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ABSTRACT

This working paper explores how the poverty reduction capacity of social security evolved in the 'booming' years leading up to the current economic crisis. The question to arise is whether and, if so, why social protection provides an explanation for, on the one hand, disappointing poverty trends in many of the EU15 and, on the other, declining poverty risks in Ireland and most of the new Member States. To what extent are these trends connected with expanding labour markets and evolutions in pre-transfer poverty on the one hand and the volume and efficiency of cash benefits deployed on the other? Relying on ECHP, SILC and SOEP data, the paper presents and discusses empirical indications of shifts in the pro-poorness and in the adequacy of cash benefits and the mechanisms underlying such trends. We find that in the nineties the adequacy of social transfers declined significantly in the traditional strongest welfare states in the *Nordic countries*. Conversely, the clusters of the *Southern States* in the nineties and of the *new Member States* in the 2000s displayed a significant increase of poverty reduction by social transfers. During the first years of the crisis the poverty reducing impact of social transfer systems in Europe seems to have been on the decline in the Nordic Countries, on the Continent as well as in the East. The most important conclusion to be drawn is the striking – and in many countries rising – inadequacy of social protection for individuals living in households with a low work intensity. This points at the tension between the adequacy of income protection and activation lending credence to the notion that policies have sought to raise employment at least partially by reducing reservation wages.

Keywords: cash benefits, at-risk-of-poverty rate, poverty reduction, work poor households, in work poverty

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1. Introduction

Social protection systems traditionally serve a dual purpose: to maintain acquired living standards in the event of the materialization of recognized social risks and to combat poverty by guaranteeing adequate minimum incomes. More recently, these goals – which are basically instances of damage compensation – have been complemented with a third objective, namely to foster 'active inclusion' as a means of preventing or rectifying damage. Although this third aspect is present in any insurance system, it has only come to the fore more prominently and explicitly in the context of social protection since the 1990s.[2] Instruments deployed to this end may range from guidance for unemployed or disabled persons towards economic self-reliance to disincentives for prolonged benefit dependency (see among many others Barr 2001).
There are inherent tensions between these three primary purposes of social protection. More specifically, the goal of 'poverty alleviation' can conflict with the two other objectives.

It is against this backdrop that this working paper explores how the poverty reduction capacity of social security evolved in the 'booming' years leading up to the current economic crisis. The question to arise here is whether and, if so, why social protection provides an explanation for, on the one hand, disappointing poverty trends in many of the EU15 and, on the other, declining poverty risks in Ireland and most of the new Member States. To what extent are these trends connected with expanding labour markets and evolutions in pre-transfer poverty on the one hand and the volume and efficiency of cash benefits deployed on the other?

Here, we consider trends in the poverty alleviating capacity of social protection for the population of active age over the past two decades, with focus on the 'good' years before the crisis. The paper begins with a discussion of the tense relationship between the three primary objectives of social security as previously defined. Subsequently it considers empirical evidence regarding trends and interrelations between the key factors explaining cross-country differences as well as temporal changes in the poverty reduction effectiveness of social protection: the size of cash benefits, their efficiency, and the occurrence and distribution of social risks across the population. Relying on ECHP, SILC and SOEP data, it presents and discusses empirical indications of possible shifts in the pro-poorness and in the adequacy of cash benefits and the mechanisms underlying such trends. The third section examines the conditions under which it is possible for modern welfare states to guarantee adequate minimum incomes to non-working groups. The final section summarizes and concludes this working paper.

[2] In a 1992 recommendation to the Council, three primary objectives were formulated at the European level: 1) minimum income protection; 2) earnings related income protection with a view to safeguarding the acquired standard of living; and 3) social and economic integration.

2. The Tensions Between Social Protection, Poverty Alleviation and Activation

Social protection (cash transfers through social insurance and social assistance) is undoubtedly the most important tool that welfare states have at their disposal for redistributing income. Much more so than taxation, schemes for transferring income from the healthy to the sick (sickness benefits), from the young to the old (old-age pensions), from those in work to the out-of-work (unemployment benefits), and from childless families to families with children (child benefits) contribute to a reduction of income inequality in society (OECD 2008; 2011). Their impact on poverty reduction is generally also considered to be very substantial. If one assesses the distributional capacity of social transfers in the conventional way – by comparing poverty rates before and after transfers – on average they account for a reduction in poverty rates of between 17 and 25 per cent (European Commission 2010). There are however inherent tensions between poverty alleviation and other purposes of social protection. More specifically, the goal of 'poverty alleviation' can conflict with other objectives of social protection. Systems that are focused strongly on the maintenance of acquired living standards through universal benefits are inevitably less preoccupied with providing (targeted) minimum income protection: such systems are, after all, reliant on insurance principles whereby proportional benefits can be linked to the accumulation of social rights through proportional social contributions. Similarly, activation and social investment can conflict with the notion of guaranteeing a minimum income, particularly if minimum incomes are seen to create unemployment traps or if non-conditional benefits provide insufficient incentives for actively pursuing alternatives to benefit dependency. Arguably, the tensions between the objectives of social protection have, over the past decades, become more pronounced. In the following section, we will focus on two apparent trade-offs in social policy, i.e. between universalism and targeting and between activation and minimum income protection.

2.1. Targeting, Universalism and the Paradox of Redistribution

Notwithstanding the great differences in design and effectiveness between the various national systems of *social insurance* (and their constituting schemes), poverty *alleviation* as such is never put forward as the primary goal. Even the Anglo-Saxon or Beveridgean system – which provides a minimal income guarantee and incorporates numerous instances of means-testing – was not expressly designed for the purpose of combating poverty; quite the contrary in fact. Already in 1907, Beveridge asserted that "any scheme [...] must be free from the attempt to make their enjoyment dependent upon poverty. Otherwise it does become no better

than a new form of Poor Law relief. …" (cited in Beveridge 1954, 56).[3] This rings even more true for the Continental, Bismarckian systems and for the so-called 'demogrant' insurance systems providing coverage for all, as in some of the Scandinavian countries.

Hence, the redistributive and poverty-reducing capacity of social insurance systems is primarily a side-effect of horizontal solidarity schemes between individuals who find themselves in different conditions of life (healthy vs. sick, employed vs. unemployed, families with children vs. childless families etc). The closer the association between the insured conditions with low income, the greater the extent of vertical redistribution induced by systems of horizontal solidarity. Consider the example of unemployment: as the risk of unemployment is the greatest among the low-skilled (who, in consequence of mechanisms of homogamy, are moreover more likely to have a low-skilled partner), unemployment insurance has a strong vertical redistributive effect (Heady et al. 2001). Child benefits, on the other hand, are far less redistributive. Parenthood as a risk is distributed rather evenly across the population, but since children from more privileged families tend to study longer and in greater numbers, compensation is concentrated to some extent among the better-off strata. Unless corrections have been incorporated into their design, child benefit schemes are therefore less redistributive. Similarly, one may expect benefits designed to facilitate the combination of work and family life (such as parental leave schemes) to have a less pronounced vertical redistributive impact, as this particular risk, by its very nature, affects those in work, and specifically members of dual-income households. The relationship between horizontal and vertical redistribution is, in other words, determined to a considerable extent by the income distribution of those affected by the risks concerned: the greater the concentration among weaker socioeconomic groups, the stronger the redistributive and poverty reducing effect of the insurance scheme, and vice versa.

In addition to horizontal redistributive effects (and coincidentally associated vertical redistribution), social security systems contain – to a greater or lesser degree – elements of vertical solidarity from high-income to low-income groups. These elements may take the form of (partial) benefit targeting, taxation, progressive co-payments or instruments designed to keep protection affordable and viable for low-income groups who are unable to contribute sufficiently to the coverage system. The latter tools encompass minimum benefits (including for the inadequately

[3] "From them he drew a few imperishable morals, such as that there was enough wealth to make poverty needless; that what was wrong was the distribution of wealth, and that by re-distribution want could be abolished. The intended re-distribution was not to be achieved by taking money from the rich to give it to the poor. It was to be made by the individual himself setting aside in times of earning money sums to insure himself against the times when by sickness, unemployment and old age he could not earn. Into the pool thus created, the state though taxation and the employer from his profits would add their allotted proportions. In other words, it was to be Social Insurance" (Beveridge 1954, 107-108).

insured), maximum benefits, variability according to household composition, variable entitlement duration, and the like.

Unlike social insurance, *social assistance* works entirely according to the principle of vertical solidarity. Such schemes (which may be universal or categorical – i.e. aimed specifically at the disabled, the elderly, households with children, etc.) are funded from general resources; the basis for entitlement is 'need', as determined through means-testing. In the vast majority of countries, such schemes are smaller in scope than existing social insurance schemes, which partly explains why their poverty impact is also more limited (Marx and Nelson 2012). Nonetheless, they obviously remain an important anti-poverty tool, an ultimate safety net under the welfare state's social protection system.

Much has already been written about the relationship between the *universalism and selectivism* of social protection schemes. A progressive design of social benefits through targeting of low-income groups is more efficient, on condition that the level of protection offered is adequate. However, the prevailing assumption in the social security literature is that targeting (i.e. more vertical redistribution) exerts downward pressure on the level of protection offered (Korpi 1980; Rosenberg 1982; Goodin and Le Grand 1987; Alber 1988; Sainsbury 1991; Mishra 1977; Esping-Andersen 1994; Rosanvallon 1995; Barr 1992, 755-757). Walter Korpi and Joakim Palme have labelled this premise the 'paradox of redistribution': "the more we target benefits to the poor... the less likely we are to reduce poverty and inequality" (Korpi and Palme 1998, 663). The underlying reasoning is that, compared to universal insurance programmes envisaging horizontal redistribution, selective poverty programmes tend to generate weak results due to their limited political legitimacy. The conviction that selective systems suffer from a lack of legitimacy is forcefully expressed in the often cited assertions that 'services for the poor are poor services' (Titmuss 1969) and that 'programs for the poor become poor programs' (Rainwater 1982, 42), and that 'good targeting leads to program shrinkage' (Grosh 1992, 12).

More recently, however, Whiteford (2008) and Kenworthy (2011) have, on empirical grounds, called into question this conventional wisdom. Kenworthy, relying on LIS data, found that the positive relationship between universalism and redistribution declines strongly over time. For the set of countries studied, he actually found no evidence for 2005 of any relationship between size and universalism. Using a slightly different method and OECD data relating to a larger set of countries, Whiteford concludes that the relationship between universalism and redistribution actually turned negative halfway through the first decade of the new millennium. Kenworthy's intertemporal analysis suggests that these observations are due to two underlying explanatory dynamics. Danish cash spending became more selective, but expenditure levels remained high, whereas US spending remained low but became more universal

(particularly as a result of the increasing proportion accounted for by pensions and EITC, albeit means-tested, but aimed at the employed who are not in the lowest income group). On the basis of these findings, Kenworthy formulates a revised size/targeting hypothesis, suggesting that, as long as there is a universal system of cash transfers, policymakers have the option of incorporating greater selectivity towards the weakest without compromising the overall volume of the redistribution mass. Previously in the literature, this was termed 'targeting within universalism' (Skockpol 1991).

Research into the relationship between size on the one hand and universalism/targeting on the other generally considers the totality of social cash transfers, without distinguishing between pensions, in-work benefits, child benefits and unemployment benefits. Aspects that have definitely been neglected in this debate are the *type* of risk against which cash transfers are deployed, the social distribution of the risks concerned and – at the same time – which segments of the income distribution those risks tend to affect. The argument that the broad middle classes are more willing to pay for universal protection systems resonates quite differently depending on whether one is considering unemployment or child benefits, parental leave or pensions. Long-term unemployment is after all a highly selective risk affecting primarily the low skilled, ethnic minorities and socio-economically more vulnerable groups. As higher-skilled groups are far less exposed to this risk, it seems unlikely that targeting within unemployment benefit schemes would be detrimental to their willingness to pay; quite the contrary in fact. On the other hand, the argument seems much more pertinent in the context of risks that are distributed more evenly across the population (e.g. parenthood, the combination of work and family life, old age).

In addition to the dangers of legitimacy loss and, consequentially, downward pressure on the generosity and adequacy of social protection, another major drawback of targeting that is described extensively in the literature is its potential impact on the labour supply through the creation of poverty traps. The willingness to work of a benefit claimant and his/her partner may be assumed to be codetermined by the extent to which benefit levels are negatively affected by their own earnings and/or the earnings of other household members. The amount lost in benefits is then effectively the fixed cost of work (Atkinson and Micklewright 1991, 1720). Moreover, means-tested benefits may then be regarded as an implicit levy on the partner's wages. As low-income households tend to incur high marginal tax rates in the tapered withdrawal of means-tested benefits with increasing income, the literature speaks of 'poverty and unemployment traps' (Deacon and Bradshaw 1983; Atkinson and Mogensen 1993; OECD 1994). This is obviously an important issue in the context of activation policy.

2.2. Social protection, benefit dependency and activation

Thus far, we have briefly considered the relationship between poverty alleviation and income maintenance and the nexus targeting universalism in social protection systems. Let us now turn our attention to the inherent tension between adequate (minimum) income protection and activation. Governments aiming to reduce benefit dependency can rely on negative incentives (shorter duration of unemployment benefits, targeting, sanctioning…) and/or positive incentives (in-work benefits, tax credits, counselling...). On the one hand, people experiencing difficulties in navigating their way to the labour market may be assisted by a broad range of policy instruments, ranging from in-work benefits, tax reductions and job subsidies to individual counselling, working-time flexibility and childcare (Barbier 2005 and Lindsay et al. 2007). On the other, 'activation' may imply the use of 'sticks', and the elimination of dependency traps by lowering benefits and tightening eligibility criteria. As unemployment mostly affects the low skilled, such action may be particularly detrimental to adequate minimum income protection. Depending on the design of the programmes involved, these kinds of policy measures may, to a greater or lesser extent, result in the financial exclusion of those who are not or cannot be activated (Clasen and Clegg 2011; Bonoli 2011; De la Porte and Jacobson 2011).

With a view to improving efficiency, containing cost and adapting the systems to new needs, most welfare states have implemented various reforms (see Hemerijck, elsewhere in this volume). The various social protection systems, which already formed a strong buffer against the negative consequences of successive economic crises, have allowed themselves to be transformed into sometimes quite potent instruments of activation and employment (Clasen and Clegg 2011). Moreover, they have supported the transition to dual earnership through all kinds of new benefits that facilitated the conciliation of work and family life. And, in many cases, additional forms of protection have been introduced for (not easily insurable) 'new social risks' (Bonoli 2005; Taylor-Gooby 2004), such as divorce and single earnership. Even the supposedly inert Bismarckian systems have adapted – albeit generally more slowly than the other types of systems – to the new social, economic and demographic circumstances (Palier 2010). These policy changes (which are further elaborated by Hemerijck in this volume) may have driven divergent evolutions in terms of the poverty alleviating capacity of social transfers. Size clearly matters when it comes to reducing income poverty. Hence, to the extent that cost containment has led to shrinkage, it is likely to have impacted negatively on the poverty-reducing capacity of social transfers, unless such an effect is offset by greater efficiency. As selective targeting enhances the (relative) protection of the vulnerable, it may be seen to strengthen the aspects of solidarity and pro-poorness underlying social security systems. Conversely, trends towards activation and recommodification may have compromised the pro-poorness of social protection if such measures are

concentrated in the low-income brackets. The effects of new benefits that facilitate the conciliation of work and family life depend on the actual distribution of work over work-poor and work-rich households, and – concurrently – on the social stratification of new and old social risks. If some of the so-called 'new social risks' – particularly the combination of work and family – affect the higher income groups and if job growth benefits mostly job-rich households, then an increase (relative to overall social security spending) in benefits covering these risks will reduce the pro-poorness of social security (Cantillon 2011).

Striking the right balance between solidarity and insurance, vertical and horizontal distribution, protection, activation and 'inclusion' is a challenge for all social protection systems. So how have they fared in this respect over the past decade? What has the outcome been of the shifts that the various systems have undergone in response to a drastically changed social and economic environment? How has the poverty-reducing capacity of social protection evolved? Although the OECD continues to consider these questions in a number of influential reports (OECD 2008 and 2011), and notwithstanding the fact that the EU indicators designed for the Lisbon 2010 strategy and currently underlying the Union's 2020 strategy refer among other things to the impact of benefits on poverty, such distribution issues appear to have somewhat faded into the background of policy discourse.[4] Save for a number of informative recent studies (Brandolini and Smeeding 2009; Kenworthy 2008 and 2011; OECD 2008 and 2011), this would appear also to be the case in research. The literature today is focused overwhelmingly on issues relating to the effectiveness of activation measures, on the distributional impact of services and on assessing the effects of new benefit schemes on the combination of work and family, and far less so than in the 1970s and 1980s on questions of redistribution and the impact of social protection on poverty.

3. Changes in Poverty Reduction by Cash Benefits

Due to the many interacting factors that come into play, assessing social policy outcomes is essentially a matter of empirical observation. This paper considers the evolution of the absolute poverty-reducing impact of social transfers among the working-age population – comprising individuals aged 20 to 59 years old. Two different data sources are used: the *European Community Household Panel* (ECHP) and its successor the *European Union Statistics on Income and Living Conditions* (EU-SILC).[5] As

[4] Employment and Social Developments in Europe (2011) contains a brief note on the impact of taxes and benefits on income inequality.

[5] Figures from the ECHP and the EU-SILC are not entirely comparable due to differences in the sampling methods used. In the present paper, we make use of the ECHP waves 1995 to 2001 and the EU-SILC waves 2005 to 2008. Please note that each survey contains information on

some authors have recently called into question the validity of EU-SILC data for Germany (Frick and Krell 2010; Goedemé, forthcoming; Hauser 2008), use is also made of the German Socio-Economic Panel Study (SOEP). Textbox 1 provides an overview of the central concepts used and how they were operationalized.

Textbox 1. Central Concepts and Their Operationalization

AROP rate = at-risk-of-poverty rate. Headcount of individuals (aged 20-59) whose income falls below the at-risk-of-poverty threshold – 60 per cent of median equivalent income of total population.

Social transfers = all active-age cash benefits accruing to individuals aged 20 to 59, i.e. unemployment benefits, sickness/invalidity pay, social assistance, family-related allowances and/or housing allowances (pensions excluded). This broad definition of social transfers corresponds to the notion that benefit schemes often act as communicating vessels.

Pre-transfer AROP rate = at-risk-of-poverty rate calculated by removing all active-age cash benefits (except pensions) from households incomes.[6]

Absolute poverty reduction = the percentage-point difference between the pre-transfer AROP rate (see above) and the AROP rate (see above).

Relative poverty reduction = the absolute poverty reduction relative to the pre-transfer at-risk-of-poverty

Size = the sum of social transfers (see above) relative to total disposable income as reported in the survey. Size refers to the redistributive effort of social protection schemes.

Average size by WI = the ratio between the average social transfer (see above) per household in a given work intensity group and the average household income in the total population – i.e. the size of cash benefits standardised to the relative size of the work intensity group.

Efficiency = the percentage point decline in AROP rate per unit of size spent.

Caseload = the share of working-age households (aged 20-59) receiving social transfers (pensions excluded).

Households work intensity (WI) = the aggregate of individual work intensities in a household. The individual work intensity is the ratio of the number of months worked during the income reference year by a working age household member to the number of months he or she could theoretically have worked. The ratio ranges from 0 (meaning that no-one at active age worked during the preceding year) to 1 (meaning that everyone at active age was full-time full-year employed).

household incomes from the previous year. There are however two exceptions: the United Kingdom (refers to 'current income') and Ireland (12 months previous to the interview).

[6] The same poverty line is applied when calculating the pre- and post-transfer at-risk-of-poverty rate. This is considered to be a proxy of the income counterfactual in the absence of cash transfers.

3.1. Disentangling 'Needs' and 'Efforts'

At a given level of resource deployment and efficiency, the poverty reduction capacity of social security is to a large extent determined by the severity and the spread of the social risks and needs concerned. But although this seems self-evident, it is hard to capture conceptually and empirically. Needs and risks are after all codetermined by the prevailing social protection system itself: when retirement age is set at sixty, then this is the age at which the need for pensions manifests itself. Likewise, the conceptualization of the notion of 'suitable work', the duration of career break benefits or the definition in a given society of the notion of 'work incapacity' all help determine the scope and the spread of social risks and the associated need. The notion of 'pre-transfer poverty' (conceptualized as the poverty level in the assumption that there were no social transfers) must therefore be applied with great circumspection. For this reason, it is proposed that the analysis of the mechanisms underlying the poverty reduction capacity of social security should first and foremost consider the changes to have occurred in respect of the proportion of households with a low work intensity. Although this trend is also partly dependent of the functioning of the social security system (this issue being at the core of our considerations), one may assume work intensity within families to provide an indication of (or at least to 'signal') their need for social protection. Hence the assumption is that Europeans living in work-poor households are in need of social protection, *given the prevailing labour market conditions and policies*.

The correlation coefficients presented in Table 1 show that, in the EU27 (excluding Malta, Bulgaria and Romania), evolutions between 2004 and 2007 in the proportion of work-poor households correlated strongly with size (.518), the extent of poverty reduction (.492) and at-risk-of-poverty (.354), but most strongly of all with pre-transfer poverty (.702) (see text box 1 for an explanation of these concepts). The same basic trends are found for the ECHP years.

Table 1. Correlations between changes (in ppc) in share of households with WI< 0.5, AROP rate, poverty reduction (absolute), AROP rate before cash transfers, size and efficiency of cash transfers

	% WP households	AROP rate		Poverty reduction		Pre-transfer AROP		Size		Efficiency	
ΔECHP 1995-2001											
% WP households	1	0.064		0.492	*	0.584	**	0.433	*	0.349	
AROP rate		1		-0.450	*	0.196		-0.316		-0.545	**
Poverty reduction				1		0.787	***	0.95	***	0.584	**
Pre-transfer AROP						1		0.825	***	0.265	
Size								1		0.303	
Efficiency										1	
ΔSILC 2005-2008											
% WP households	1	0.354	*	0.492	**	0.702	***	0.518	***	0.100	*
AROP rate		1		-0.271		0.557	***	0.055		-0.537	***
Poverty reduction				1		0.648	***	0.853	***	0.550	***
Pre-transfer AROP						1		0.779	***	0.050	
Size								1		0.058	
Efficiency										1	

Note: AROP = at-risk-of-poverty rate, preAROP = pre-transfer at-risk-of-poverty, WI = work intensity *** significant with 99% ci, ** significant with 95% ci, * significant with 90% ci

Source: own calculations ECHP (1995-2001) and EU-SILC (2005-2008)

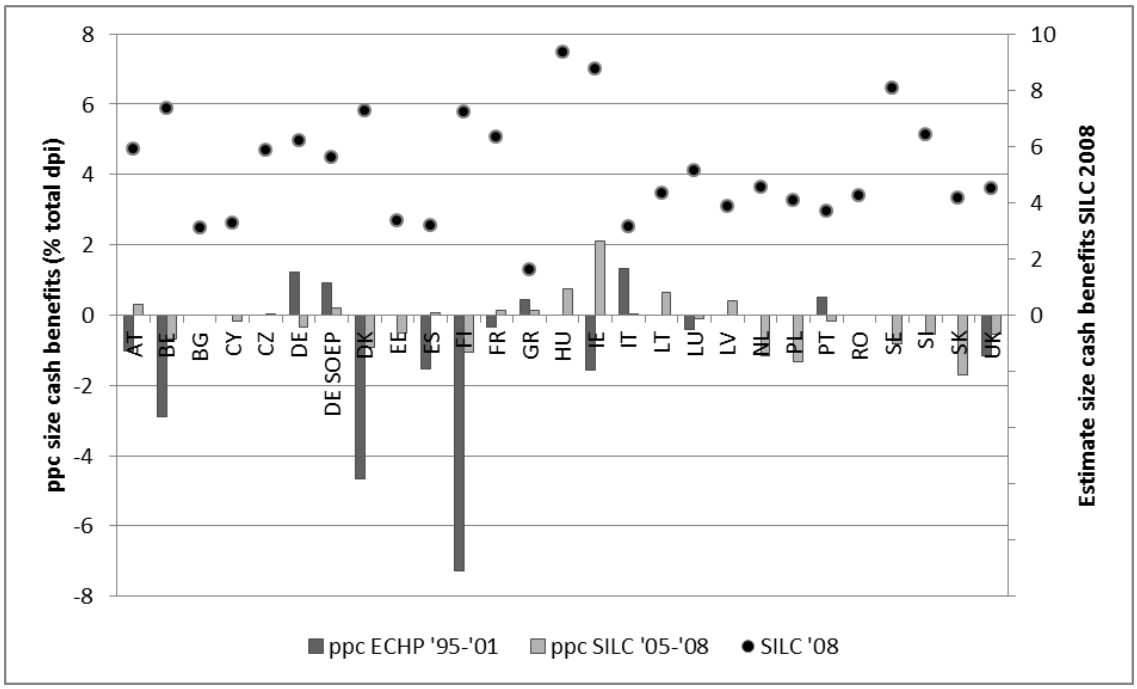
It seems thus reasonable to assume that the changes to have occurred in the favourable years prior to the crisis – in terms of the proportion of work-poor households – had significant implications for the poverty reduction of social transfers. The decline in the proportion of work-poor households observed to varying extents in just about all Member States had an automatic downward effect on pre-transfer poverty and needs and, concurrently, on the size of the resources deployed as social security systems had to work less hard.

Figure 1 presents the percentage point change in benefit size (as a percentage of total disposable income in the survey) during the nineties and the 2000's. In addition, the 2008 point estimates are given. The dominant pattern *in the 1990s* was one of *decline or stagnation of spending levels for the active-age population, with substantial declines in Denmark, Finland, Sweden, Ireland, the UK, Austria, Belgium and Spain*.[7] This trend is confirmed by ESSPROS and SOCX administrative data. *The same basic evolutions are observed for the 2000s, except in Hungary, Ireland, Lithuania and Latvia*, where the total amount in cash benefits increased relative to total disposable income – as reported in SILC. In general, the size of social spending decreased most strongly in the 'old' welfare states, although the total amount in benefits also declined in Poland, Slovakia, Slovenia, and Estonia. The decline in spending levels during the 1990s coincided with quite a strong convergence in social

[7] The empirical estimates of spending on cash transfers in both surveys are broadly in line with ESSPROS data, although ECHP data tend to report some underestimation of real expenditures whereas SILC data slightly overestimate real size – albeit with exceptions. Notably for Germany and Spain, the 1994 ECHP substantially underestimates the real cash expenditures while the SILC data for Sweden, Ireland and especially Hungary probably yield an overestimation. As a result, the declining trend in Germany as reported by ESPROSS is not reflected in the survey estimates.

expenditure across the then EU Member States (Adelantado and Calderon 2006; Schmitt and Starke 2011). However, this trend seems to have stagnated somewhat in recent years, especially across the enlarged EU, but also across the 'old' Member States (Caminada et al. 2010; for sigma and beta convergence tests: see Tables A1 and A2 in the appendix).

Figure 1. Evolution of size cash benefits (% of total disposable income, left axis) and SILC 2008 point estimate of cash benefits (right axis)



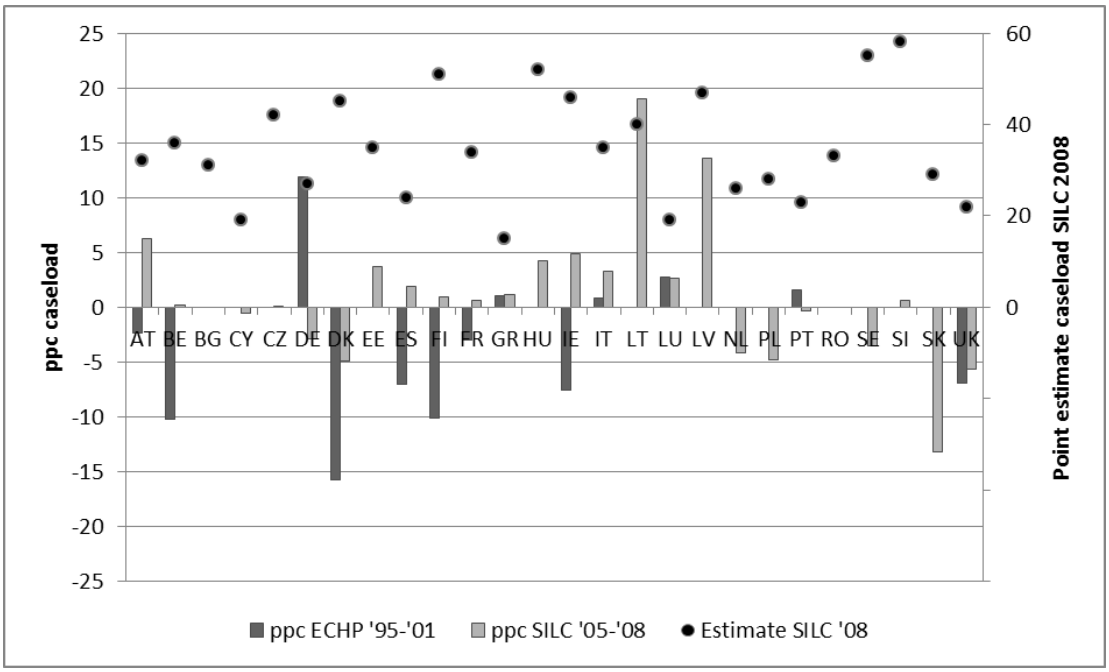
Note: ppc = percentage point change, size = sum of cash benefits as a percentage of total disposable income

Source: own calculations ECHP (1995-2001) and EU-SILC (2005-2008)

Textbox 2. Trends in Caseloads

The significant drop in expenditure on cash transfers has in many countries been accompanied by decreasing numbers of households receiving social benefits. From 1994 to 2000, caseloads – as measured by the share of working-age households receiving cash transfers (pensions excluded) – diminished almost everywhere in the EU, but most drastically in Denmark, Finland and Belgium. In most Western European countries, caseloads continued to decline between 2004 and 2007. The share of household in receipt of cash transfers also declined considerably in Poland and Slovakia. Most Central and Eastern European countries, however, saw a rise in caseload trends. This was most notably the case in Hungary, Latvia and Lithuania, but also in Ireland. From 2004 to 2007, caseloads declined not only among work-poor households but also among the higher work intensity group.

Figure 2. Evolution of benefit caseload (left axis) and SILC 2008 point estimate of benefit caseload (right axis)



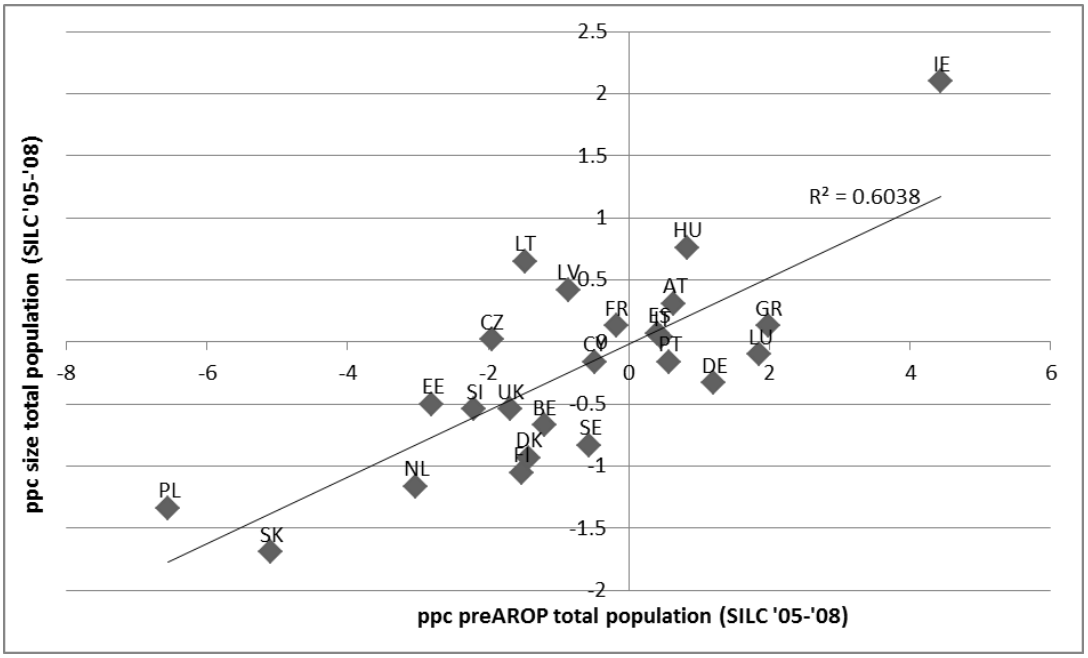
Note: ppc = percentage point change, caseload = the share of working-age household receiving cash benefits (pensions excluded)

Source: own calculations ECHP (1995-2001) and EU-SILC (2005-2008)

Of course, spending levels are strongly correlated with the occurrence and the distribution of social risks (see for a discussion of trends in 'caseload' – see textbox 2). Expanding labour markets in the periods under consideration obviously accounted for an important part for the decreases in overall spending levels. It is therefore important to understand how trends in spending levels are related to changing 'needs'. As has been pointed out, need is not an exogenous factor. The same certainly holds for the calculated pre-transfer poverty risks. However, the strong correlation between this variable and the proportion of work-poor households as shown in Table 1 suggest that – in the context of the period under study – pre-transfer poverty may be regarded as a 'signal' of neediness. So what does this tell us about the concurrence of changes in size and in pre-transfer needs? Figure 3 visualizes the relationship between pre-transfer at-risk-of-poverty and total size of cash benefits. Clearly there is a substantial positive relationship between the two. Increases or decreases in pre-transfer poverty are associated with rising or falling social spending on cash benefits, which may be assumed to be due to two mechanisms, the relative importance of which is hard to determine. On the one hand, this may be attributable to policies. Social security systems – on the other hand – respond automatically (as 'automatic stabilizers') to increases or decreases in social risks. During periods of cyclical downturns, total expenditure quasi-automatically increases as a result of rising unemployment (see for example Dolls et al. 2010; Brandolini and Smeeding 2009; Kenworthy and Pontussen 2005; OECD 2011).The

opposite occurred in the booming years under consideration here. In Figure 3, a linear interpolation has been added of the relationship between size and pre-transfer at-risk-of-poverty. Welfare states below the regression line *responded less generously to changes in pre-transfer poverty*. More specifically, this was the case in *Finland, Sweden and Denmark*. To a lesser extent, this was also in evidence in *Belgium, the Netherlands, Slovakia and Portugal,* while *Germany* (according to SILC data) and Greece did not increase the size of social redistribution in line with increasing pre-transfer poverty. On the other side of the regression line, one observes the *more generous responses in Lithuania, Ireland and, albeit to a lesser extent, the Czech Republic, Latvia and Hungary.*

Figure 3. Evolution of benefit size (left axis) as a function of changes in pre-transfer AROP (right axis)



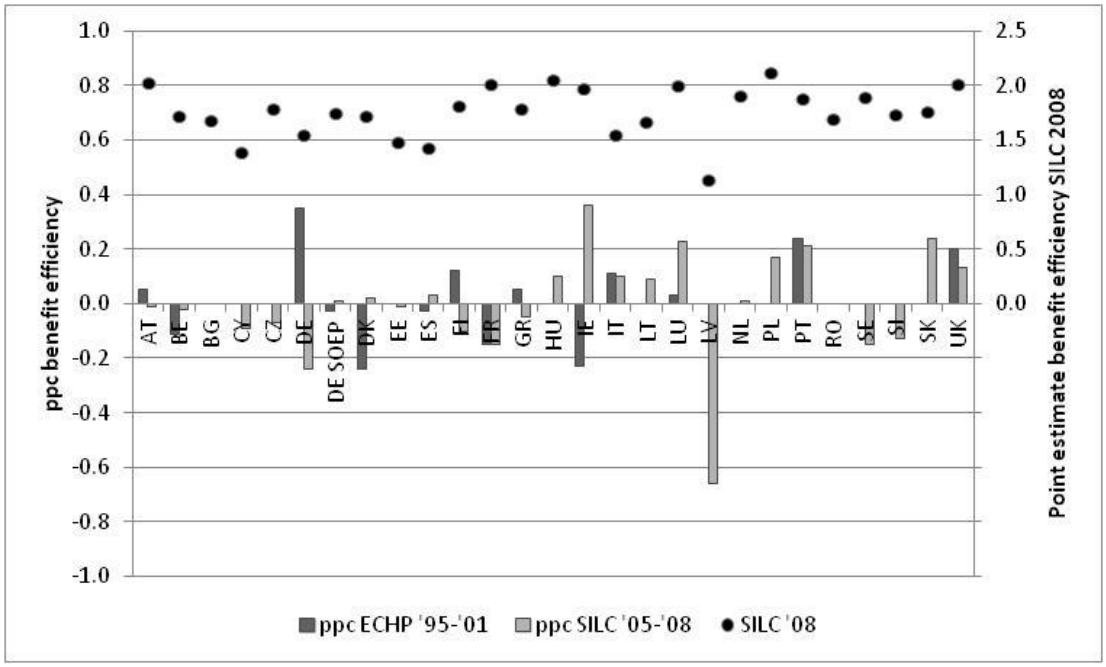
Note: AROP = at-risk-of-poverty rate, ppc = percentage point change
Source: own calculations EU-SILC (2005-2008)

Of course, these simple associations say nothing at all about the underlying causal relationships: the increase in pre-transfer poverty risk in Ireland, for example, may have been caused by more generous social benefits, which may have discouraged work poor households to seek employment. And the declining level of social protection in some of the other countries was arguably necessary to achieve success in employment. Nonetheless, the evidence points at the hypothesis that *in a number of countries (mainly in the old Europe) the response of the social security system to pre-transfer needs has been less generous than one would expect under a model of 'automatic stabilization'*.

3.2. The relationship Between Efficiency and Benefit Size

We loosely define the efficiency of cash benefit systems by measuring the degree of poverty reduction per percentage of total disposable income. Trends and the 2008 SILC estimate are given in Figure 4.[8] Poland, the United Kingdom, Austria, France, Hungary and Lithuania have quite efficient arrangements in place, whereas efficiency is comparatively low in Latvia, Spain and Cyprus. Contrary to expectations, there is little evidence to be found of a shift towards augmented efficiency. In most countries efficiency did not change much in the periods observed. On the whole, efficiency growth was strongest among countries with formerly comparatively low degrees of poverty reduction per euro spent, leading to a convergence across the EU. Hence, convergence is observed in terms of size as well as efficiency (see Tables A1 and A2).

Figure 4. Evolution of benefit efficiency (left axis) and SILC 2008 point estimate of benefit efficiency (right axis)



Note: ppc = percentage point change, efficiency = the percentage point decline in AROP per percentage of total disposable income spent

Source: own calculations ECHP (1995-2001) and EU-SILC (2005-2008)

Unlike trends in size, changes in efficiency are not correlated with developments in at-risk-of-poverty rates before social transfers – as exemplified in Table 1. Moreover, efficiency trends are scarcely linked to movements in size. In Poland and the Slovak Republic, efficiency growth has went along with a reduction in social transfer volumes, whereas in Ireland and Hungary the shift towards greater efficiency has gone hand in hand with expanding spending on cash transfers. The finding that in Europe there is no cross-sectional nor longitudinal relationship between

[8] We present figures based on the 60% of median equivalised income; trends have proven to be the same when poverty gaps and the 40% of median income is considered.

size and efficiency may cast some new doubt on the paradox of redistribution thesis (Korpi and Palme 1998; Goodin and Le Grand 1987) which was discussed in the previous section.

3.3. The relative Importance of Needs, Size and Efficiency

To disentangle the basic mechanisms behind changes in at-risk-of-poverty, we rely on the simple decomposition proposed by Kim (2000):

$$AROP_{post} = AROP_{pre} - PR = AROP_{pre} - size \times efficiency (1)$$

where AROPpost = the AROP rate after social transfers
AROPpre = the AROP rate before social transfers
PR = absolute poverty reduction

The poverty rates observed are considered to be a function of the pre-transfer poverty rates, the amount of cash benefits involved, and the efficiency – in terms of poverty reduction – of the distribution of social transfers. In fact, it can be argued – see infra – that changes in the pre-transfer poverty risk are a function of the occurrence of risks in society, whereas the efficiency term reflects the importance of policy design. This paper adds to the literature on the effectiveness of social transfers in that it uses formula (1) to contextualize longitudinal poverty trends, i.e. to depict how poverty changes are a function of pre-transfer poverty rates, the size of cash benefits, and the poverty efficiency of social allowances. In fact, (1) can be decomposed as follows:

$$\Delta AROP_{post} = \Delta AROP_{pre} - \Delta(size \times efficiency)$$
$$= \Delta AROP_{pre} - \Delta size \times \overline{efficiency} - \Delta efficiency \times \overline{size} \ (2).$$

Tables 2 and 3 present the results of this basic decomposition respectively for ECHP and for EU-SILC years. Figure 5 presents an overview of changes in pre- and post-transfer at-risk of poverty for EU member states during the pre-crisis years.

Table 2. Decomposition AROP rate for active age population (20-59 y.o.)

	$\Delta AROP_{pre}$		Δpoverty reduction (absolute)		Effect Δsize	Effect Δefficiency	$\Delta AROP_{post}$	
AT	-3.70	***	-1.11		1.63	-0.51	-2.59	***
BE	-8.04	***	-5.08		4.00	1.08	-2.96	***
BG								
CY								
CZ								
DE	-4.16	***	4.58	***	-1.76	-2.82	-8.74	***
DE SOEP	0.08				-1.73	0.12	-1.53	
DK	-8.13	***	-8.98	***	6.61	2.37	+0.85	
EE								
ES	-4.30	***	-2.28		2.02	0.26	-2.01	**
FI	-7.72	***	-10.01	***	11.93	-1.92	+2.29	***
FR	-2.09		-2.03		0.57	1.46	0.00	
GR	0.21		0.91		-0.51	-0.40	-0.01	
HU								
IE	-4.90	***	-4.57	**	2.18	2.38	0.00	
IT	3.09	***	2.63	***	-1.55	-1.08	0.00	
LT								
LU	-1.05		-0.34		0.66	-0.32	-0.01	
LV								
NL								
PL								
PT	0.22		2.71	***	-0.58	-2.13	-2.49	*
RO								
SE								
SI								
SK								
UK	-2,46	***	-0,18	*	1,63	-1,45	-2,28	***

Note: ΔAROPpost = ΔAROPpre – Δpoverty reduction with Δpoverty reduction = Effect Δsize + Effect Δefficiency; *** significant change with 95% confidence interval (ci), ** significant change with 90% ci, * significant change with 85% ci

Source: own calculations ECHP (1995-2001) and SOEP

Table 3. Decomposition AROP rate for active age population (20-59 y.o.)

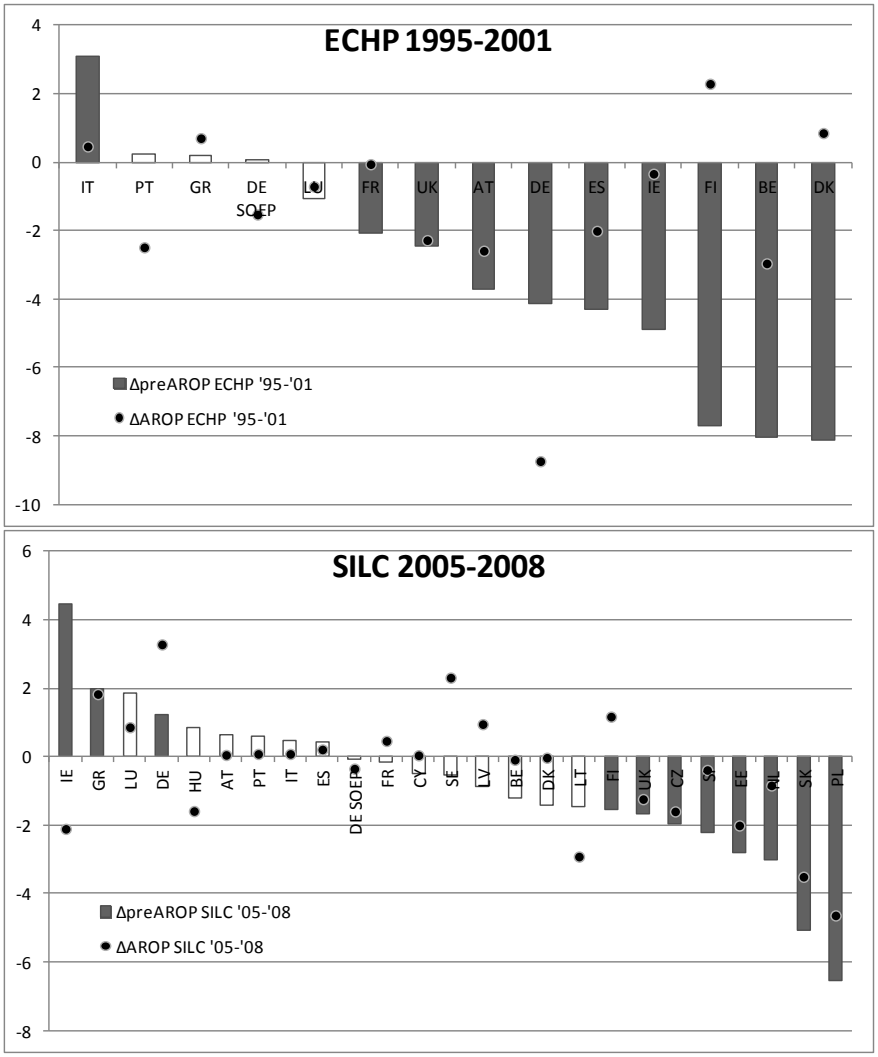
	$\Delta preAROP_{pre}$		Δpoverty reduction (absolute)		Effect Δsize	Effect Δefficiency	$\Delta AROP_{post}$	
AT	0.64		0.59		-0.64	0.05	0.05	
BE	-1.20		-1.29		1.15	0.14	-0.09	
BG					0.00	0.00		
CY	-0.49		-0.52		0.23	0.29	0.04	
CZ	-1.95	**	-0.35		-0.03	0.38	-1.60	**
DE	1.21	**	-2.06	***	0.55	1.51	3.28	***
DE SOEP	-0.04		0.31		0.37	-0.06	-0.35	
DK	-1.43		-1.40		1.59	-0.19	-0.03	
EE	-2.80	***	-0.79		0.75	0.04	-2.01	***
ES	0.41		0.20		-0.10	-0.10	0.21	
FI	-1.53	**	-2.71	***	1.94	0.76	1.17	***
FR	-0.18		-0.64		-0.27	0.91	0.46	
GR	1.98	**	0.16		-0.23	0.07	1.83	**
HU	0.83		2.42	***	-1.51	-0.91	-1.59	***
IE	4.44	***	6.55	***	-3.80	-2.75	-2.11	***
IT	0.46		0.39		-0.07	-0.32	0.08	
LT	-1.48		1.43	***	-1.06	-0.37	-2.92	***
LU	1.86		1.00		0.20	-1.20	0.86	
LV	-0.86		-1.80	***	-0.62	2.42	0.95	
NL	-3.03	***	-2.18		2.21	-0.03	-0.84	
PL	-6.55	***	-1.91		2.72	-0.81	-4.64	***
PT	0.58		0.50		0.29	-0.79	0.08	
RO					0.00	0.00		
SE	-0.56		-2.87	***	1.62	1.24	2.31	***
SI	-2.21	***	-1.82		0.97	0.85	-0.39	
SK	-5.09	***	-1.58		2.76	-1.18	-3.51	***
UK	-1.69		-0.45		1.05	-0.60	-1.24	**

Note: ΔAROPpost = ΔAROPpre – Δpoverty reduction with Δpoverty reduction = Effect Δsize + Effect Δefficiency; *** significant change with 95% confidence interval (ci), ** significant change with 90% ci, * significant change with 85% ci

Source: own calculations EU-SILC (2005-2008) and SOEP

As a reminder, the most important poverty trends may be summarized as follows. *First*, among the countries of the old Europe, Germany (according to SILC), Finland, Sweden and Greece have experienced significant increases in poverty risks in the 2000s, a trend that in the case of Finland was already demonstrably unfolding in the 1990s. *Second*, likewise within the group of the 'old' Member States, data for Belgium, France, Denmark the Netherlands and the Southern European countries indicate a general standstill, a pattern that, in the case of France, also predominated in the 1990s. *Third*, the UK and, even more so, Ireland have recorded a decline in at-risk-of-poverty rates among the population of active age. In the UK, this trend has manifested itself since the 1990s. *Fourth*, in many of the new Member States, poverty figures between 2004 and 2007 evolved favourably. This trend was particularly noticeable in Poland, Lithuania, Estonia and Slovakia, and it unfolded as part of a convergence process in at-risk-of-poverty rates across Europe (see Tables A1 and A2 in appendix).

Figure 5. Evolution AROP rate (pre and post transfers) total active age population (20-59 y.o.)



Note: ppc = percentage point change, the grey bars indicate significant change
Source: own calculations ECHP (1995-2001), EU-SILC (2005-2008) and SOEP

The Tables 2 and 3 give an indication of the relative importance of changes in pre-transfer poverty, and absolute poverty reduction for post-transfer at-risk-of-poverty rates. In order to keep the decomposition transparent and simple, we have opted to use an absolute measure of poverty reduction. However, in order to take grasp of the intrinsic redistributive capacity of cash benefits, one should also look at a relative measure of poverty reduction – see textbox 1. In Table 4, we have presented changes in and points estimates of as well relative as absolute poverty reduction. Regardless of the measure of poverty reduction applied, differences within the Union appear to be enormous, ranging from a 3 to 5 per cent absolute reduction in Spain, Greece, Estonia and Latvia to more than 10 per cent in the Czech Republic, Denmark, France, Slovenia, Finland and Sweden.

Table 4. Evolution of the absolute and the relative poverty reduction for the whole active-age population (20-59 y.o.)

	ppc absolute poverty reduction					ppc relative poverty reduction				
	ΔECHP '95-'01		ΔSILC '05-'08		SILC '08	ΔECHP '95-'01		ΔSILC '05-'08		SILC '08
AT	-1.11		0.59		11.99	4.62		1.15		52.56
BE	-5.08		-1.29		12.64	-2.37		-2.61		53.00
BG					5.17					23.94
CY			-0.52		4.50			-2.44		29.87
CZ			-0.35		10.48			3.58		55.93
DE	4.58	***	-2.06	***	9.57	26.17	***	-11.14	***	39.77
DE SOEP	1.61		-0.31		9.87	8.47	***	-1.19		43.85
DK	-8.98	***	-1.40		12.49	-16.92	***	-2.49		57.46
EE			-0.90		5.00			0.14		26.96
ES	-2.28		0.20		4.57	-1.60		0.56		22.64
FI	-10.01	***	-2.71	***	13.04	-12.37	***	-7.47	***	55.89
FR	-2.03		-0.64		12.74	-3.27		-2.26		52.88
GR	0.91		0.16		2.90	3.26		-0.61		13.81
HU			2.42	***	19.10			6.29	***	61.21
IE	-4.57	**	6.55	***	17.37	-7.41	**	15.73	***	58.94
IT	2.63	***	0.39		4.88	4.87	***	1.35		23.20
LT			1.43	***	7.23			7.74	***	31.43
LU	-0.34		1.00		10.26	0.87		0.90		43.52
LV			-1.80	***	4.40			-6.89	***	19.20
NL			-2.18		8.69			-3.26		50.21
PL			-1.91		8.60			1.18		34.83
PT	2.71	***	0.50		6.91	9.62	***	1.47		30.91
RO					7.17					27.57
SE			-2.87	***	15.26			-9.81	***	60.60
SI			-1.82		11.20			-2.79		53.00
SK			-1.58		7.28			3.02		43.90
UK	-0.18	*	-0.45		9.06	3.48	*	0.91		39.84

Note: ppc = percentage point change, absolute poverty reduction = percentage point difference between pre- and post-transfer at-risk-of-poverty, relative poverty reduction = absolute poverty reduction relative to the pre-transfer at-risk-of-poverty

Source: own calculations ECHP (1995-2001) and EU-SILC (2005-2008)

The decomposition results in the Tables 2 and 3 give way to the following country patterns. *The rise in poverty in Finland and Sweden in the period considered (and, in the case of Finland, also in the 1990s) is largely*

attributable to a decline in absolute poverty reduction. As a result of the continuing rise in employment rates and the decline in the proportion of work-poor (by 2.33 per cent in Sweden and 4.15 per cent in Finland), pre-transfer poverty dropped. However, a reduction in and a less efficient deployment of social security resources meant post-transfer poverty actually increased. This Scandinavian pattern possibly points at a strategy of getting more people in work by exerting downward pressure on social protection. The substantive and significant increase of at-risk-of-poverty rates amongst the work poor households reinforces this hypothesis – see 3.5 for an elaboration on the trends for work poor households. Given the high employment rates in these countries, it is reasonable to assume that one has now reached a point where a core group of work-poor can barely be mobilized. The *Danish* trends recorded in the 2000s are not statistically significant. However, in the 1990s, the country did record a significant and substantial decrease in pre-transfer poverty which was completely eliminated by a decline in poverty reduction through social transfers. These trends went along with a very important increase of income poverty amongst the work poor households. *The Netherlands* exhibited no significant changes in poverty rates, even though employment growth resulted in some decline in the proportion of work-poor households and hence in pre-transfer needs. Arguably, this country *followed – albeit less clearly – the Scandinavian pattern*: a positive trend in pre-transfer poverty was weakened by a reduction in social redistribution and an increase of poverty faced by work poor households.

The pattern observed in *Germany deviates from that seen in the above-mentioned countries* in that it *combines an increase in pre-transfer poverty risks with a decrease in income redistribution*. According to SILC the strong rise in poverty in Germany was driven by both an increase in pre-transfer poverty and a decline in poverty reduction by the social security system. However, this trend is not confirmed by SOEP data according to which recorded changes are not statistically significant.

The strong drop in poverty seen in Ireland was – subsequently – driven entirely by greater generosity on the part of the social security system. *This makes Ireland the only country in the 'old Europe' where the adequacy of social security increased significantly.* As a result of weak labour market performance, the extent of pre-transfer poverty increased strongly despite a moderate rise in employment. This was offset fully by more extensive and efficient social protection. In the *United Kingdom*, the decline in poverty in the 1990s and the 2000s was the result of lower pre-transfer poverty.

The decline in poverty in *Poland, the Czech Republic, Estonia and Slovakia* was driven entirely by (strongly) expanding labour markets and a drop in the proportion of work-poor households. The corresponding pre-transfer poverty rate dropped. Generally speaking, *the absolute poverty-reduction*

decreased – although *in relative terms* the poverty reduction increased in some of these countries (see below).

Lithuania experienced a strong drop in the proportion of work-poor households and a comparatively smaller decline in pre-transfer needs, but, thanks to a marked improvement in social protection (in terms of both size and efficiency) poverty levels declined significantly. In *Hungary*, a slight increase in pre transfer poverty was mitigated by more social redistribution.

3.4. Changes in Needs and Relative Poverty Reduction

Ceteris paribus, when needs become smaller and pre transfer poverty declines social security systems have to work less hard. Obviously, in these settings absolute poverty reduction by social transfers will decrease. Therefore, the absolute poverty reduction indicator should be interpreted with great caution. Given the important changes in some countries in pre transfer poverty during the periods under review it is imperative to look at the changes in relative poverty reduction which are presented in Table 4. Taking into account changes in need by considering *relative* poverty reduction, one discerns *three different pathways* see Table 5). The *first pathway* is characterized by declining pre-transfer poverty, *amplified* by enhanced poverty reduction by social protection systems: in these settings, the decline in post-transfer poverty is stronger than that in pre-transfer poverty. The only country belonging to this group is Lithuania in the 2000s.

The *second pathway*, containing Ireland and Hungary in the 2000s, is characterized by rising pre-transfer poverty that is however *mitigated* (quite substantially in the case of Ireland) by a stronger redistributive impact of social protection. In these countries, a very modest (and in the case of Ireland quite unevenly dispersed) job growth is compensated for by an increase in social transfers. Italy and Portugal followed a comparable trend in the nineties. The *third pathway* was marked by a decline in pre-transfer poverty in consequence of expanding labour markets that was *cancelled out largely (or even completely)* by a weakening of the poverty reduction achieved by social protection. Sweden and Finland are the prime examples of countries belonging to this cluster: in the 2000s they exhibited a decline in the social redistribution to the extent that lower pre-transfer poverty is transmuted into rising post-transfer poverty. Denmark in the 1990s would appear to have followed a similar trend.

Table 5. Summary trends in (pre)AROP and relative poverty reduction, according to geographical clusters

	preAROP			Relative pov red			AROP		
	ΔECHP '95-'01	ΔSILC '05-'08	ΔSILC '08-'09	ΔECHP '95-'01	ΔSILC '05-'08	ΔSILC '08-'09	ΔECHP '95-'01	ΔSILC '05-'08	ΔSILC '08-'09
Scandinavian	↘	↘	↘	↘	↘	↘	↗	↗	=
Anglo-Saxon	↘	↘	↗	=	=	↗	↘	↘	=
Continental with DE SILC	↘	=	=	↗	↘	↘	↘	↗	=
Continental with G-SOEP	=	=	=	↗	=	=	=	=	=
Continental excl. DE	↘	=	=	=	↘	↘	↘	=	=
Eastern Europe	n.a.	↘	↘	n.a.	↗	↘	n.a.	↘	=
Southern Europe	=	=	=	↗	=	=	↘	=	=

Note: AROP = at-risk-of-poverty; pov red = poverty reduction; Scandinavian = DK, FI and SE; Anglo-Saxon = IE and UK; Continental = BE, LU, FR, NL, AT and DE; Eastern Europe = PL, CZ, LV, LT, SI, EE, SK, HU; Southern Europe = ES, IT, GR and PT; ↗/↗ = significant change with 85% ci; n.a. = not available

Source: own calculation ECHP (1995-2001) and EU-SILC (2005-2009)

Table 5 summarizes trends in (post- and pre-transfer) at-risk-of-poverty rates and relative poverty reduction according to geographical clusters. The results are based on weighted averages – for detailed overview of the results see Table A4 in the appendix. The following divergent patterns emerge. In the 1990s significant declines in relative poverty reduction are found in the traditionally strongest welfare states in the North while there was a standstill in relative poverty reduction in the Anglo-Saxon and the continental clusters.[9] Southern European countries – on the other hand – displayed a modest increase in overall poverty reduction during the 1990s. In the 2000's before crisis, two clear clusters emerge. While in the Scandinavian and the continental welfare states relative poverty reduction by social transfers declined significantly, it increased significantly in the new EU member states of Eastern Europe.[10] Southern Europe and the Anglo-Saxon countries displayed a standstill. Note however that the basic pattern found in the continental welfare states is highly dependent on whether you work with the German SILC or SOEP figures. When making use of the G-SOEP date, the decline in poverty reduction found in continental welfare states disappears.

Obviously, changes in poverty reduction may have been endogenous (e.g. because those who remain unemployed in a boom economy tend to receive comparatively lower benefits), they may have been driven by a lack of institutionalized adjustment of benefits to improving living standards or by deliberate policy interventions (e.g. benefit retrenchment as a means of reducing unemployment traps). Microsimulation or in-depth study of country-specific policy trajectories may provide insight in this

[9] Please note that the dominant trend for the continental countries in highly dependent on the inclusion of German ECHP- and SILC-figures.

[10] I.e. the decreases in absolute poverty reduction largely seems to reflect the amelioration of the Eastern European labour markets.

matter. Later in this paper, data will be presented on the generosity of social assistance and child benefit packages. Although the national patterns observed are quite divergent, standard simulations suggest that policy interventions at least partially explain the previously described trends in the poverty-reducing impact of social protection.

3.5. In-work Poverty, Work Poor Households and the Adequacy of Social Protection

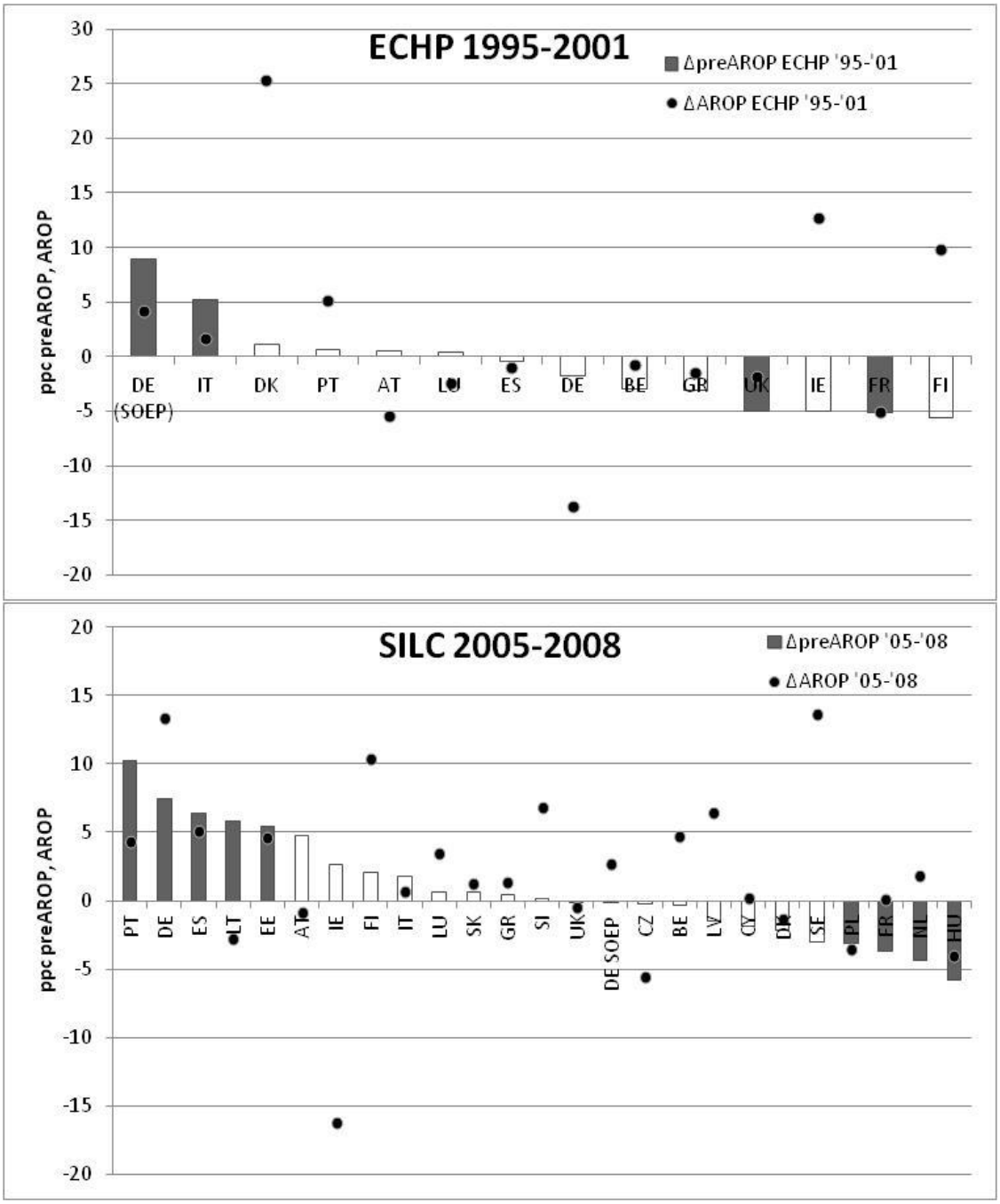
In this section, we consider trends in at-risk-of-poverty and poverty reduction for two work intensity groups: households with a work intensity status below 0.5 – we will refer to them as 'work poor households' – and households with higher work intensity (Figures 6 and 7).

With regard to the work poor households (WI<0.5), two clear conclusions emerge. *First*, while there was no dominant trend in relation to at-risk-of-poverty in the 1990s, in the pre-crisis years at-risk-of-poverty was rising in most of the countries considered – Ireland being a clear exception. In general, income poverty among work poor households reaches extremely high levels, ranging from 70 per cent in Latvia over 55 per cent in Germany (according to SILC and SOEP) to more than 40 per cent in Finland, Belgium and Sweden. *Second*, cash benefits are clearly very important for these households. In all countries where substantial changes have occurred with regard to income poverty, changes in poverty reduction were the main determinant – as exemplified in Denmark (1990s), Ireland (1990s and 2000s), Finland (1990s and 2000s) and Sweden (2000s). Ireland is the only country where the poverty reduction for the work poor households increased substantially. In general, in the 2000's relative poverty reduction declined in the Nordic and in the Continental clusters while social protection for the work poor households became more adequate in the group of the new Member States (see Table A4 in appendix).

Although social transfers are obviously less important for *non work-poor households*, it is clear that inadequate social protection is a not unimportant factor explaining *in-work poverty* too. Changes over time were less outspoken than in the case of work poor households, but are by and large in line with the poverty trends for the work poor households. Clear divergent trends between both groups are only found in Denmark (1990s), Belgium (2000s), Ireland (2000s) and Slovenia (2000s). The most remarkable trend was observed in Denmark during the 1990s, where a sharp increase in poverty among the work poor (more than 25 per cent) coincided with a poverty standstill for the other households. The figures give some mild support to the hypothesis that in-work poverty is associated not only with low pay but also with low work intensity at the household level and with shortcomings in tax and benefit systems. Although increasing pre transfer poverty (pointing to increasing

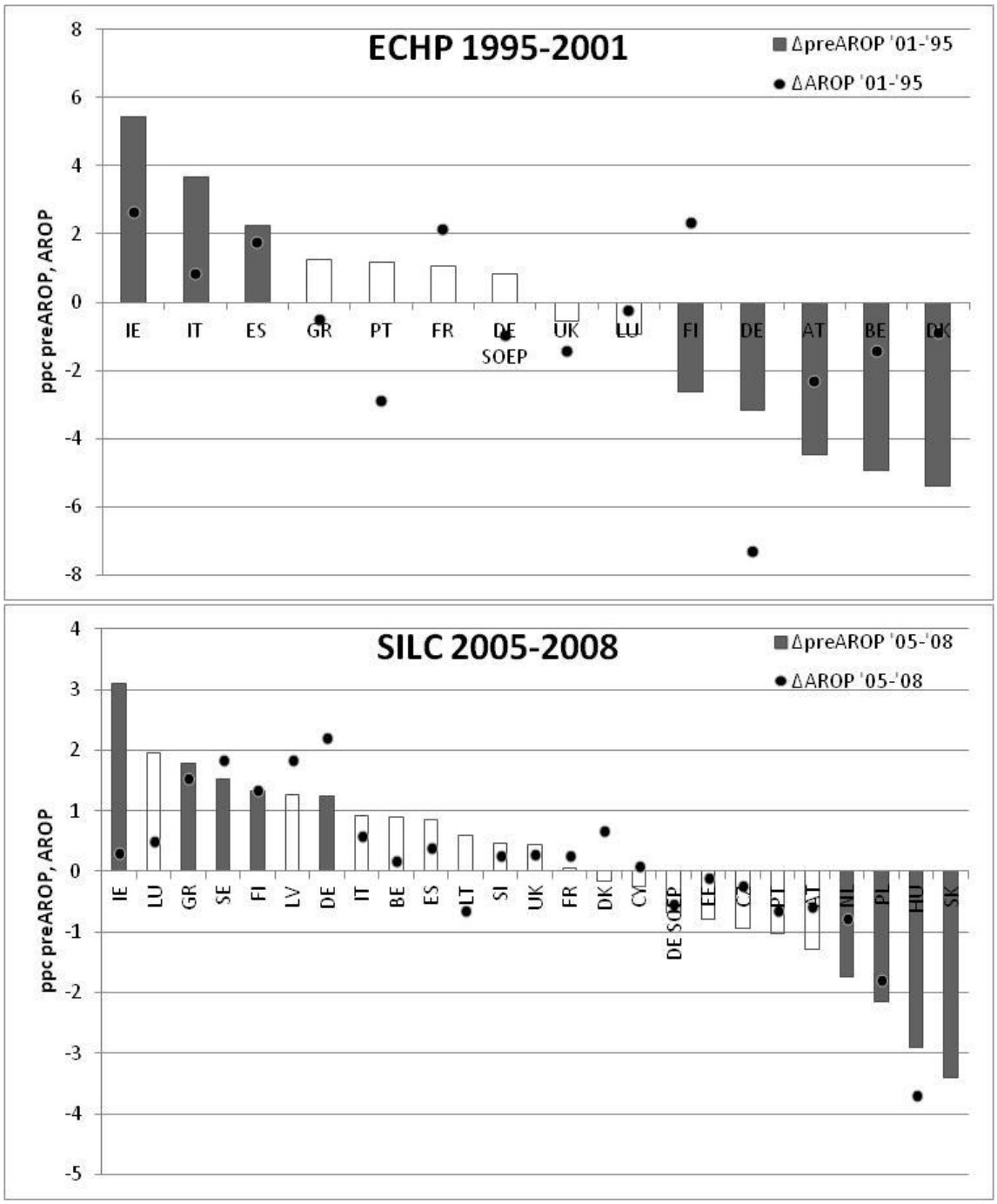
vulnerability on the labour market) accounts for the largest part of the increase of in-work poverty in some countries, *declining poverty reduction by social transfers seems to have been an additional factor*. This was clearly the case in Germany (according to SILC), Finland (in the nineties), Latvia and Sweden. Likewise, more adequate social transfers accounted at least partly for decreasing in-work poverty in Hungary and in the UK (in the nineties).

Figure 6. Evolution AROP rate (pre and post transfers) active age population (20-59 y.o.), work intensity < 0.5



Note: ppc = percentage point change, the grey bars indicate significant change
Source: own calculations ECHP (1995-2001), EU-SILC (2005-2008) and SOEP

Figure 7. Evolution AROP rate (pre and post transfers) active age population (20-59 y.o.), work intensity ≥ 0.5



Note: ppc = percentage point change, the grey bars indicate significant change
Source: own calculations ECHP (1995-2001), EU-SILC (2005-2008) and SOEP

A way of looking at the relative generosity of social benefits for both work intensity groups, is to take stock of the size of cash benefits relative to the share of households in the group. We will label this indicator the average size of cash benefits – for more information see textbox 1. It can be interpreted as the average benefit per households as a percentage of the average income in the population. Table 6 presents estimates for both work intensity groups. Unsurprisingly cash benefits are more important for

the work poor households. The average benefit per work poor household is typically 15 to 20 per cent of the average income. In general, we find a strong association between the average size of cash benefits involved and the absolute measure of poverty reduction we have used above. The co-variation is strongest for households with low work intensity. *A*lthough there is substantial overlap between the changes in average size for both groups, some apparent divergent trends emerge. Whereas in Belgium (2000s) and Denmark (1990s) the evolution in average size was detrimental for the work poor, the opposite evolution is found in Germany (according to ECHP) during the pre-crisis years.

Table 6. Percentage point change (ppc) in average size by work intensity group (WI<0.5, WI>=0.5)

	Average size WI<0.5			Average size 0.5<=WI<1		
	ΔECHP '95-'01	ΔSILC '05-'08	SILC '08	ΔECHP '95-'01	ΔSILC '05-'08	SILC '08
AT	-0.34	0.67	16%	-1.19	-0.04	4%
BE	-2.07	-2.60	22%	-1.67	0.40	4%
BG			6%			3%
CY		0.40	8%		-0.22	3%
CZ		0.74	16%		0.14	5%
DE	2.32	2.28	19%	1.63	-0.53	4%
DK	-11.34	0.96	30%	-2.40	-0.79	4%
EE		1.24	10%		-0.43	3%
ES	0.23	1.80	10%	-0.41	0.01	2%
FI	-12.15	0.01	24%	-3.99	-0.31	5%
FR	4.46	-1.64	17%	-0.19	0.35	5%
GR	-1.96	0.00	4%	1.09	0.10	1%
HU		-0.40	19%		-0.20	6%
IE	-2.24	3.68	20%	1.43	1.38	6%
IT	0.95	-0.30	4%	1.74	0.16	3%
LT		2.89	13%		0.71	3%
LU	3.20	-1.10	15%	-0.95	0.01	4%
LV		1.08	8%		0.48	3%
NL		-3.26	21%		-0.54	2%
PL		-1.05	10%		-0.40	3%
PT	1.26	0.35	10%	0.72	-0.28	3%
RO			9%			3%
SE		-0.25	26%		-0.35	6%
SI		-1.70	12%		0.15	6%
SK		-1.24	13%		-1.26	3%
UK	-3,35	-0,61	16%	-0,39	-0,06	3%

Note: *** significant change with 95% confidence interval (ci), ** significant change with 90% ci, * significant change with 85% ci, average size = average cash benefit per household / average household income in the total population

Source: own calculations ECHP (1995-2001) and EU-SILC (2005-2008)

4. More Adequate Protection: Potential and Constraints

The most important conclusion to be drawn from the above is the striking – and in many countries rising – inadequacy of social protection for individuals living in households with a low work intensity. This points at the tension between the adequacy of income protection and activation, as elaborated in an earlier section, and it lends credence to the notion that policies have sought to raise employment at least partially by reducing reservation wages (see among others Atkinson 2010). Arguably, the focus on employment has weakened traditional (passive) social protection as

"much of the thrust of labour market reform has been by reducing the level and coverage of social protection and tightening the conditions under which benefits are paid" (Atkinson 2010, 15). In the same line of reasoning, Vandenbroucke and Vleminckx (2011) draw attention to the existence of an '*activation protection trilemma*'. According to them 'activation can entail a trilemma between three objectives that egalitarian believers in social investment may wish to pursue: (i) ensuring that the unemployed people are not poor; (ii) ensuring that administrative monitoring systems are not excessively intrusive and cumbersome; (iii) ensuring employment growth in order to reduce benefit dependency' (Vandenbroucke and Vleminckx 2011, 461).

The necessity of adequate minimum income protection has been recognized in the European policy agenda for at least twenty years.[11] However, there is ample evidence of an erosion of minimum social benefits, primarily in the 1990s but, in many countries, also in the 2000s (see textbox 3). In many cases, minimum benefit levels are below 40 per cent of median equivalent income. This is not only so in the relatively new Member States, but also in older, usually richer Member States such as Belgium, Germany, France, Finland, Sweden, and the United Kingdom (Cantillon and Van Mechelen 2012). This raises the question of whether it is possible (and, if so, under which conditions) to guarantee an adequate minimum income protection given the high number of people who are structurally excluded from the labour market and the necessary activation policies, which inevitably also include the fight against dependency traps.

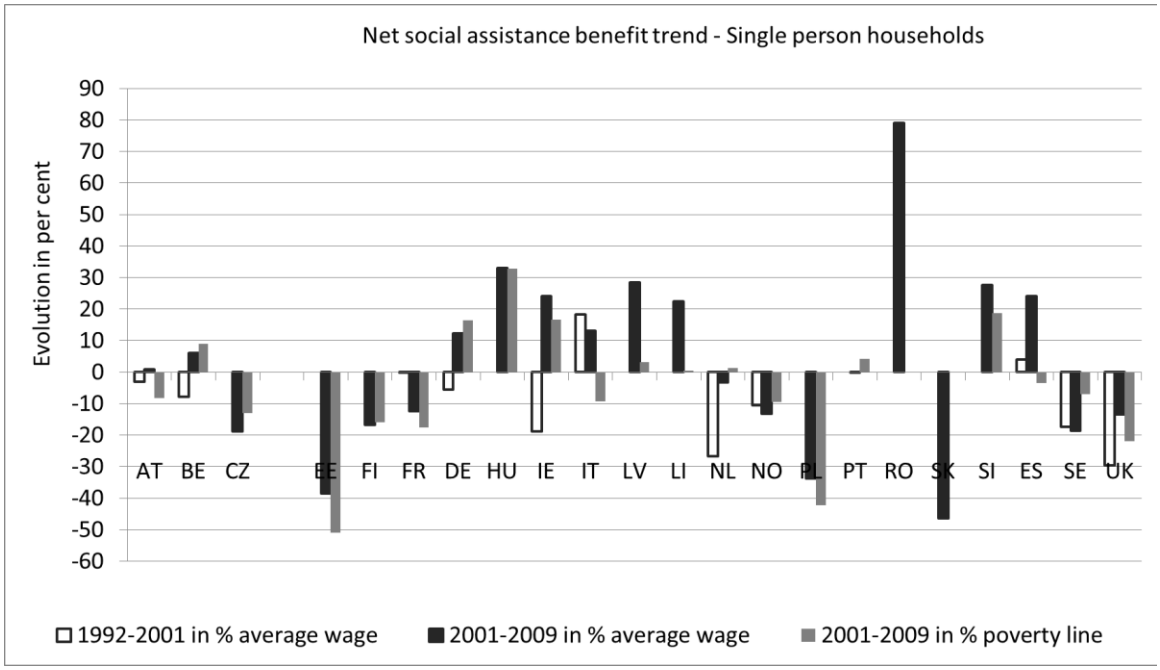
Textbox 3. Trends in income protection

The predominant picture to have emerged from the literature on the evolution of social security benefits since the 1980s is one of strong social retrenchment (Korpi and Palme 2003; Cantillon et al. 2004; Nelson 2007; Scruggs 2008; Starke and Obinger 2009; OECD 2011). Although this image largely persists, recent empirical evidence tells a rather more qualified story (OECD 2010; Weishaupt 2011; Van Mechelen and Marchal 2012). The level of erosion of benefits turns out to vary quite substantially between different countries and periods, and by the nature of the benefits concerned. Most countries reduced benefit levels of unemployment insurance between 1995 and 2005 (OECD, 2011). With regard to social assistance, for example, the overall picture for the 1990s in the EU 15 was one of almost uniform erosion of benefit levels relative to average wage and median equivalent household income. Nevertheless, net social assistance benefit levels have by and large

[11] See, for example, Council (1992) Council Recommendation 92/441/EEC of 24 June 1992 on Common Criteria Concerning Sufficient Resources and Social Assistance in Social Protection Systems (OJ L 245/46); European Commission (2008), Commission Recommendation 2008/867/EC of 3 October 2008 on the active inclusion of people excluded from the labour market (0J L 207, 18.11.2008, 11); European Parliament (2010), European Parliament Resolutions of 20 October on the role of minimum income in combating poverty and promoting an inclusive society in Europe, Reference number: INI/2010/2039.

eroded less since 2000 (Van Mechelen and Marchal 2012). In recent years social assistance has continued to become less and less adequate as an anti-poverty device in countries as diverse as Sweden, Finland, Norway, France, Estonia, Poland, the Czech and the Slovak Republic, whereas it seems to have gained some ground compared to median equivalent income in Ireland, Belgium, Germany, Hungary, Slovenia.

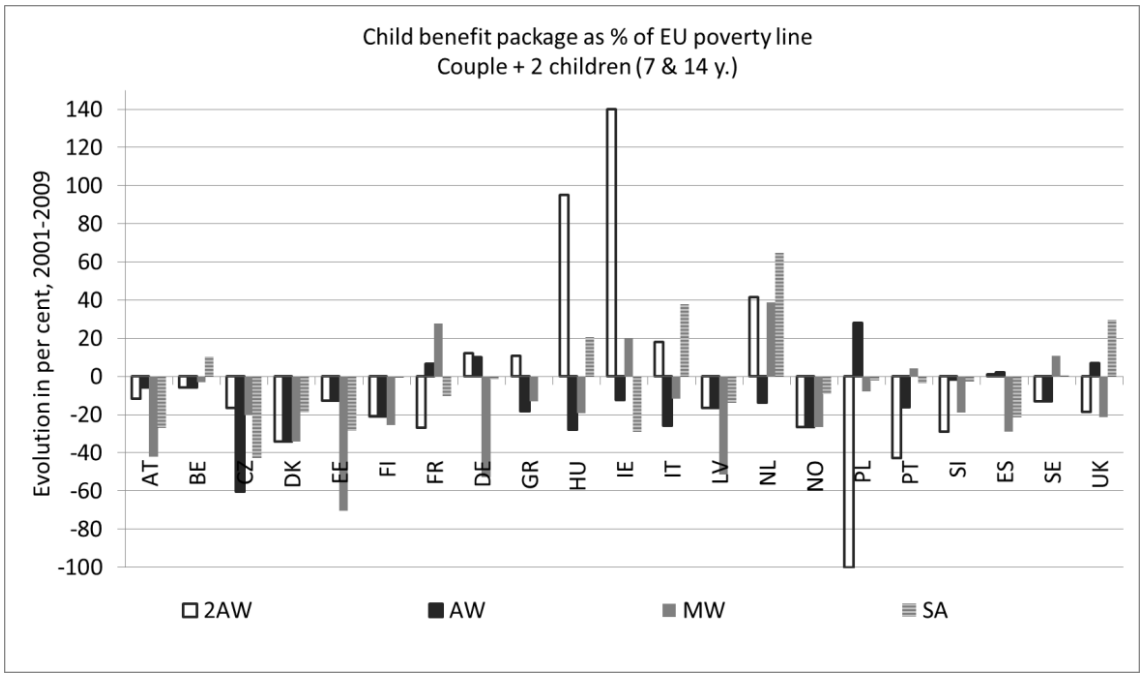
Figure 8. Net social assistance benefit trend – Single-person households, 1992-2009



Source: CSB-MIPI (see Van Mechelen et al. 2011)

Child benefit generosity has followed a somewhat different path. Whereas child benefit packages were able to escape welfare erosion until the 1990s, their adequacy has declined over the past decade in a majority of countries (Van Mechelen and Bradshaw 2012; Gauthier 1990; Kamerman and Kahn 2001). Figure 7 shows the trend between 2001 and 2009 in the child benefit package of a model family (a couple) with two children. Although child benefit packages have tended to increase in real terms, in most countries they have decreased relative to the poverty line set at 60 per cent of median equivalent income. This holds true not only for double-income families, but also for low-income families such as single-earner households on average or minimum wage and social assistance recipients. The gap between the child benefit package and the poverty line has increased by more than 20 per cent in countries such as Denmark, Finland, Germany, Austria, the United Kingdom, Portugal, Spain, the Czech Republic, Estonia, Latvia, Poland and Slovenia. The main exceptions are Hungary, Ireland, Italy and the Netherlands, where the child benefit package of several model families has grown faster than median equivalent income.

Figure 9. Child benefit package trend – Couple with two children, 2001-2009

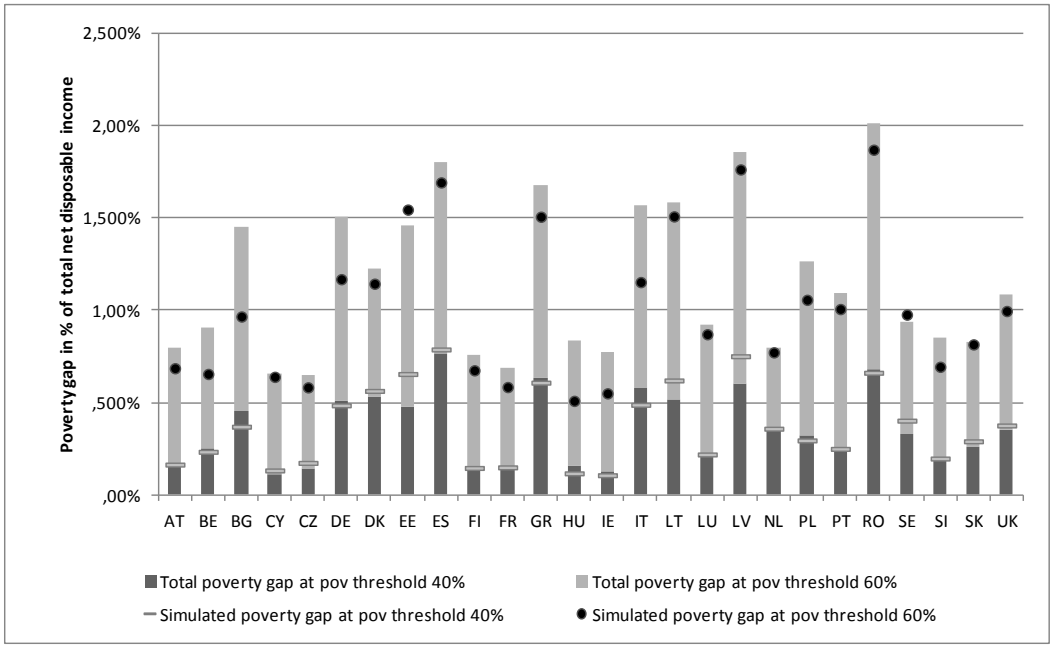


Source: CSB-MIPI (see Van Mechelen et al. 2011)

Figure 10 presents a tentative calculation showing that the total cost of an increase in minimum incomes to the 60 per cent poverty threshold would amount to almost EUR 82 billion, which corresponds to 1.46 per cent of total disposable income in the EU.[12] Clearly the financial effort required for all countries to attain the 60 per cent level is considerable. Moreover, it would be unequally divided between the Member States. In Austria, the Czech Republic, Cyprus, Finland, France, the Netherlands and Slovenia, the measure would require less than 1.0 per cent of total disposable income; in Bulgaria, Spain, Italy, Latvia, Lithuania, and Romania, it would require over 2.0 per cent. The budgetary impact of increasing minimum benefits across to the Union to 40 per cent of median standardized income would represent some EUR 21 billion, ranging from 0.07 per cent of disposable in the Cyprus to 0.94 per cent in Romania. Obviously, these differences in simulated costs are correlated with the numbers of work poor households, the level of prevailing minimum wages and with the actual levels of means deployed in social security systems.

[12] The budgetary impact of an increase in minimum social benefits on the national EU poverty thresholds is estimated as the sum of the poverty gaps of all households aged 20-59 years. The cost obtained is presented as a proportion of the sum of the disposable incomes of the total population. It should be emphasized that many practical and technical aspects are ignored in this exercise, so that the result is an approximation and therefore merely illustrative. For example, it is implicitly assumed that introducing such a guaranteed minimum income will affect neither taxes paid nor other benefits claimed by the households. It is also assumed that the poverty threshold is fixed.

Figure 10. The total poverty gap of individuals aged 20-59 (% of total disposable income) at poverty thresholds 40% and 60%, before and after a reduction of the share of households with work intensity lower than 0.5



Note: we assume that poverty risks in both work intensity groups are unaltered
Source: own calculation EU-SILC 2008

Moreover, a Europe-wide introduction of social assistance minimums equal to 60 per cent of national median income would create financial 'inactivity traps' in no fewer than ten Member States: in Bulgaria, Estonia, Slovenia and Lithuania, the net income of a single benefit recipient would be between 25 per cent and 30 per cent higher than the equivalent income of a single person working at minimum wage; in Spain and the Czech Republic, the relative advantage of the benefit claimant would amount to between 14 and 16 per cent. Less severe dependency traps would appear in Hungary, Luxembourg, Portugal and the United Kingdom (Cantillon and Van Mechelen 2012; Vandenbroucke et al. 2012).

Not unimportantly, the large differences in the severity of the dependency trap coincide with a great diversity in activation measures and minimum wages (Van Mechelen et al. 2011; Marx, Marchal and Nolan forthcoming). In some Eastern European countries, a genuine activation policy would appear to be lacking thus far. In countries such as Lithuania and Estonia, the only incentive for social assistance recipients to seek work is the enormous gap between benefits and wages. Clearly, here an increase in benefit amounts would appear to be feasible only if minimum wages are increased and a new balance is struck between the rights and duties of benefit claimants. So what would be the cost of the introduction of adequate minimum income protection if countries were able to devise successful activation policies and – in so doing – to push down their number of work-poor households? Figure 9 illustrates the budgetary impact of an increase in minimum income protection assuming that the

proportion of household with low work intensity (< 0.5) were cut to 7.8 per cent of the population aged 20-59 years in all Member States, i.e. the average proportion in the top-5 performers (Slovakia, Sweden, Estonia, and Lithuania).[13] Under the assumption of constant poverty gaps in both work intensity groups, the cost of an increase in minimum social benefits to 60 per cent of median equivalent income would amount to 66 billion, i.e. 1.18 per cent of net disposable income (as compared to 82 billion prior to the reduction in the share of work-poor households). Evidently, the impact of active inclusion policies on the poverty gap would be strongest in countries with a high proportion of work-poor households. In countries such as Bulgaria, Hungary, Italy and Ireland – where about 20 per cent of working-age households is work poor – the total poverty gap may be reduced by 30 to 50 per cent by cutting back current levels of low work intensity to about 8 per cent (under the assumption that the poverty line remains unchanged). However, in others the number of work-poor households scarcely influences the size of the poverty gap. In Spain, Romania, Lithuania, Estonia and Latvia, the poverty gap would remain large even if the share of families with low work intensity were to be reduced to 8 per cent. In the latter three countries, the work intensity of households is already relatively high, hence one should not expect spectacular employment effects. Here the poverty gap mainly reflects the inadequacy of current income protection arrangements. In sum, *although active labour market policies can and should play a crucial role in reducing poverty gaps across Europe, income protection schemes remain an important instrument for improving welfare state poverty alleviation.* It is however clear that given the great heterogeneity between countries, any binding instrument at the EU level on minimum income will have to be worded flexibly, introduced gradually, and implemented in unison with a convergence in activation measures, redistributive efforts and minimum wages.

5. Conclusion

Let us briefly reiterate the central issues at hand. The first question to arise was whether and – if so – why social protection provides an explanation for disappointing poverty trends in the EU15 and declining poverty risks in many of the new Member States. A second question to arise was whether social security has become more or less effective in providing protection for households who remained largely outside the labour market, and why. The third question relates to the issue of in-work poverty: how important is social protection for non-work poor households

[13] This idea also underlies the active inclusion strategy of the European Commission. In its recommendation of 3 October 2008 on the active inclusion of people excluded from the labour market, the Commission links adequate income support to other priorities such as inclusive labour markets and access to quality services. The Commission calls on the Member States to adopt measures to ensure that able-bodied person receive help to re-enter or to stay in the labour market.

(WI>=0.5) and how has the adequacy of social protection evolved in relation to working individuals and their families?

We may summarize the main results as follows. First, as the *whole active-age population* is concerned one may conclude that *in the nineties* the redistributive impact of social transfers *declined significantly* in the traditionally strongest welfare states in the Nordic cluster. *In the 2000s* figures signal that same trends may have prevailed not only in the North but also in some of the old Member States on the Continent, albeit to a much lesser extent. Conversely, *the clusters of the new Member States in the 2000s and of the Southern States in the nineties displayed a significant increase* of poverty reduction by social protection. During the *first year of the crisis* the poverty reducing impact of social transfer systems in Europe seems to have been on the decline in the Nordic countries, on the Continent as well as in the East. In all, in the period prior to the crisis, Europe's social security systems were important devices in the fight against poverty, but as a consequence of declining social redistribution few countries are to be found where the advantages out of the favourable pre crisis conditions were translated in poverty reduction.
Second, considering *work-poor households* in particular, significant and substantial *decreases in relative poverty reduction through social transfers occurred in the Continental and Nordic clusters*. In many of these countries income poverty among work poor households increased accordingly. Conversely, in the cluster of *new Member States* poverty reduction by social transfers increased substantially thereby reducing the number of income poor among households with a low work intensity.
Finally, although social transfers are obviously less important for non work-poor households and changes over time were less outspoken than in the case of work poor households, it is clear that inadequate social protection is not an unimportant factor explaining *in-work poverty.* The figures shown in this paper give some mild support to the hypothesis that in-work poverty is associated not only with low pay but to some extent also with low work intensity at the household level and with shortcomings in tax and benefit systems.

One may thus conclude that the convergence within Europe – in so far as working age financial poverty is concerned – is a consequence of strongly expanding labour markets in the East, a decline in the size and/or the efficiency of social redistribution in some of the traditionally strongest welfare states in the North and on the European continent, and increases in social protection in some of the 'laggards', including Ireland, Lithuania, Hungary and the Czech Republic in the 2000s, Italy and Portugal in the 1990s. In several of the matured welfare states of the 'old' Europe this led either to a poverty standstill or significant poverty increases. The positive impact of expanding labour markets seems partly offset by decreasing social protection in some of the new Member States while in others better social protection contributed to positive poverty trends.

Obviously, changes in poverty reduction may have been endogenous (e.g. because those who remain unemployed in a boom economy tend to receive comparatively lower benefits), they may have been driven by a lack of institutionalized adjustment of benefits to improving living standards or by deliberate policy interventions (e.g. benefit retrenchment as a means of reducing unemployment traps). Micro simulation or in-depth study of country-specific policy trajectories may provide insight in this matter. Data presented on the generosity of social assistance and child benefit packages suggest however that, in many countries, policy interventions may at least partially explain why they failed to increase the poverty-reducing impact of social protection.

The assumption of the Lisbon Agenda was that a strong focus on social investment would result in so-called 'virtuous cycles' of more work, lower social spending and less poverty. However, in many countries (mainly in the rich part of Europe) this hope would not be fulfilled, arguably because the aspect of social redistribution was pushed into the background in a concerted drive – successful or not – to inject new dynamism into the labour markets. In some of the new Member States the positive impact of expanding labour markets was partly offset by decreasing social protection although in some others as well as in Ireland and (to a lesser extend) some of the Southern European countries social redistribution increased. Figures of the *first year of the crisis are particularly disquieting* pointing to a decline of the poverty reducing impact of social transfer systems not only in the Nordic countries and on the Continent but also in the East. Considering that the years that lie ahead promise to be economically more challenging than the recent past has been, it is highly doubtful that an unchanged policy paradigm will result in notable progress in the field of poverty reduction. So, having arrived at this point, the question arises how a maximization of employment and an effective egalitarian agenda can be made compatible. Three considerations are in place here.

First, differences in social redistribution observed between individual countries are quite considerable. Although a reduction in the poverty alleviation by social protection has been the dominant pattern the countries of Scandinavia continue to provide an example of how low poverty, high employment and economic performance can be combined with a strong social redistribution. Although the adequacy of Nordic social protection decreased, the poverty reducing capacity is still among the highest in Europe (in 2008 only preceded by Hungary and Ireland).

Second, poverty is clearly more prevalent among jobless households, who typically comprise between 10 and 20 per cent of the working-age population. Poverty risks among this population group are generally very high, even though considerable differences between countries are observed. Comparison between countries suggests two things: first, the proportion of work-poor households may certainly be reduced to 10 per

cent according to the examples of Slovakia, the Czech Republic and Denmark; second, guaranteeing adequate minimum incomes to the apparently 'non-condensable' groups of work-poor households, while expensive, is not altogether impossible, provided that the policy design is efficient, genuine activation measures as well as adequate minimum wages and an appropriate level social redistribution are put in place. Given the limited economic strength of the poorer countries of Europe and the fact that they usually face a wider poverty gap, they will obviously need to proceed gradually in introducing adequate minimum income protection. The simulations that have been showed in this paper clearly showed that *although active labour market policies can and should play a crucial role in reducing poverty gaps across Europe, adequate income protection schemes and social redistribution remain an important instrument for improving welfare state poverty alleviation.*

Third, social budgets are clearly not always deployed efficiently. It has been established that there is generally a positive relationship between spending levels and poverty risks: successful anti-poverty measures clearly require important distributional efforts. However, some countries achieve much lower poverty rates despite similar social spending levels. The design and structure of social programmes are obviously important, so that certain Member States attain greater 'efficiency' in terms of poverty risk reduction than others. The European evidence clearly points to the fact that as long as there is a universal systems of cash transfers, policymakers have the option of incorporating greater selectivity towards the weakest without compromising legitimacy.

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APPENDIX

Table A1. Convergence of the at risk of poverty, poverty reduction, and the size and efficiency of social protection in Europe (EU15 excl. Netherlands and Sweden)

	Coefficient of variation 1994	Coefficient of variation 2000	Value 1994 and subsequent growth rate* Pearson's correlation
AROP	0.29	0.29	-.54
POVRED	0.39	0.23	-.73**
SIZE	0.29	0.14	-.77**
EFFICIENCY	0.14	0.12	-.65**
AROP WP	0.26	0.24	-.57**
POVRED WP	0.36	0.28	-.50
SIZE WP	0.34	0.18	-.81**
EFFICIENCY WP	0.29	0.28	-.29
GENEROSITY WP	0.29	0.19	-.70**

Note: * growth rate = ratio between 2000 value and 1994 value, ** significant at 0.05 level
Source: own calculations ECHP (1995-2001)

Table A2. Convergence of the at-risk-of-poverty, poverty reduction, and the size and efficiency of social protection in Europe, 2004-2007 (EU27 excl. Bulgaria, Malta and Romania)

	EU15 excl. Netherlands and Sweden			EU27 excl. Bulg., Malta and Rom.		
	Coeffic. of variation 2004	Coeffic. of variation 2007	Correlation value 2004 and subsequent growth*	Coeffic. of variation 2004	Coeffic. of variation 2007	Correlation value 2004 and subsequent growth*
AROP	0.20	0.19	-.30	0.25	0.23	-0.41**
POVRED	0.41	0.40	-.31	0.41	0.44	-0.15
SIZE	0.37	0.37	-.28	0.35	0.37	-0.21
EFFICIENCY	0.12	0.11	-.44	0.11	0.14	-0.28
AROP WP	0.13	0.14	-.56**	0.24	0.24	-0.34
POVRED WP	0.46	0.44	-.26	0.47	0.43	-0.29
SIZE WP	0.52	0.48	-.37	0.49	0.52	-0.19
EFFICIENCY WP	0.18	0.20	-.33	0.24	0.24	-0.53**
GENEROSITY WP	0.46	0.45	-.15	0.46	0.44	-0.32

Note: * growth rate = ratio between 2007 value and 2004 value, ** significant at 0.05 level
Source: own calculations EU-SILC (2005-2008)

Table A3. Comparing size estimates (based on ECHP and SILC surveys) with external data (ESSPROS)

	ECHP 1995	ESSPROS 1994	ECHP 2001	ESSPROS 2000	SILC 2005	ESSPROS 2004	SILC 2008	ESSPROS 2007
AT	6.18	7.96	5.10	6.98	7.03	7.11	7.25	6.14
BE	8.33	8.52	7.18	7.15	8.78	7.81	8.33	7.78
BG							3.00	2.56
CY					4.60	5.85	3.76	5.58
CZ					6.71	4.65	6.26	4.46
DE	4.11	7.40	5.05	7.64	8.08	7.71	7.15	6.39
DK	11.93	11.34	6.89	8.34	9.42	9.01	8.16	7.52
EE					5.09	3.52	4.57	3.10
ES	3.23	7.08	1.82	4.47	2.92	4.80	3.26	4.84
FI	16.26	13.71	9.19	8.18	9.29	7.99	8.08	6.82
FR	6.88	6.86	5.35	6.33	7.68	6.67	8.30	6.06
GR	0.63	3.07	0.76	3.16	1.40	3.26	1.34	3.08
HU					9.89	5.01	10.66	5.38
IE	8.39	6.59	5.98	4.09	9.13	5.06	10.69	5.40
IT	1.05	3.68	1.08	3.07	3.11	3.12	3.38	3.16
LT					4.19	2.56	4.80	3.05
LU	5.28	6.33	5.64	5.74	6.43	7.48	6.22	6.15
LV					4.43	2.85	4.79	2.50
NL					6.78	7.58	4.94	6.35
PL					5.16	4.54	3.68	3.60
PT	2.57	4.26	2.60	4.16	3.54	4.75	3.42	4.57
RO							4.13	2.99
SE					11.50	8.33	10.51	6.53
SI					7.68	5.21	7.47	4.37
SK					7.06	4.37	4.41	3.80
UK	6.36	6.81	4.91	4.97	7.34	4.51	6.50	4.37
r		0.94		0.83		0.73		0.69

Note: ESSPROS estimate = unemployment + sickness + invalidity + family + social assistance (cash benefits, for all age groups), ECHP/SILC = aggregate of active-age cash benefits (20 to 59 years old), relative to total disposable income in the survey, r = bivariate correlation coefficient

Source: own calculations ECHP (1995-2001) and EU-SILC (2005-2008), ESSPROS database

Table A4. Evolution of the absolute and relative poverty reduction for the whole active-age population (20-59 y.o.), work poor households (WI<0.5) and non-work poor households (WI>=0.5). Figures are weighted averages for all countries in the sample

	Pre-transfer arop (60%)						Post-transfer arop (60%)						Abs. pov. reduction						Rel. pov. reduction					
Total	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**
EU15	0.067		-0.273		0.280		-1.534		0.057		0.380		1.601	***	-0.330		-0.100		8.443	***	-0.989		-0.933	
EU15 minus DE	-2.213	***	-0.319		0.370		-0.774	***	0.013		0.184		-1.440	***	-0.332	*	0.186		-1.351		-0.934		0.198	
EU15 minus DE & IE	-1.997	***	-0.391		0.332		-0.770	***	0.043		0.190		-1.226	***	-0.434	***	0.142		-0.966		-1.273	*	0.075	
NMS9			-4.057	***	-1.538	***			-3.228	***	-0.243				-0.829	***	-1.295	***			3.146	***	-2.933	***
North	-7.973	***	-1.065	**	-0.961	**	1.696	***	1.350	***	0.495		-9.669	***	-2.415	***	-1.456	***	-13.458	***	-7.235	***	-3.918	***
East			-4.086	***	-1.573	***			-3.258	***	-0.249				-0.828	***	-1.324	***			3.191	***	-2.986	***
South	-0.208		0.576		0.491		-1.142	**	0.270		0.257		0.934	**	0.306		0.234		3.525	***	0.859		0.572	
Anglosaxon	-3.292	***	-1.276	*	2.466	***	-1.624	***	-1.304	***	0.061		-1.668	***	0.028		2.404	***	-0.822		2.277		5.385	***
Continent	0.073		-0.419		-0.830		-1.533		0.191		-0.746	*	1.606	***	-0.610		-0.084		8.461	***	-1.765		1.477	
Continent minus DE	-3.186	***	-0.698		-0.944		-1.259	***	0.163		0.112		-1.927	***	-0.861	**	-1.056	***	-0.471		-2.108	*	-2.551	**

	Pre-transfer arop (60%)						Post-transfer arop (60%)						Abs. pov. reduction						Rel. pov. reduction					
WI<0.5	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**
EU15	8.889	***	0.748		-6.169	***	4.073		1.713	**	-4.906	***	4.816	*	-0.965		-1.263	*	2.257		-1.839	*	1.481	
EU15 minus DE	-1.848	*	0.520		-3.318	***	1.057		1.140		-2.250	***	-2.904	***	-0.620		-1.068		-2.748	**	-1.262		0.231	
EU15 minus DE & IE	-1.382	*	0.389		-3.424	***	0.677		1.440	*	-2.217	***	-2.059	*	-1.051		-1.207		-1.899		-1.863	*	0.036	
NMS9			-1.113		-3.153	***			-3.293	***	-10.051	***			2.180	***	-4.139	***			4.143	***	-4.721	***
North	-3.452		-1.006		-0.968		14.732	***	8.120	***	3.004		-18.184	***	-9.126	***	-3.972	**	-17.316	***	-9.827	***	-4.056	**
East			-1.091		-3.160	***			-3.317	***	1.031				2.226	***	-4.191	***			4.200	***	-4.792	***
South	1.463		3.400	***	-3.352	***	0.895		2.125	*	-3.754	***	0.568		1.275		0.401		-0.086		0.911		2.352	*
Anglosaxon	-4.473	*	0.424		-4.959	***	4.690	*	-2.105		-5.158	**	-9.163	***	2.529		0.198		-9.325	***	3.121		3.035	
Continent	8.918	***	-1.559		-7.750	***	4.074		2.138		-7.069	***	4.844	*	-3.697	***	-0.682		2.286		-4.046	***	3.551	**
Continent minus DE	-2.234		-2.902	**	-3.781	***	-3.948	**	1.119		0.713		1.714		-4.021	***	-4.494	***	3.982		-3.611	**	-4.061	**

	Pre-transfer arop (60%)						Post-transfer arop (60%)						Abs. pov. reduction						Rel. pov. reduction					
WI>=0.5	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**	**ECHP95-01**	**Sig n.**	**SILC05-08**	**Sig n.**	**SILC08-09**	**Sig n.**
EU15	0.842		0.164		0.009		5.304	***	0.190		0.393	*	1.826	***	-0.026		-0.383	**	10.593	***	-0.655		-2.583	***
EU15 minus DE	0.529		0.404		-0.098		0.266		0.382	**	-0.101		0.263		0.021		0.003		0.053		-0.963		0.295	
EU15 minus DE & IE	0.226		0.368		-0.087		0.098		0.384	**	-0.084		0.128		-0.017		-0.003		0.117		-1.116		0.223	
NMS9			-1.677	***	-1.113	***			-1.347	***	-2.544	***			-0.330		-0.672	***			2.128	*	-1.376	
North	-3.772	***	0.998	**	-1.811	***	0.972	*	1.368	***	-0.162		-4.744	***	-0.371		-1.648	***	-10.693	***	-6.442	***	-3.447	**
East			-1.692	***	-1.138	***			-1.363	***	-0.450				-0.329		-0.689	***			2.164	*	-1.411	
South	2.322	***	0.772	**	0.466		-0.124		0.478		0.471		2.446	***	0.294		-0.005		9.218	***	0.883		-0.722	
Anglosaxon	1.387	*	0.605		-0.408		-0.165		0.272		-1.628	***	1.552	***	0.333		1.220	**	5.841	**	0.501		9.338	***
Continent	0.843		-0.492		-0.051		-0.985	*	-0.270		0.053		1.828	***	-0.222		-0.103		10.601	***	0.330		-0.478	
Continent minus DE	-1.697	***	-0.317		-0.293		-0.071		-0.023		0.160		-1.626	***	-0.294		-0.453		-3.381	**	-0.742		-1.908	

Note: *** significant change with 95% ci; ** significant change with 90% ci; * significant change with 85% ci; EU15 = BE, GR, LU, DK, ES, NL, DE, FR, PT, IE, IT, UK, AT, FI, SE; Continent = BE, LU, FR, NL, AT, DE; NMS9 = PL, CZ, CY, LV, LT, SI, EE, SK, HU; North = DK, FI, SE; East = PL, CZ, LV, LT, SI, EE, SK, HU; South = ES, IT, GR, PT; Anglo-Saxon = IE, UK

Source: own calculations ECHP (1995-2001) and EU-SILC (2005-2009)