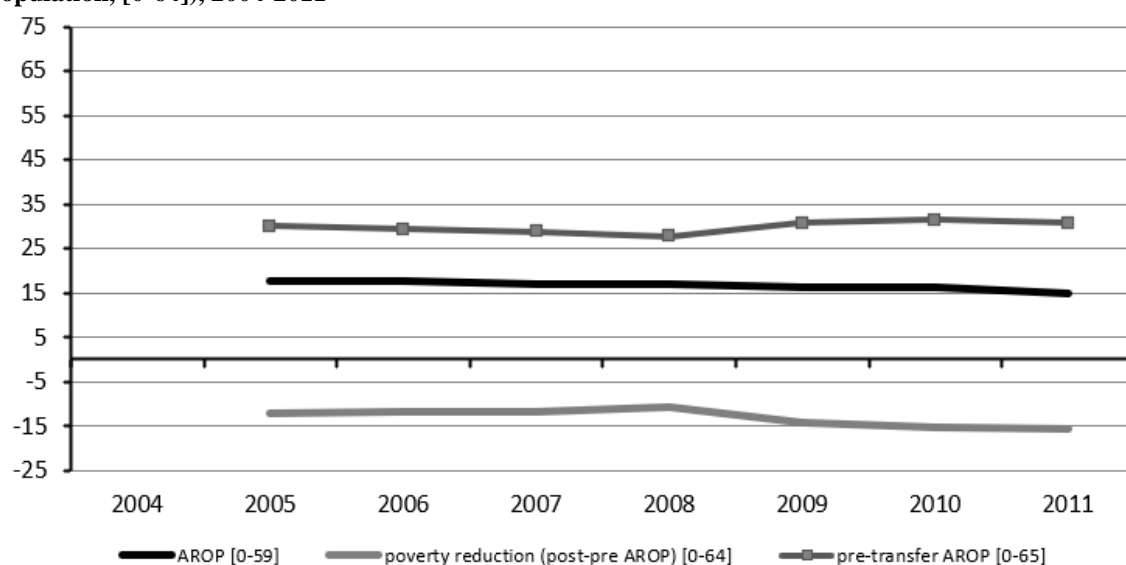
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.15b: United Kingdom, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



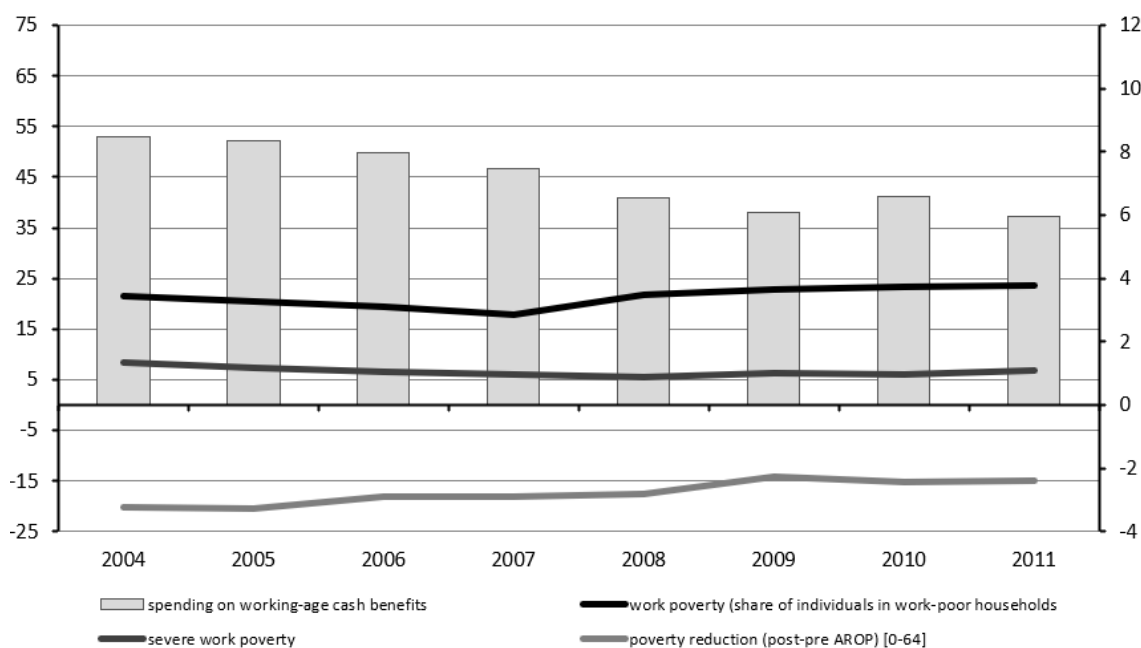
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.15c: United Kingdom, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), pre-transfer AROP (population, [0-64]), 2004-2011



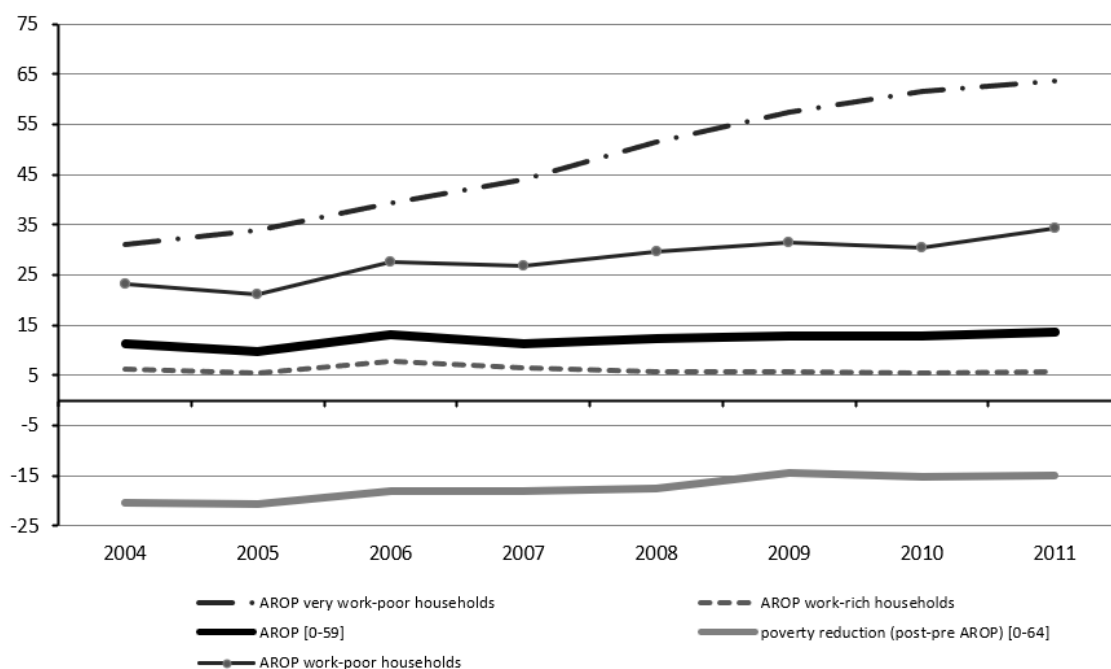
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.16a: Sweden, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



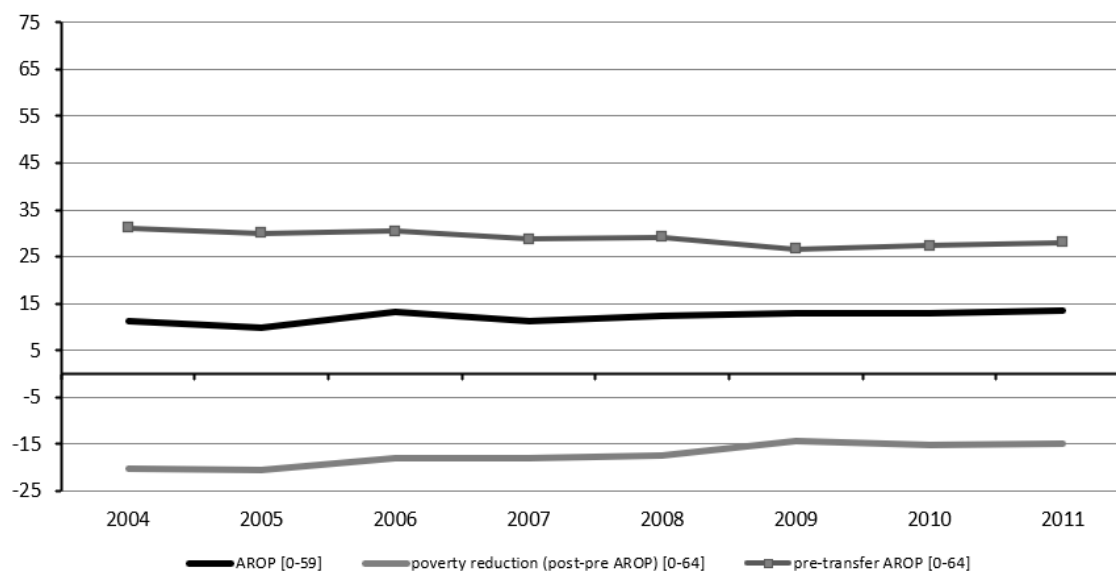
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.16b: Sweden, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



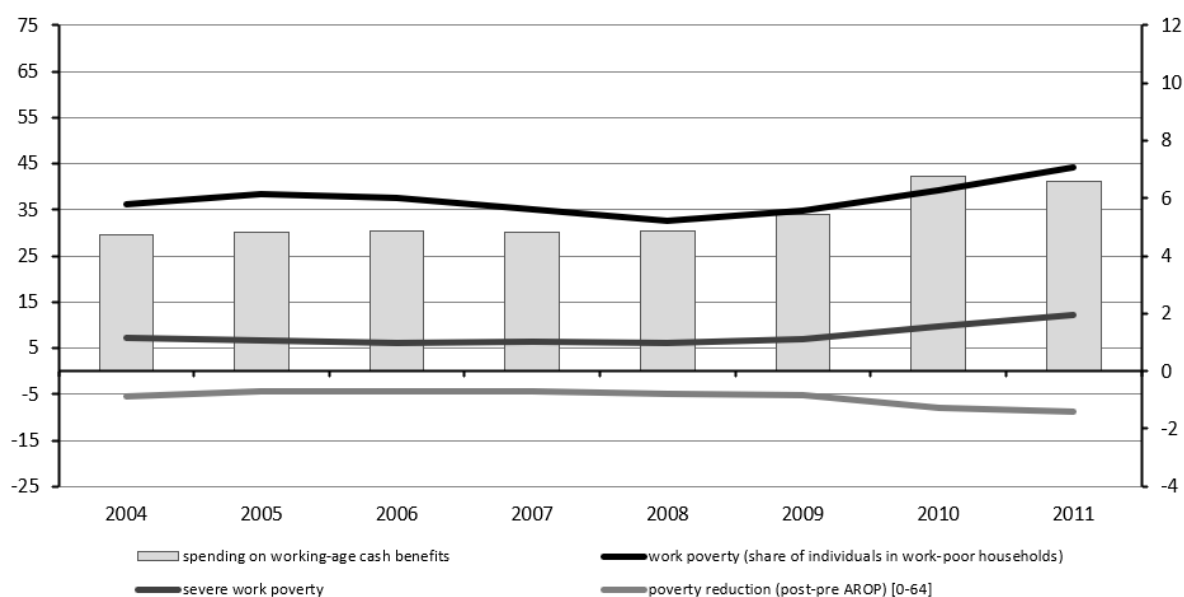
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.16c: Sweden, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



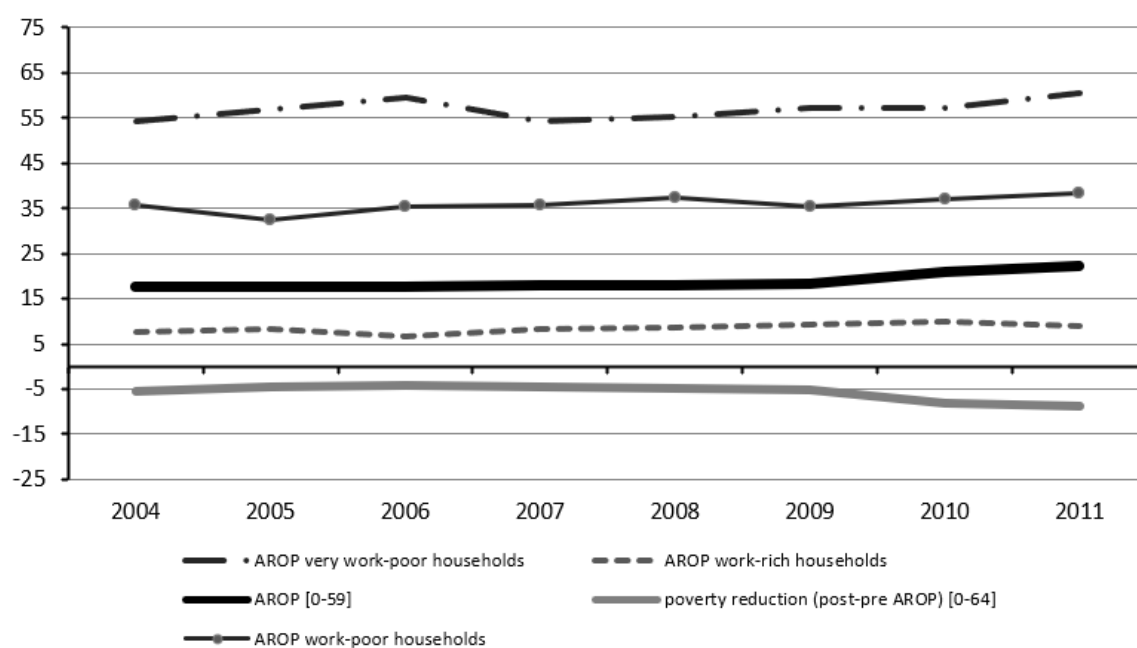
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.17a: Spain, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



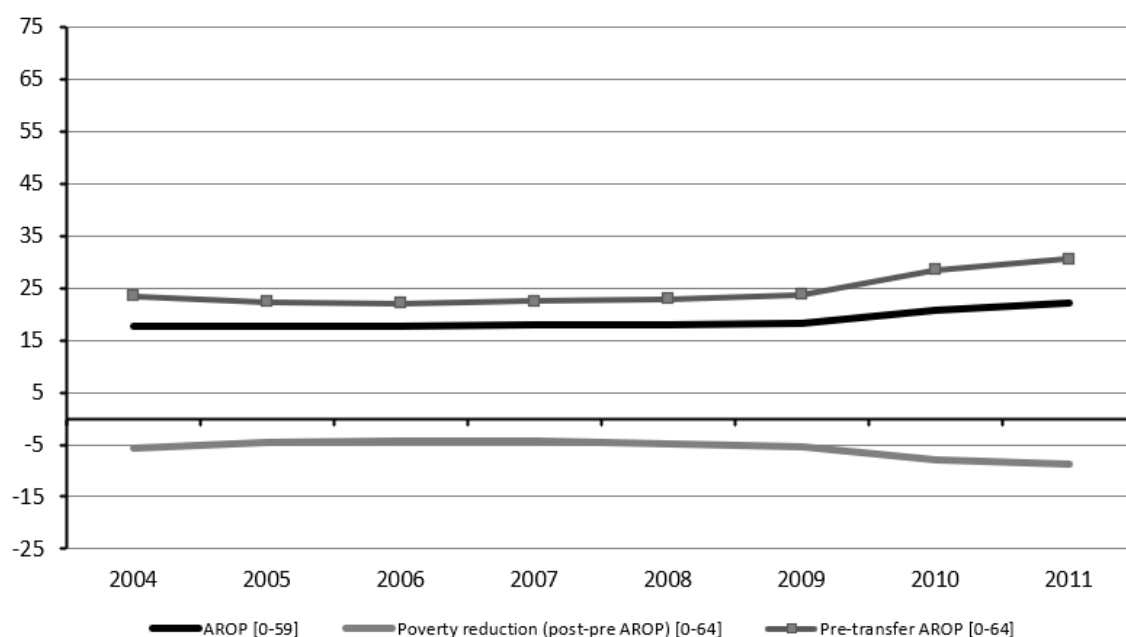
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.17b: Spain, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



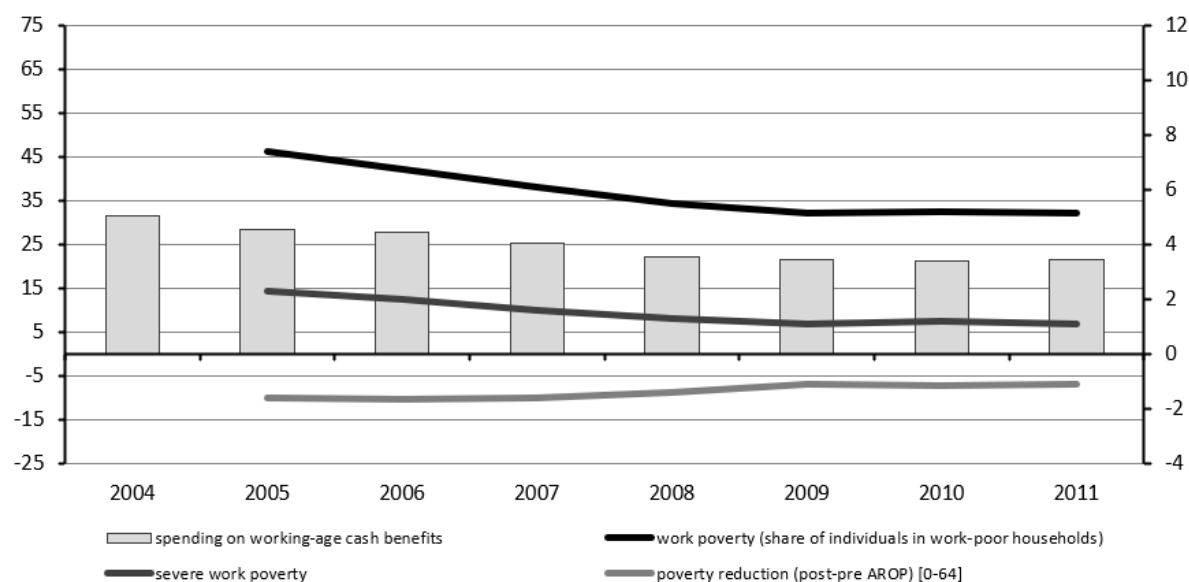
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.17c: Spain, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



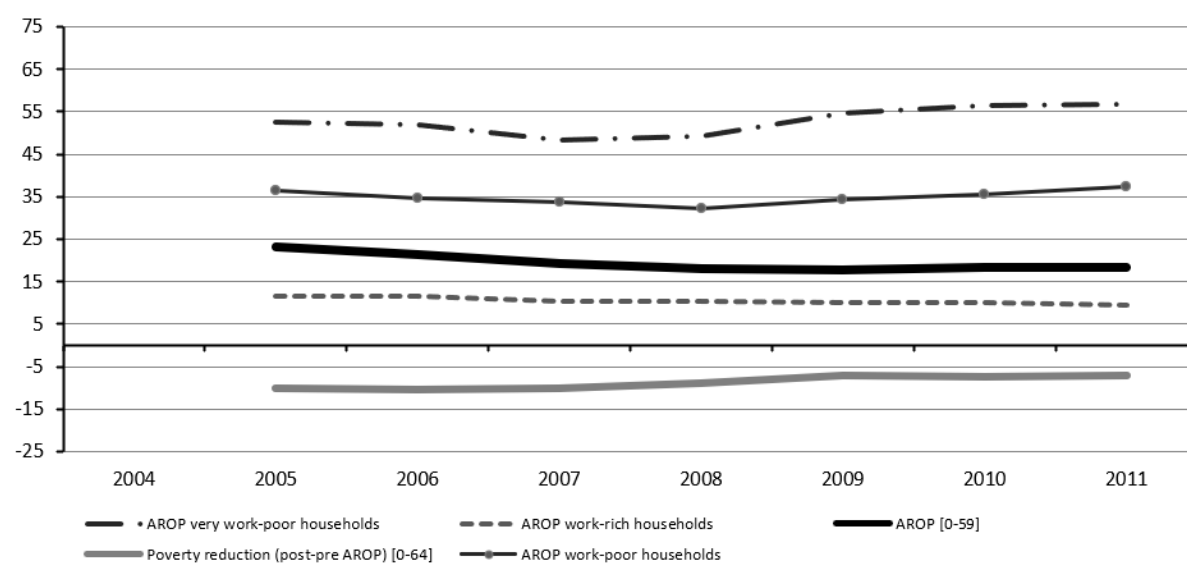
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.18a: Poland, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



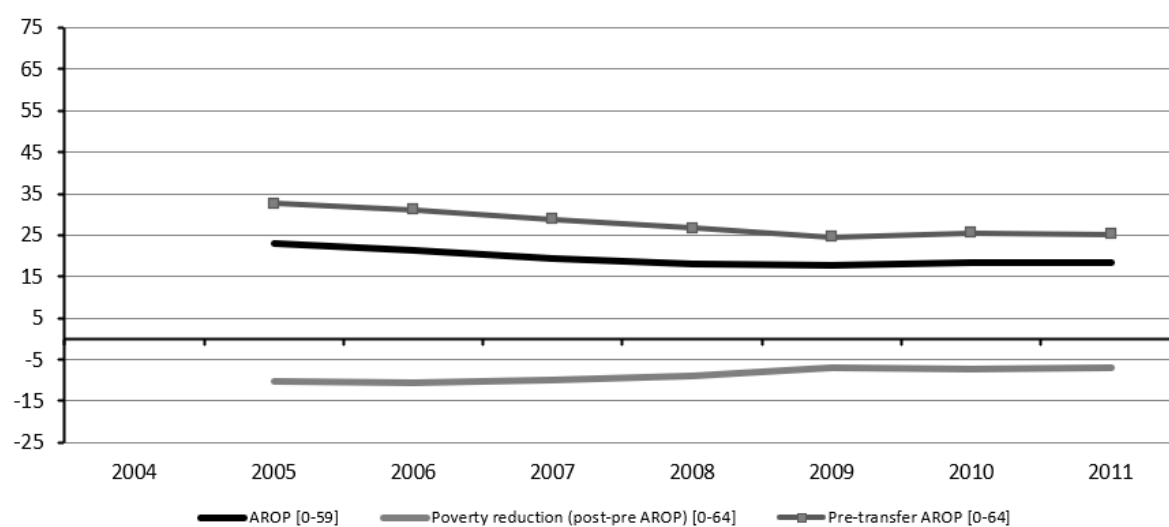
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.18b: Poland, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



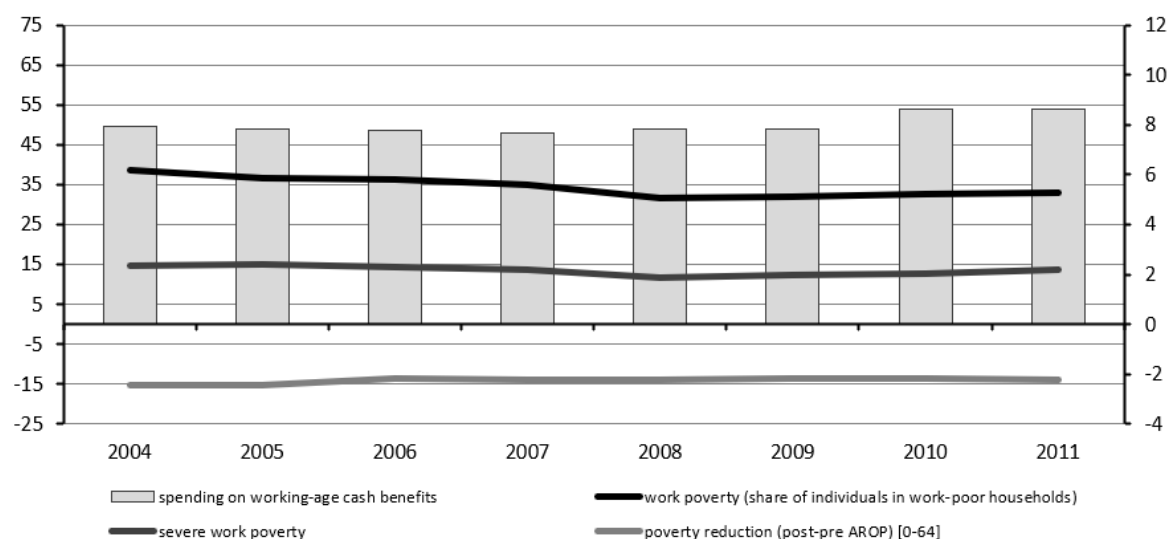
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.18c: Poland, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



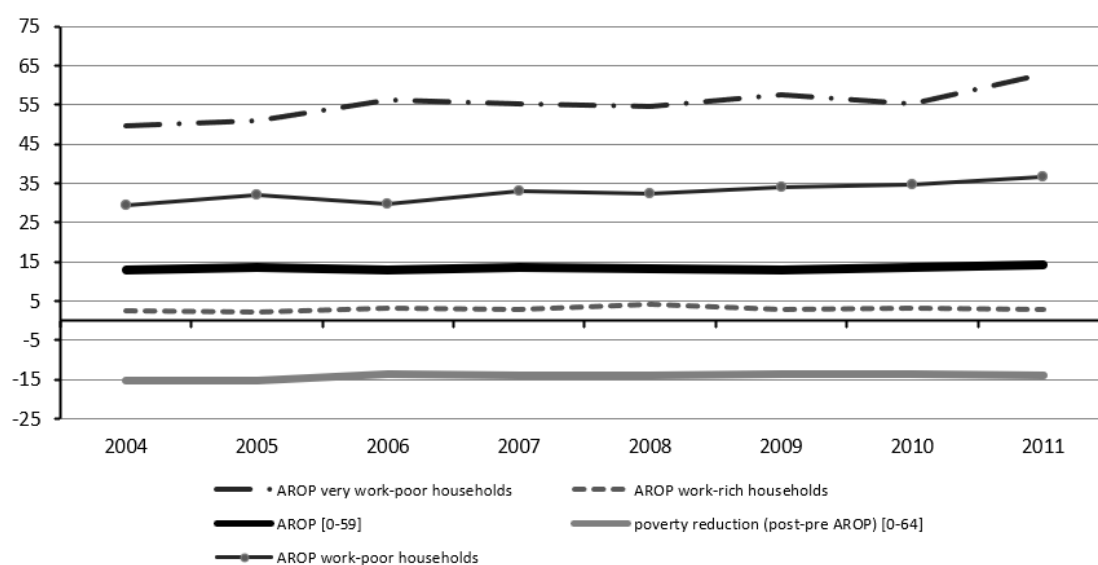
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.19a: Belgium, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



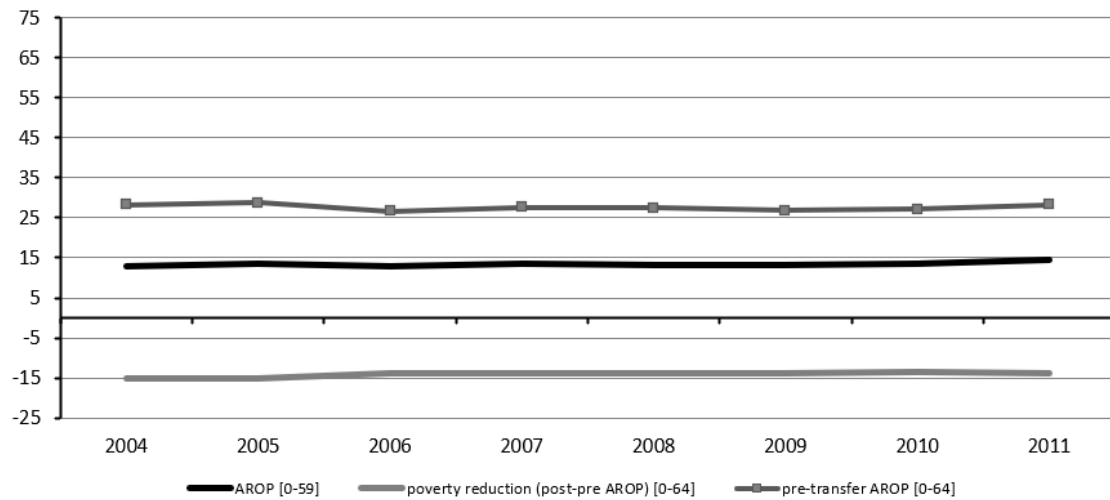
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.19b: Belgium, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



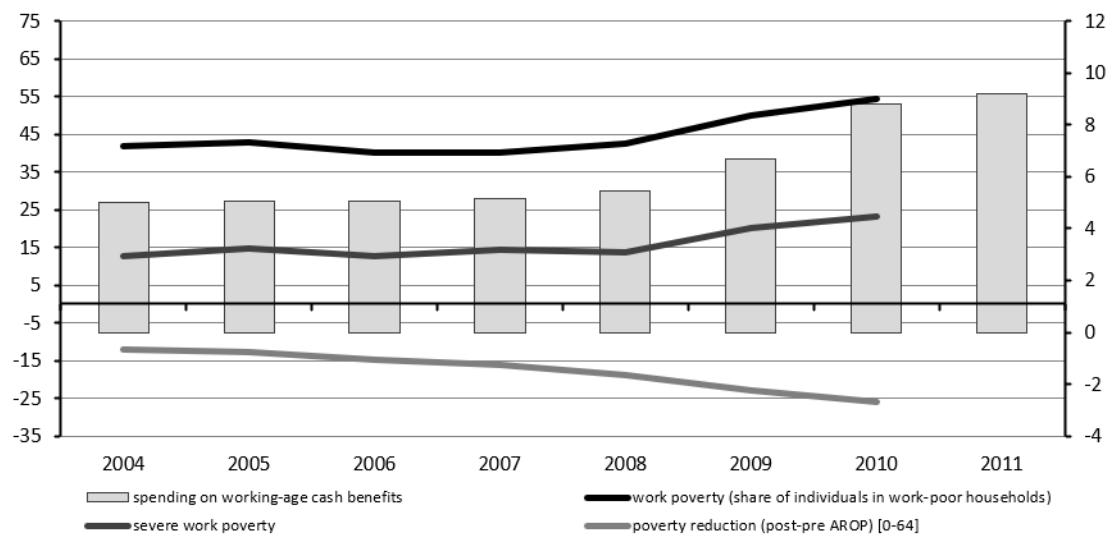
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.19c: Belgium, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



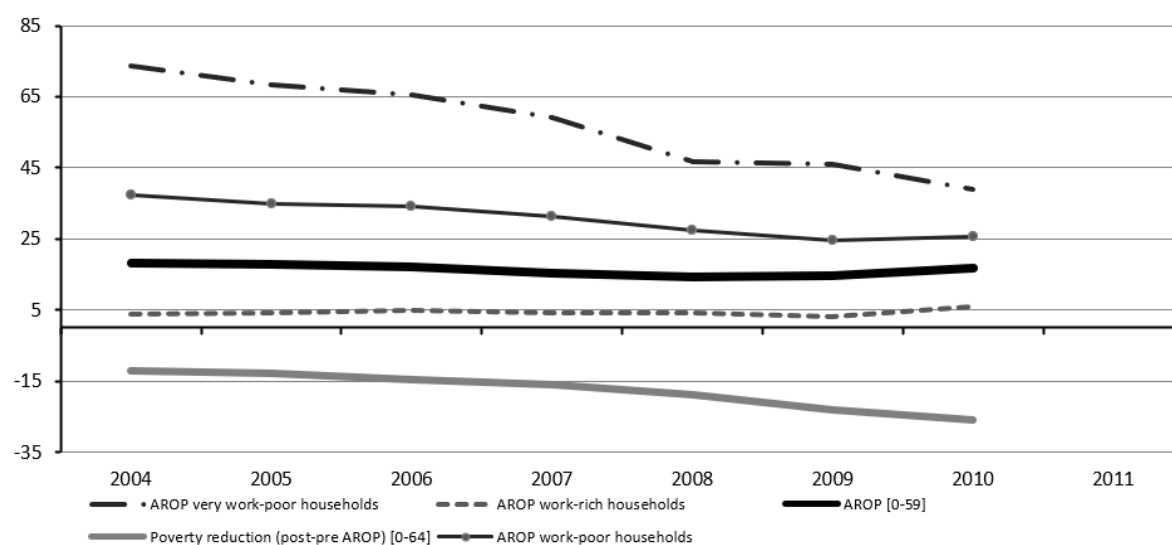
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.20a: Ireland, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.20b: Ireland, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.20c: Ireland, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011

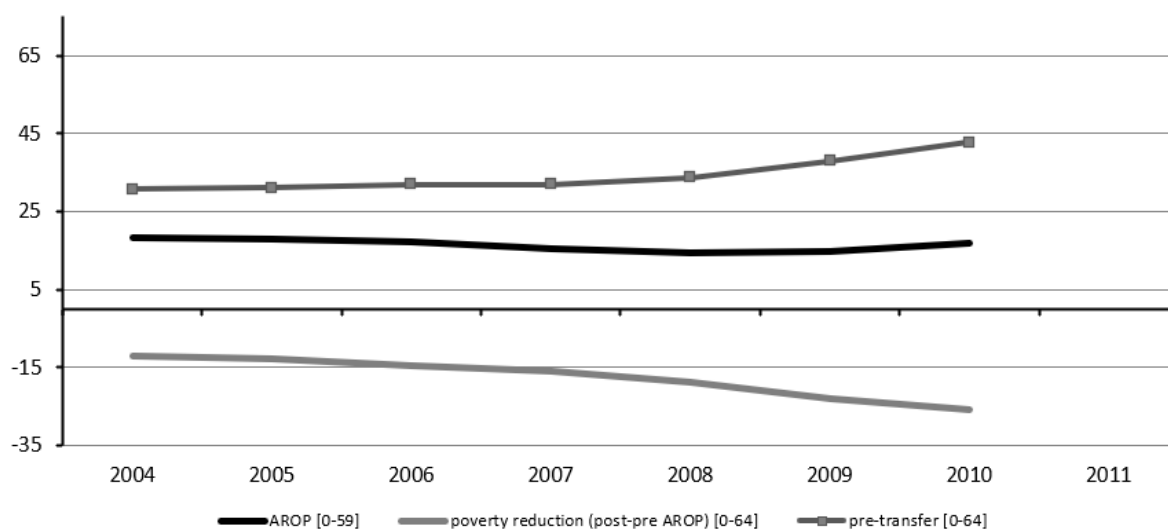
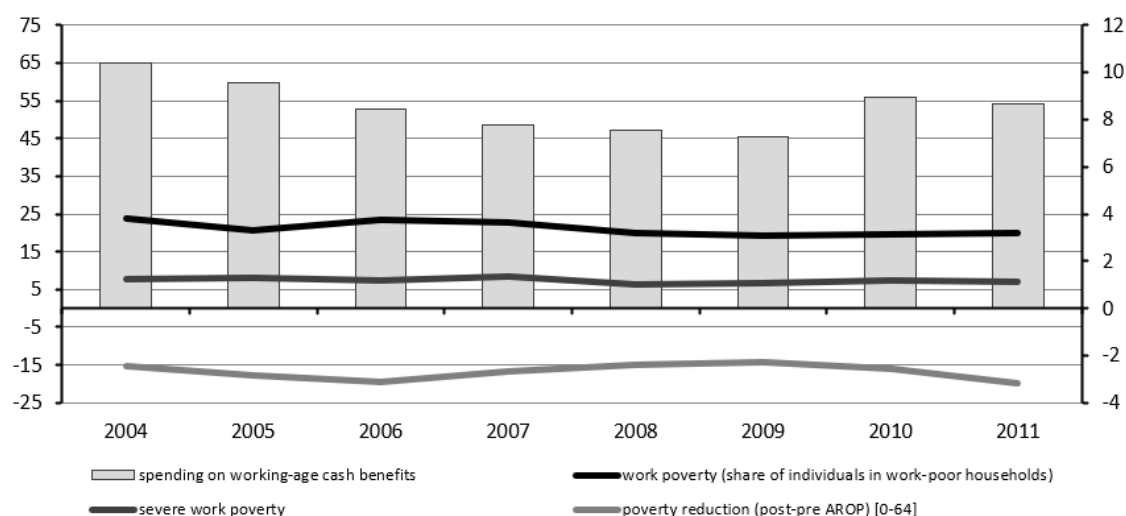
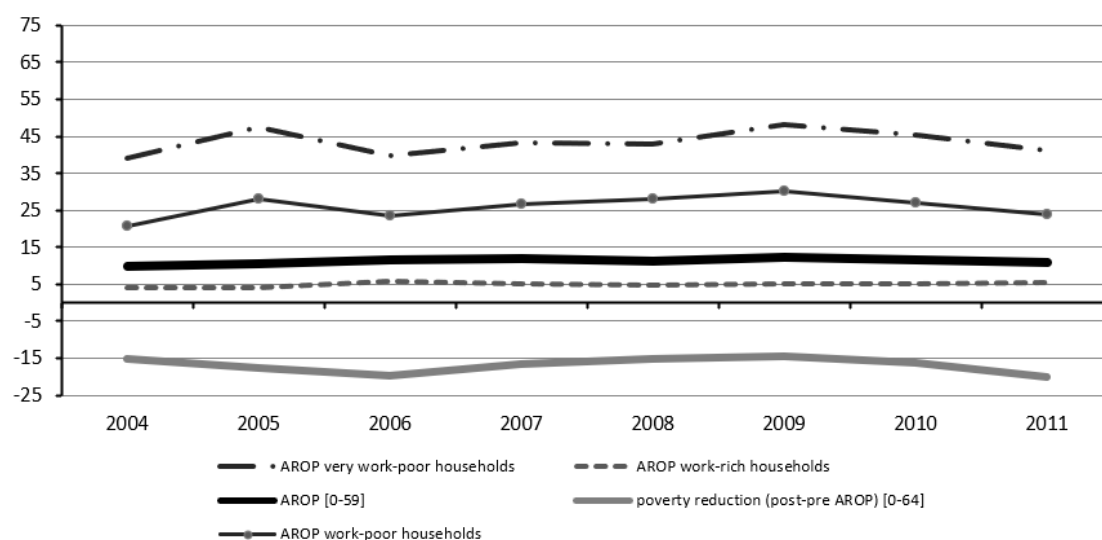


Figure 1.21a: Norway, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



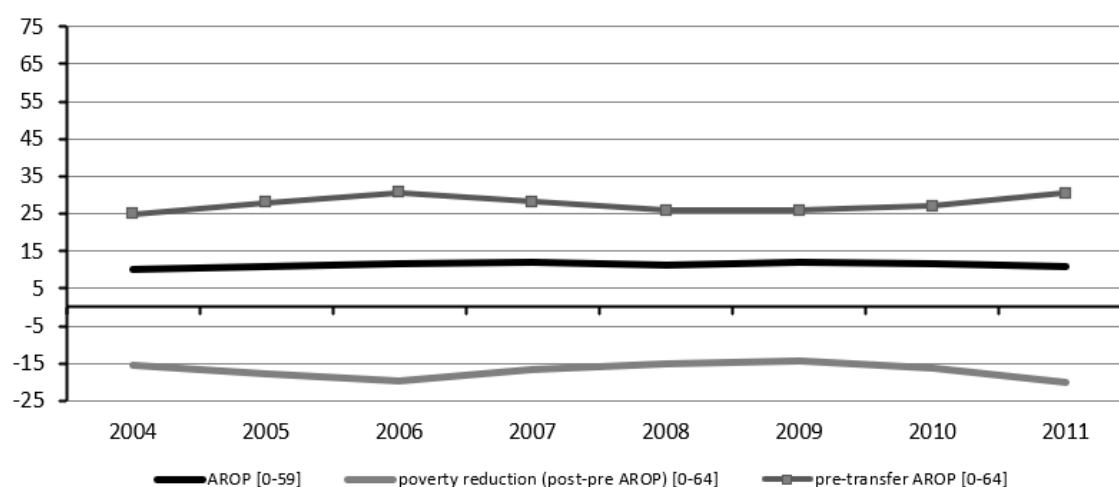
Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.21b: Norway, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

Figure 1.21c: Norway, distribution of population by household work intensity (population [0-59]), poverty reduction by social transfers (excl. pensions) (population [0-64]), 2004-2011



Source: EU-SILC & EUROSTAT for spending data. Years are equal to EU-SILC survey years.

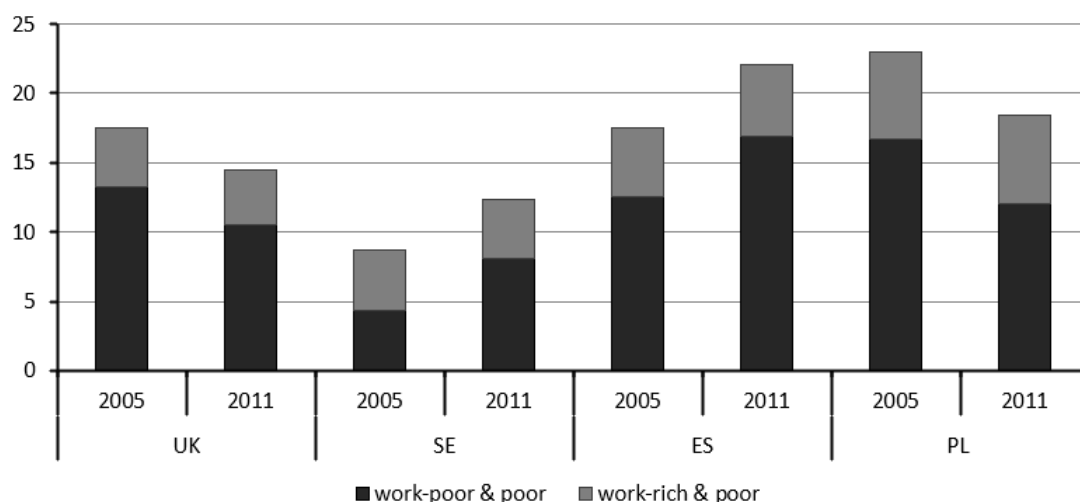
In the United Kingdom, the minor decrease in the at-risk-of-poverty rate before the crisis was mainly due to a decreasing proportion of individuals living in work-poor households (with unchanged poverty risks in both the work-poor and the work-rich segments of the population). From SILC 2008 onwards, the at-risk-of-poverty rate declined markedly in the UK, notwithstanding a growing proportion of individuals living in work-poor households; the considerable decrease in poverty risks in both the work-poor and the work-rich segments of the population account for this (Figures 1-16a-b-c). In Sweden, the opposite pattern occurred: poverty increased, driven by significant increases in poverty in the work-poor segment of the population (Figures 1-17a-b-c). Notably in the very work-poor segment, poverty increased from a comparatively low level (compared to the other countries under review) to the highest level in the countries under review in this section. The diverging patterns of poverty reduction in the UK and Sweden corroborate this striking difference in trajectory.

Earlier, we mentioned the fact that a comparison between the UK and Sweden should not overlook the fact that the poverty threshold in Sweden stopped increasing during the crisis years but remained considerably higher than it had been at the beginning of the period under review, whilst in the United Kingdom it declined considerably after which it returned to its initial level. However, one should not conclude from this that there was an inevitable trade-off between the evolution of the poverty threshold and the poverty headcounts during the crisis years: in Norway the poverty threshold kept rising, while the poverty headcount remained stable. This is not happenstance: spending on working-age cash benefits increased much more in 2009 in Norway than it did in Sweden.

Figure 1-22 shows, for the United Kingdom, Sweden, Spain and Poland, (A) the share of the population that is at-risk-of-poverty *and* living in a work-poor household (in short: ‘poor work-poor’), and (B) the share of the population that is at-risk-of-poverty *and* living in a work-rich household (‘poor work-rich’); we compare SILC 2011 and SILC 2005. Both A and B are expressed as a percentage of the total population, hence the sum of A and B is equal to the poverty headcount for the total population. In those four countries, a considerable

change in the poverty headcount was driven mainly by the change in the share of ‘poor work-poor’; the share of ‘poor work-rich’ remained remarkably constant. (This observation should not lead us to conclude that the at-risk-of-poverty rate in the work-rich segment was not an important driver of poverty evolutions in a number of countries; see Chapter 3 on this matter.) However, the underlying dynamics were quite different: in the United Kingdom, the share of ‘poor work-poor’ decreased because the poverty risk in the work-poor household segment had declined, whilst in Poland the share of ‘poor work-poor’ decreased because the share of individuals in work-poor households had dropped. In Sweden, the share of ‘poor work-poor’ increased mainly because the poverty risk of the work-poor rose; in Spain the share of ‘poor work-poor’ increased mainly because the share of individuals in work-poor households grew. Hence, four different trajectories were followed.

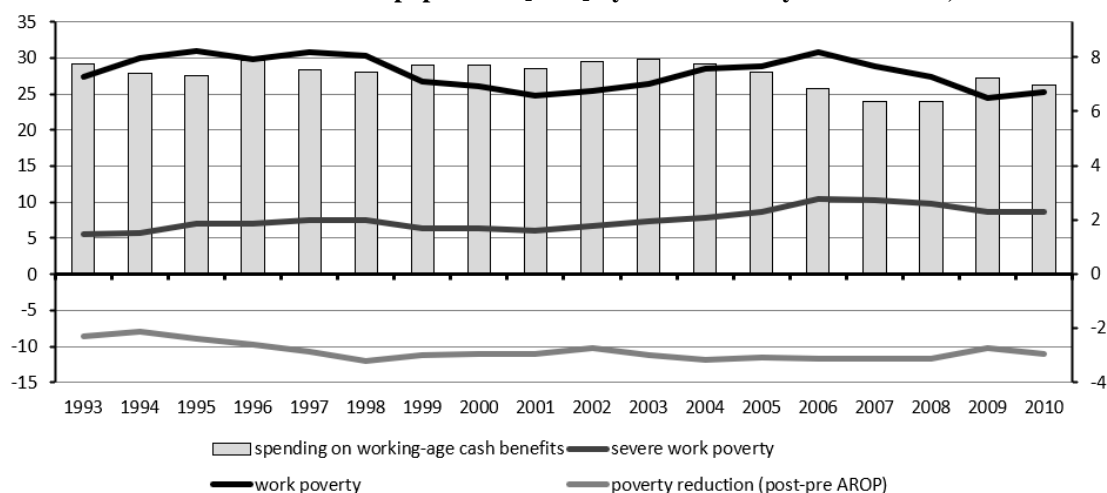
Figure 1.22: Composition of the population [0-59] at-risk-of-poverty, in % of total population [0-59], 2005 & 2011



Source: EU-SILC. Years are equal to EU-SILC survey years

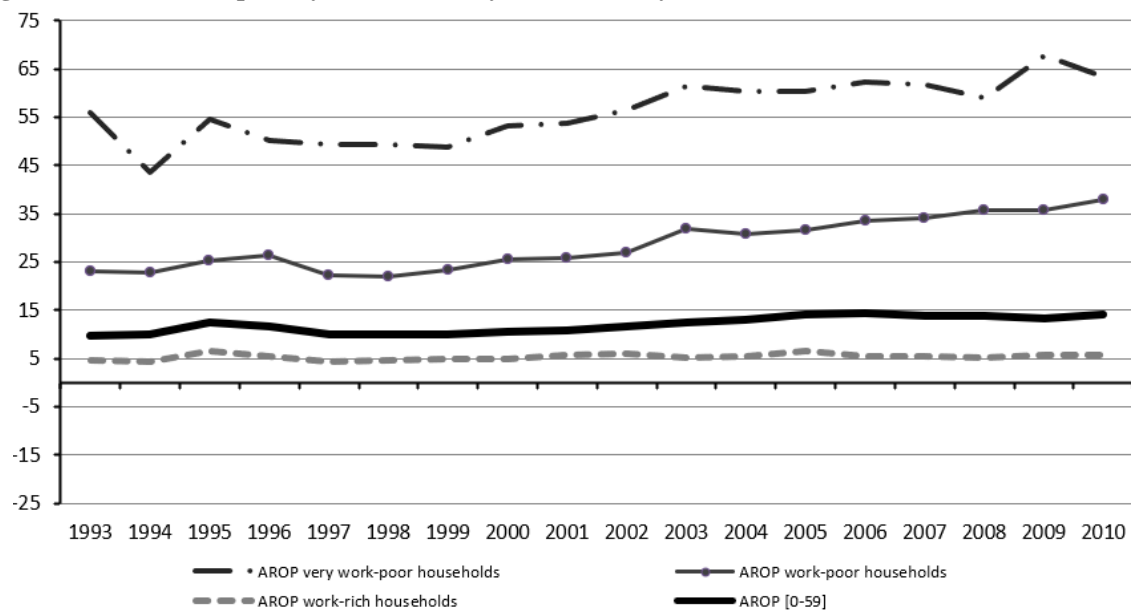
The German SOEP allows an analysis over the whole period starting in 1995, provided in Figures 1-23a-b-c.

Figure 1.23a: Distribution of German population [0-59] by work intensity of household, 1993-2010



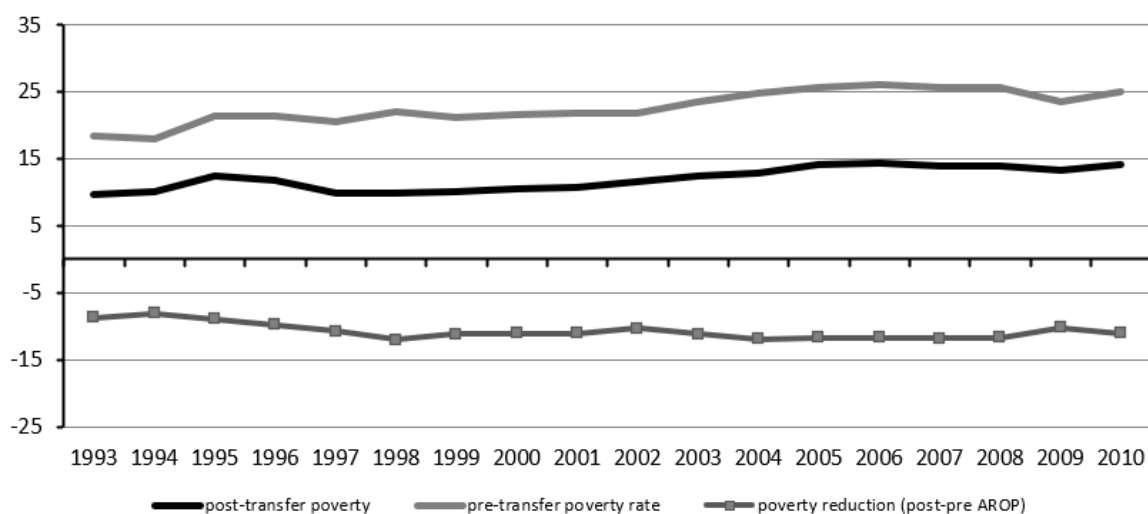
Source: SOEP & EUROSTAT for spending data. Spending on working-age cash benefits as % of GDP.

Figure 1.23b: German poverty rates [0-59], by work intensity of households, 1993-2010



Source: EU-SILC.

Figure 1.23c: German post- and pre-transfer poverty, poverty reduction, population [0-59], 1993-2010



Source: GSOEP.

As previously mentioned, German poverty rates obtained on the basis of SOEP follow an evolution that is very different from the evolution observed on the basis of SILC. According to SOEP, poverty increased considerably between 1997 and 2006, remained basically flat between 2006 and 2010 (with even signs of a decrease). Although the timing is different, we see a development over the past seventeen years that shares some features, in terms of poverty outcomes and poverty reduction, with developments sketched on the basis of SILC for some other European welfare states in the second half of the 2000s. Poverty reduction follows a pattern that is, according to our calculations on SOEP, very mildly countercyclical vis-à-vis household employment (poverty reduction increases when work-poverty increases) and vis-à-vis pre-transfer poverty; but the increase in poverty reduction is largely insufficient

to counteract rising pre-transfer poverty. Steadily increasing poverty within the work-poor segment of the population corroborates this observation, and signals worrying changes in the German welfare edifice. These trends may in part be attributable to the evolution of social spending, which was basically flat during years in which the population shares in work-poor and very work-poor households increased (2001-2006), as can be inferred from Figure 1-23a; but next to less generous spending, evolutions within the labour market, for instance with regard to minimum wages, may have played a role here.

1.8 Conclusion

Our main purpose in this introductory chapter was to introduce and justify the research agenda that is developed in this book. This research agenda is motivated by a policy question, which we summarized as follows: is it possible to structurally replace spending on cash benefits for working-age adults and their families with employment creation, and to simultaneously reduce poverty among working-age adults and their children? Or, to formulate it less ambitiously: is it possible to structurally replace spending on cash benefits for working-age households by employment creation without increasing poverty? This question pertains to the essence of welfare reform as it has been conceived over the last twenty years: already in the 1990s, employment-centred welfare reform was the key policy objective in mature welfare states confronted with ageing populations and increasing expenditures for health care. We emphasized the word ‘structurally’, because one should distinguish correlations between short-term changes in spending and employment during the business cycle from structural trends.

The purpose of this book is not to arrive at a definitive verdict on that question. In order to enhance our understanding of the issues at hand, we rely to a large extent on decomposition techniques. These decompositions are based on a partition of individuals on the basis of the work-intensity of the households in which they live. Decomposition analysis does not reveal causality: it is basically an accounting device. However, it yields interesting descriptions of country-specific trajectories of welfare state change. Obviously, in order to be relevant in a comparative perspective, the factors on which these decompositions focus – notably the share of individuals in work-poor households and the share of individuals in very work-poor or jobless households –, must also have some general explanatory power in a cross-country analysis. The regression result reported in this chapter do support the attention paid in this book to both the share of individuals in work-poor households and the share of individuals in very work-poor or jobless households.

An upshot of these regression analyses is that they shed some light on the poverty performance of European welfare states. Social spending is a factor explaining the dispersion of poverty rates, but its exact impact differs strongly across methods and samples. Work-intensity further equalizes the field, and mainly helps in explaining why good countries do well, rather than why bad countries do bad. Additional indicators that we believe are closely related to the ‘underlying fabric of the nation’ can provide additional insights. Elsewhere it has been established that past investments in education and the labour market help explain why Scandinavian welfare states have such good poverty records. In this chapter we provide data suggesting that the degree of pro-poorness of benefits can help explain why the

Netherlands is a strong performer, and why Spain is a weak one. In general, the analyses provide answers to why good countries do well, but often leave unexplained why the poverty records of other nations are so poor. The same indicators that explain excellence do not help much in explaining weakness. Moreover, the performance of welfare states in Central and Eastern Europe presents a number of puzzles which remain unresolved when applying our type of analysis. In other words, there is still an important research agenda with regard to welfare state performance. Despite these cautionary notes and a number of important conceptual *caveats* listed in this chapter – ‘efficiency’ so conceived is a tricky notion and is certainly not a virtue *per se* for welfare states – we consider the issue of ‘efficiency’ as crucially important with a view to developing a social policy concept at the EU level.

One should be aware that analyzing *changes* in poverty risks in single countries, in an intertemporal perspective, and making a cross-country analysis of poverty *levels* are two quite different exercises. Much confusion, both in the academic and in the policy debate, is caused by the unwarranted conflation of these two perspectives. By way of example, we ought to explain how contemporary Sweden can continue to rank quite well in terms of poverty in a cross-country perspective and yet, as a country, has clearly followed an inequalitarian course in the second half of the past decade. Factors accounting for the Scandinavian ‘superiority’ in terms of social inclusion and employment (relative to performance levels across Europe) are not preventing some Scandinavian welfare states from shifting to less outstanding outcomes (more so than is the case in other European welfare states). *A fortiori*, with a view to practical policy advice, understanding welfare state change cannot be confined to understanding observable cross-country differences in performance levels.¹¹

Although we are able to discern some common features, there are no general laws that uniformly explain the dynamics of poverty in European welfare states in the previous decade. The overall increase in poverty rates by the end of the decade can be seen as the combined result of an economic boom without declining poverty in many Member States – as the gain in household employment was relatively limited and/or offset in many countries by increasing poverty risks within vulnerable subgroups of the population –, followed by a crisis with decreasing household employment rates and increasing poverty in many Member States. Although they cannot be conclusive, the decomposition analyses presented in this chapter show that the countercyclical ‘poverty stabilizing’ character of welfare states in general still prevails, but simultaneously suggest that in some European welfare states the structural capacity to reduce poverty declined in the second half of the 2000s.

Since we emphasize the employment-poverty nexus in this book, our analysis focuses on the non-elderly. The picture with regard to poverty risks for the elderly population (60 years or over) is very different than the picture with regard to the non-elderly. While the weighted average of national at-risk-of-poverty rates of the non-elderly increased with 1.3 ppt for the EU27 in the second half of the previous decade, poverty rates for the elderly decreased with 2.1 ppt. Old-age poverty decreased in many European welfare states, but not in all of them. Where old-age poverty decreased, this is in part the result of trends that started before the financial crisis; in part it is an upshot of declining incomes of the non-elderly in a number of welfare states that were hit hard by the financial crisis. This observation on poverty rates for the elderly should be related to the observation that in many welfare states,

though not in all, pension and health care spending substituted for working-age cash benefits. That, in turn, underscores the relevance of the central question motivating this book: is it possible to structurally replace spending on cash benefits for working-age households by employment creation and to simultaneously reduce poverty?

Acknowledgments

We thank Tim Goedemé and Aaron Vanden Heede for preparation of data on the basis of SILC, Nathalie Schuerman and Gerlinde Verbist.

Notes

¹ In this chapter, we use ‘the European welfare states’ as a shortcut for the EU27, Norway and Iceland. However, references to data on ‘the European welfare states’ provided in other chapters in this book may refer to a smaller set of welfare states.

² In this chapter, the term ‘average’ invariably refers to the unweighted average.

³ We did signal some doubts with regard to the Germany SILC figures for 2005 and 2006, and with regard to the Swedish figure for 2005. Given that approximately one fourth of the non-elderly population of the EU15 lives in Germany and Sweden, excluding Germany and Sweden reduces the increase of the weighted average at-risk-of-poverty rates in the EU15 from 2 ppt to 1 ppt. Excluding Germany and Sweden from the calculation for EU27 reduces the increase for the EU27 from 1.3 ppt to 0.5 ppt. Hence, the German and Swedish figures have a considerable impact, but excluding them does not alter the conclusion with regard to convergence.

⁴ Confining the scope of our analysis to the working-age population (in the 15-64 age bracket), we observe a decrease in the economic dependency ratio of working-age adults from 0.67 in 1994 to 0.49 in 2008.

⁵ The figure for adults in jobless household refers to individuals in the 18-59 age bracket; the individual non-employment rate refers to the 15-64 age bracket.

⁶ Paul de Beer (2007) analyzes the failure of the Lisbon Strategy with regard to its poverty goal on the basis of the relation between poverty and household joblessness, contrasting long-term changes in individual joblessness and household joblessness. The OECD *Employment Outlook 2001* (2001, 59-61) pointed to the absence of significant correlations between aggregate employment and unemployment rates on the one hand and poverty measures on the other hand. This OECD finding is cited in Gregg and Wadsworth (2008) and may have inspired different authors, such as Dickens and Ellwood (2002) and Nickell (2004), to focus on household joblessness. Our results contradict the findings by the OECD; however, the latter relate to a different sample of countries (ECHP countries and Canada and the USA), a different database (ECHP) and a different time than the correlations we obtain on the basis of SILC for European welfare states in the 2000s.

⁷ See Vandenbroucke *et al.* (2013) for a more fine-grained analysis of cross-country differences in poverty, which also includes the impact of *pension* spending, which plays a

significant role, next to spending on working-age cash benefits. The latter analysis focuses on child poverty, but its conclusions by and large also hold for non-elderly poverty.

⁸ Keynesian macroeconomic stabilization and ‘poverty stabilization’ are closely associated, since increasing unemployment benefits when the economy goes into recession play a role in both mechanisms, but they are not the same. Keynesian automatic stabilization depends on the support of effective demand; it presupposes that the government deficit increases. The fact that poverty is reduced is not essential for the macroeconomic mechanism to function (although supporting incomes below or close to the poverty threshold may be most efficient with a view to boosting effective demand). For the ‘poverty stabilization function’ to operate, it is not necessary that government spending increases more rapidly than government revenue (although Keynesian stabilization may, through its positive effect on employment, make it easier to prevent poverty from rising).

⁹ Note that the difference between this specification and the one with simply the share of work poor and the share of very work poor is twofold. For one, it provides a different scale, where more weight is given to increases in the share of very work poor when the share of total work poor is low. Secondly, it provides a different interpretation for the coefficient for the share of the work poor, since it holds the relative share of very work poor constant, rather than the absolute share. This implies that increases in the share of very work poor occur around the mean of the share of work poor in our specification, while they occur at the margin in the alternative specification.

¹⁰ Figure 1-11 also shows the sensitivity of the analysis for Sweden to the choice of the first reference year, by presenting alternative decompositions starting with SILC 2004 and SILC 2006.

¹¹ See Marx *et al.* (2012b) for an interesting analysis related to this problem.

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