CHILD POVERTY RISKS IN BELGIUM, WALLONIA AND FLANDERS: ACCOUNTING FOR A WORRYING PERFORMANCE

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1. INTRODUCTION

The at-risk-of-poverty rate for children is a 'lead indicator' for future social problems. A high rate of child poverty may signal inadequate social protection and/or poorly functioning labour markets, which may be related to lacunae in childcare and in the education system. In turn, child poverty makes success in education policy more difficult to obtain, given the strong link between the social, economic and cultural status of children and their success at school. In other words, child poverty may be *cause* and *effect* in a vicious circle of underperforming labour markets and education systems. In the same vein, there may be a vicious interplay between child poverty and failing health care. Belgium is a mediocre performer with regard to child poverty, notwithstanding its long tradition of social security. Moreover, child poverty is increasing. As a first step to understanding why our performance is mediocre and worrisome, we apply an analytical technique that is in essence an accounting device: decomposition. Although this technique is mechanical in all its simplicity, it highlights features of the Belgian welfare edifice which are quite exceptional in a cross-country comparison, but which have not been the subject of much research. One of these features is the skewed distribution of jobs over households. Elsewhere we study this social phenomenon by means of a 'polarisation analysis' (Corluy and Vandenbroucke, 2013a, 2013b). In this paper, we signal the same phenomenon with a simple indicator, the 'relative severity of work poverty' among households with children. Another feature of our welfare state is the high rate of poverty in households that are very work-poor, i.e. with little or no participation in the labour market. These observations show that Belgium is characterised by a dual polarisation: many children live in households that are very work-poor; simultaneously, financial poverty risks in very work-poor households with children are high.

Section 2 sets the scene by providing elementary information on child poverty in Belgium, Wallonia and Flanders. Section 3 illustrates that the child poverty risks are crucially determined by the 'work intensity' of the household in which these children live. It explains the meaning of 'household work intensity', and introduces the related concepts of 'work poverty', 'severe work poverty' and the 'relative severity of work poverty'. In Section 4, we show that the structure of child poverty is quite exceptional in Belgium, with regard to the work intensity of the households to which poor children belong. Section 5 explains the formal structure of our decomposition analyses; it can be skipped by readers knowing this technique or mainly interested in the results. Section 6 decomposes cross-country differences in child poverty on the basis of household work intensity, using Belgium as the benchmark country. Section 7 digs deeper into the cross-country differences in patterns of household work intensity: we investigate whether the exceptional pattern of household employment in Belgium can be explained by the relatively large share of lone-parent households. In Section 8 we turn to another determinant of child poverty: social spending. We conclude that the challenge is to improve social protection at the household level, whilst avoiding '(severe) work poverty traps' at the household level: this should trigger a reconsideration of policies in several domains. In Section 9, we decompose the increase in child poverty (as we observe it since 2005), again on the basis of household employment. We do this before we conclude on policies, because policies that have been developed over the last decade should first be confronted with the (disappointing) pattern of change in child poverty that we observe meanwhile. In the concluding section of the paper, we sketch three key policy challenges, implying that both social protection and social investment policies should be reconsidered in the light of increasing child poverty.

2. CHILD POVERTY IN BELGIUM AND ITS REGIONS

We use 'child poverty' as a shortcut for the at-risk-of-poverty rate, as defined by Eurostat, for individuals below the age of 18. Being at risk of poverty means living in a household with an equivalised net disposable income below 60% of the national median equivalised net disposable household income. Although we consider it to be one of the key parameters in the assessment of welfare state performance, the notion 'poverty', so defined, should be used with caution, for several reasons. This poverty concept presupposes a sharing of all resources within households, which is not necessarily the case. The at-risk-of-poverty rate applied here is a rather crude headcount: it simply measures the share of individuals in households with an income below the poverty threshold, and does not account for the depth or severity of the poverty faced. The notion 'at risk of' is not without meaning: we present a measure that signals a *risk* to be cut off of the mainstream of society because of lack of resources. The poverty headcount defines poverty in relation to the level of income in the welfare state where an individual happens to be living: it is a relative

measure. We use a floating poverty threshold, i.e. the threshold changes every year. In a number of countries the poverty threshold decreased during the crisis years, reflecting the decrease of median household incomes: this has a favourable impact on the headcount, although financial needs may have increased in many families, poor and non-poor alike.[1]

Our data are based on the EU Statistics on Income and Living Conditions (EU-SILC). The years '2006', '2011', etc. refer to the SILC survey years; except for the United Kingdom and Ireland, they reflect incomes and household employment of the year before the survey. Hence we show data essentially relating to the years 2005 and 2010. We present calculations for two of the three Belgian regions, Flanders and Wallonia. The child poverty situation is particularly alarming in the Brussels region (and is included in our data for Belgium), but we do not include Brussels in our separate regional analyses, since the EU-SILC sample for Brussels is too small. Unless otherwise indicated, 'poverty' always refers to child poverty, and 'households' refers to households with children.

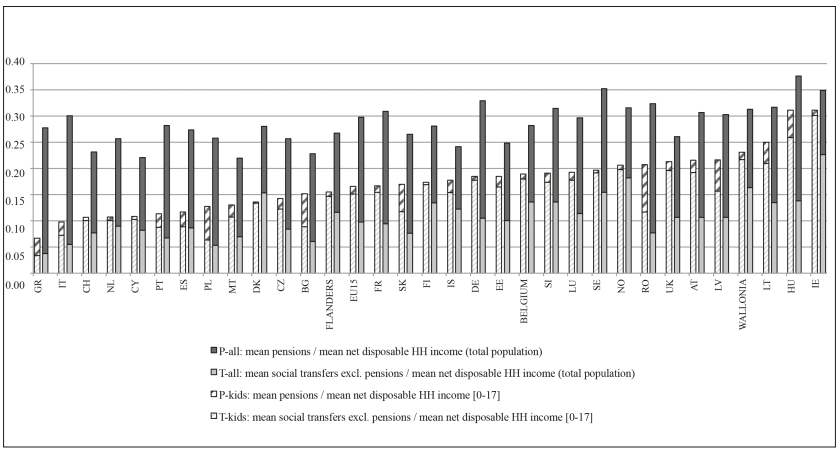
We calculate the regional poverty risks both using a Belgian poverty threshold (based on the Belgian equivalised median household income) and using regional poverty thresholds (based on the *regional* equivalised median household income). To be sure, since Belgium has an integrated tax and benefit system, the only correct measure of regional *poverty* is that relying on the Belgian median, both from a normative and from a policy perspective. However, calculating poverty rates using regional median incomes yields interesting additional information on the intra-regional *income distribution* with a comparable indicator. It implies sobering observations, both for Flanders (which does less well in terms of income distribution than one might assume purely on the basis of a Belgian-wide poverty threshold) and for Wallonia (which likewise harbours more intra-regional inequality between rich and poor than one might assume).

On the basis of EU-SILC 2011, 18.7% of Belgian children live below the poverty threshold in 2010. A quarter of Wallonia's children (24.9%) live below the Belgian poverty threshold, compared to 10.4% of the children in Flanders. Applying regional poverty thresholds yields child poverty headcounts of 20.8% for Wallonia and 13.1% for Flanders: the Walloon relative poverty risk, so conceived, 'diminishes' in Wallonia, though it remains very high; the Flemish figure, on the other hand, increases.

(1) Vandenbroucke et al. (2013, pp. 8-10) present and discuss child poverty rates with the thresholds anchored in time. For a thorough discussion of the concepts and measurement issues involved, see Decancq et al. (2014).

Figure 1 illustrates that Belgium is a mediocre performer with regard to child poverty, when compared to the other European welfare states for which we have EU-SILC data. When we limit the comparison to the welfare states of the EU15, it appears that the Belgian figure is more or less equal to the unweighted EU15 average (18.5%), and slightly below the weighted EU15 average (19.9%) which takes into account the size of the countries. Comparing Belgian regions to European nation states, as we do in Figure 1, would constitute a category mismatch if interpreted without due caution: as a matter of fact, national data for other countries also conceal important regional disparities (Germany is a telling case). However, the fact that the Belgian outcome reflects regional realities that are so different is important for understanding the Belgian position in the European league (as a German regional decomposition would be for understanding the German position in the European league).[2]

FIGURE 1: AT-RISK-OF-POVERTY RATES FOR CHILDREN IN EUROPEAN WELFARE STATES, BELGIUM, FLANDERS AND WALLONIA



Notes: We use 'FL-FL' and 'WA-WA' for the poverty rates calculated on the basis of regional thresholds, and 'FL-BE' and 'WA-BE' for the poverty rates calculated on the basis of the Belgian threshold.
*: significantly different from EU15 at 0.05 significance level, making use of the independent samples t-test.
Source: compiled by the authors, using EU-SILC 2011.

(2) See Vandenbroucke (2013) pp. 84-85 for an illustration of this argument, with regard to individual and household employment data in Belgium and Germany.

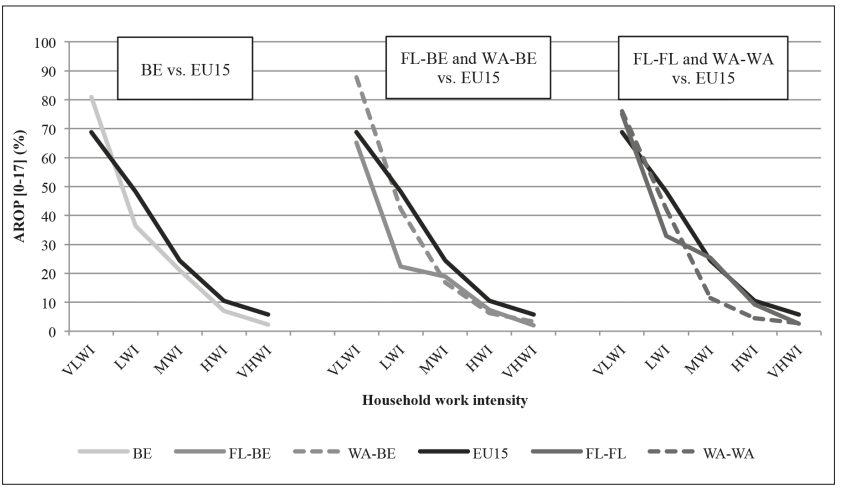
Given Belgium's history as a pioneer welfare state, our child poverty record is disappointing. One should consider child poverty as a key lead indicator for the future of our welfare state: so conceived, the Belgian performance is not just disappointing but worrying.

3. HOUSEHOLD WORK INTENSITY AND POVERTY RISKS

Our poverty concept is based on household incomes. Hence, the starting point of the analysis should be at the household level: we are interested in the impact of social spending on *household* incomes and in the labour market participation of the *household*. The latter can be measured by an indicator labelled 'household work intensity', which Eurostat defines as the ratio between the total number of months worked by working-age household members and the total number of months that they could, in theory, have worked. When we calculate work intensities, all individuals in the age bracket 18-59 are considered in 'working age', except students between 18 and 24, who are excluded from the calculation. For persons who reported having worked part-time, an estimate of the number of months in terms of full-time equivalents is computed on the basis of the number of hours habitually worked at the time of the interview.

In all European welfare states, at-risk-of-poverty rates of individuals correlate negatively with the work intensity of the household to which they belong. Figure 2 displays child poverty rates for five different subsets of households: households with very high work intensity (work intensity ranges between 85% and 100%), households with high work intensity (between 55% and 85%), households with medium work intensity (between 45% and 55%), households with low work intensity (between 20% and 45%), and households with very low work intensity (20% or less). We show these poverty rates for the EU15, as a weighted average of national rates, and for Belgium, Flanders and Wallonia. The regional poverty figures are based both on the Belgian poverty threshold (FL-BE and WA-BE), and on the regional poverty thresholds (FL-FL and WA-WA).

FIGURE 2: CHILD POVERTY BY HOUSEHOLD WORK INTENSITY FOR BELGIUM, THE BELGIAN REGIONS (BELGIAN AND REGIONAL POVERTY LINE) AND THE EU15



Source: compiled by the authors, using EU-SILC 2011.

In the EU15, the child poverty rate in households with very high work intensity was 5.8%; the poverty rate in households with very low work intensity was 68.8%, i.e. more than ten times higher. This profile of poverty risks illustrates that the work intensity of the household to which an individual belongs, is a crucial factor in explaining his or her poverty risk. It also shows that the Belgian profile deviates from the average EU15 profile, as registered in EU-SILC 2011: with 81.0%, the poverty risk in the subgroup of households with very low work intensity is significantly[3] higher than the European average; in contrast, with 2.3%, it is significantly lower in the subgroup of households with very high work intensity; in all other subgroups the point estimate for Belgium is also lower, though the difference with the EU15 is not significant for the low and medium work intensity subgroups. In other words, the poverty gap between the *haves* and the *have not's* – 'have' referring to having more than a marginal attachment to the labour market – is particularly large in Belgium. Rather surprisingly, that pattern also holds for Wallonia, when we use a Walloon poverty threshold.[4] Children living in Walloon households with little or no attachment

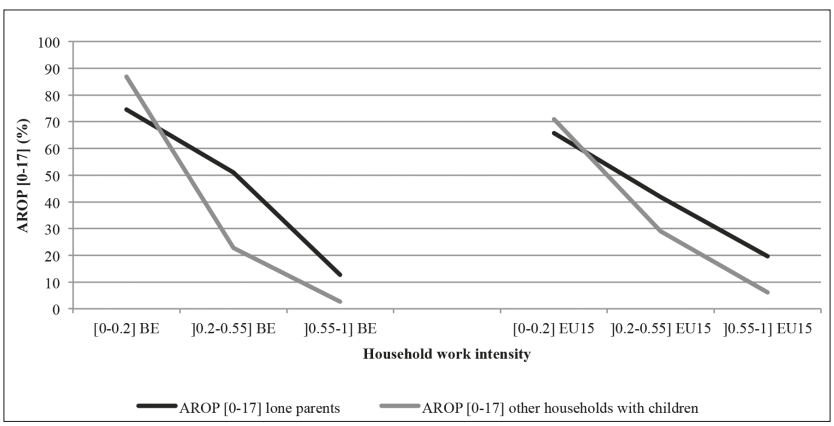
(3) We test for significance making use of an independent samples t-test and a 0.05 significance level. Since the regional samples considered in Figure 2 are not independent from the Belgian sample, this t-test implies a conservative test.

(4) This observation is not true for earlier vintages of EU-SILC. For instance, in EU-SILC 2008, the Walloon poverty rates were higher for *all* work intensity subgroups, when compared to the weighted average of the EU15.

to the labour market face an exceptionally high risk of poverty, both with reference to a Walloon regional poverty threshold and with reference to a national Belgian poverty threshold. So conceived, Wallonia is a highly polarised region, even from an 'internal' regional point of view. The Flemish case is more nuanced: when we use a Flemish threshold, child poverty in the very low work intensity subgroup appears to be higher than the EU15 average, but the difference is not statistically significant; when we use a Belgian threshold, poverty in the very low work intensity subgroup is lower than the EU15 average.

What this measure of 'work intensity' really means for a particular household should be understood in relation to its size: a lone-parent working four days a week, whose household work intensity is 80%, can be confronted with a very different situation than a couple with children, whose household work intensity is also 80%, with one partner working five days a week and the other only three days. Reconciling work and family responsibility with a household work intensity of 80% may be more difficult for the lone-parent and entail more costs than for two-parents households. And, obviously, in euros the household income of the latter is probably much higher than the income of the former. The income factor emerges when we compare child poverty risks on the basis of the work intensity of the household, distinguishing lone-parent and other households. Figure 3 shows the poverty rates for two types of households with children, and three broad classes of work intensity; we compare Belgium and the weighted average of the EU15.

FIGURE 3: CHILD POVERTY BY HOUSEHOLD WORK INTENSITY FOR LONE-PARENT HOUSEHOLDS AND OTHER HOUSEHOLDS WITH CHILDREN (BELGIUM AND EU15)



Source: compiled by the authors, using EU-SILC 2011.

Lone-parents households with a very low work intensity face a very high risk of poverty: 74.5% in Belgium, which is higher than the EU15 average of 66.5%. Other households with children face an even higher risk of poverty when their work intensity is very low: 85.1% in Belgium, which is higher than the average European figure of 72.3%. In short, when their work intensity is very low, other households with children are in even more dire straits than lone-parents. When the work intensity of the household is in the low-medium interval (between 20% and 55%), the positions change: the poverty risk for lone-parents in this employment class is much higher than for other households (Belgian lone-parents in this group face a poverty risk of 51.0%; other households in this class face a poverty risk of 22.9%). When the work intensity of the household is high or very high, the poverty risk for other Belgian households with children nearly disappears (2.6%); Belgian lone-parent households with a high to very high work intensity have a low poverty risk, but considerably higher than other households in that employment class (12.7%). The average European picture is similar, but, as in Figure 2, we see that the Belgian figures for households with high to very high work intensity are slightly better than average European figures.

The observations in Figure 3 trigger another question: why is poverty in lone-parent households so much higher than in other households? In Belgium, applying the definitions used in Figure 3, child poverty in all lone-parent households is 43.3%, compared to 14.1% in other households with children; elsewhere in the EU we observe similar figures (though, on average, the gap between lone-parent households and other households is smaller than in Belgium). Is this the result of lower levels of work intensity in lone-parent households? Or is it because, with work intensity levels above 20%, lone-parent households face higher poverty risks than other households for the same level of work intensity? Across the EU, there is no uniform answer to that question: in some countries child poverty is higher in lone-parent households mainly because, with similar levels of household work intensity, lone-parents face a higher poverty risk than other parents. In other countries child poverty is higher in lone-parent households, mainly because of lower levels of work intensity in these households. In Appendix 1 we show the result of a simple decomposition of the difference between child poverty rates in lone-parent households and child poverty rates in other households (using the decomposition technique we explain in Section 5, below): in this, admittedly mechanical, analysis, 85% of the difference between the poverty rate in Belgian lone-parent households and the poverty rate in other Belgian households with children is explained by the lower levels of work intensity in lone-parent households. That justifies a focus on household work intensity in the context of this paper. But it does not eliminate the fact that parents whose work effort is identical in the 'work intensity metric' but live in different household constellations, may face very different social and financial circumstances. In our policy conclusions we return to this observation, which raises difficult issues of fairness and adequacy in social protection in its own right.

We now shift our attention from an analysis at the individual level to an analysis at the level of welfare states. To what extent is a welfare state's poverty record determined by the work intensity of its households? For our analysis, we distinguish three indicators of the household employment record of welfare states. The first indicator is the share of children living in households with very low work intensity (not higher than 20%); we label these households as 'very work-poor'. The second indicator is the share of children living in households with medium work intensity or less (i.e. 55% or less); we label these households as 'work-poor'. In our description of European welfare states we will use 'work poverty' as a shortcut for the share of children living in work-poor households, and 'severe work poverty' as a shortcut for the share of individuals living in very work-poor households. Our third indicator is the share of children in very work-poor households within the subgroup of children in work-poor households; we will call this indicator 'the relative severity of work poverty'.

The concepts we introduce here must not be confused with the notion of 'working poor'. An individual is considered a 'working poor', when he/she is working but (financially) poor; thereby, 'working' is defined on a minimal basis (e.g. being in employment in the period just before the survey, even if the number of hours worked is very limited). Hence, the 'working poor' concept mixes observations at the level of the individual (is he/she employed or not employed?) with observations at the level of the household to which he/she belongs (what is the *household* income?). This makes it an intrinsically difficult concept, often leading to unwarranted conclusions. However, being a 'working poor' is not unrelated to the concept of work intensity: 'working poor' individuals often belong to households with low work intensity. In these cases, they are, individually, counted as 'working poor' because of the limited work intensity of the household to which they belong; this may be the consequence of the fact that they work only irregularly or part-time, and/or of the very limited labour market participation of *other* household members (Marx and Nolan, 2014).

Vandenbroucke, Diris and Verbist (2013) and Vandenbroucke and Diris (2014) examine different regression models explaining child poverty and non-elderly poverty on the basis of patterns of employment in European welfare states (testing the explanatory power of individual employment rates, household work poverty, severe work poverty and the relative severity of work poverty) and patterns of social spending, for the period covered by EU-SILC 2005 – 2010 (and, for some analyses, EU-SILC 2011). It turns out that combining 'work poverty' and the 'relative

severity of work poverty' as separate independent variables yields the best fit.[5] These results suggests that one should study the country-specific distribution of household work intensity over the population, and that the concentration of children in very work-poor households does play an independent role, next to the total share of children in work-poor households.[6] These regression analyses examine the role of household employment as a general explanatory factor for child poverty across European welfare states. The present paper develops a different question on the basis of the same indicators: by comparing Belgium and other welfare states, we develop specific explanations for Belgium rather than general explanations for all European welfare states.

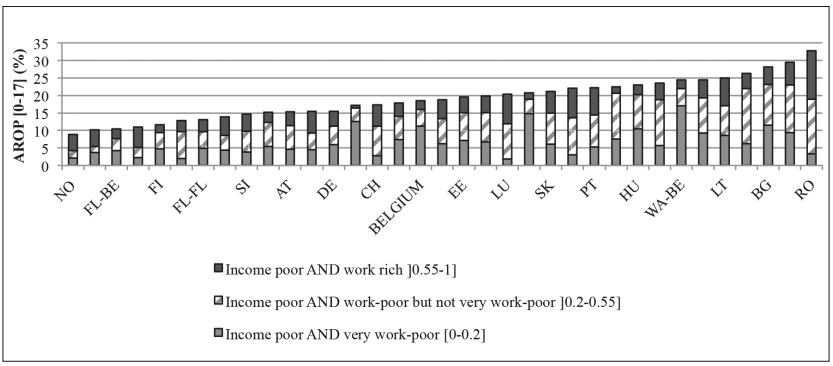
4. BELGIUM AS AN OUTLIER?

In Figure 4, we subdivide the national and regional poverty rates on the basis of the work intensity of households to which children, considered as 'at risk of poverty', belong. To highlight the distinction with the notions 'work-poor' and 'very work-poor', we label children who are at risk of poverty as 'income-poor' in the legend of Figure 4. The lowest parts of the bars represent the number of children at risk of poverty living in very work-poor households (i.e. those who combine income poverty and severe work poverty), expressed as a percentage of the total child population. The middle parts of the bars represent children at risk of poverty living in households that are work-poor, but not very work-poor (i.e. with work intensity higher than 20% but not higher than 55%), again as a percentage of the total child population. The upper parts of the bars represent children who are at risk of poverty but live in households that are work-rich. From a *household* perspective, one might say that the adults living with the children in the latter category are truly 'working poor', i.e. their household's work potential is valorised for more than 55%, but nevertheless their household income is below the poverty threshold. The sum of the three bars corresponds to the at-risk-of-poverty rate of children.

(5) We should stress that this conclusion holds for the pooled time series regression over the whole period. It does not hold for a 'naïve' regression that is, for instance, limited to SILC 2011. In a simple regression applied to the SILC 2011 data presented in this paper, with child poverty as dependent variable, and (i) work poverty, (ii) relative severity of work poverty, and (iii) the share of transfers and pensions in household incomes of children as independent variables, it appears that only work poverty has a significant impact. In EU-SILC 2011, the bivariate correlation coefficient with child poverty is 0.56 for work poverty, 0.24 for severe work poverty, -0.15 for the relative severity of work poverty, and 0.01 for spending. The fact that 2010 was a year of deep crisis explains this result (in contrast to the result of a pooled time series regression over the whole period).

(6) The fact that the *relative* severity measure provides a better fit than using severe work poverty *as such*, indicates that increases in severe work poverty are more important (with respect to poverty) when work poverty is low (Vandenbroucke, Diris and Verbist, 2013, p. 29).

FIGURE 4: CHILD POVERTY RATES, SUBDIVIDED ON THE BASIS OF HOUSEHOLD WORK INTENSITY

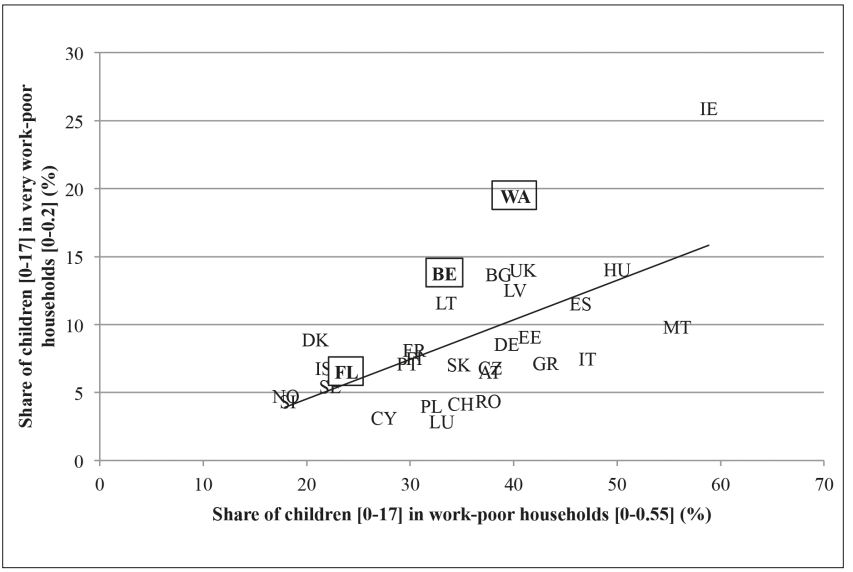


Note: Total child poverty rates can differ slightly from the figures reported in Figure 1, due to missing values for certain observations on the work intensity variable.
Source: compiled by the authors, using EU-SILC 2011.

Figure 4 shows that the internal structure of Belgian child poverty, in terms of the work intensity of households to which these children belong, is exceptional. Except for Ireland, Hungary and Malta, there is no other country where the relative share of poor children belonging to work-poor households is so high. The latter observation is mainly driven by severe work poverty: 60.6% of poor children in Belgium belong to households that are very work-poor; this is an exceptionally high proportion, compared to all other European countries. Figure 4 also shows that this is the result of the structure of child poverty in Wallonia; the internal structure of child poverty in Flanders is quite different.

This prompts the question of what the salient differences are between the Belgian, Walloon and Flemish patterns of household employment on the one hand, and this pattern in other European welfare states. Figure 5 summarises some striking observations in this respect, by combining data on work poverty (on the horizontal axis) and data on severe work poverty (on the vertical axis), as registered in EU-SILC 2011. Dividing the values on the vertical axis by the values on the horizontal axis yields our indicator of 'relative severity of work poverty'.

FIGURE 5: WORK POVERTY AND SEVERE WORK POVERTY ACROSS THE EU



Source: compiled by the authors, using EU-SILC 2011.

Figure 5 illustrates the disparity among European welfare states with regard to 'work poverty': work poverty is around 20% in Scandinavian welfare states, but between 40 and 60% in Latvia, the UK, Estonia, Greece, Spain, Italy, Hungary, Malta and Ireland. The vertical axis shows that there is an even larger disparity with regard to 'severe work poverty': the share of children living in very work-poor households is less than 5% in Luxembourg, Cyprus, Poland, Switzerland, Romania, Slovenia, and Norway; it is around 14% in Bulgaria, Belgium, Hungary and the UK. Although 'work poverty' is influenced by the prevalence of part-time work and by the distribution of jobs across households, it correlates rather strongly (negatively) with simple individual employment headcounts.[7] Severe work poverty is much less correlated with *individual* employment rates than work poverty. As a result, European welfare states display very different patterns with regard to individual employment rates,

(7) One can calculate individual nonemployment rates on the basis of SILC, applying the ILO concept of employment which is used in the European Labour Force Survey. In EU-SILC 2007, 2008, 2009, 2010 the correlation between individual nonemployment rates, so defined, and work poverty is between 0.80 and 0.90; the correlation between individual nonemployment rates and severe work poverty is between 0.50 and (exceptionally, for one year) 0.65.

work poverty and severe work poverty.[8] Our indicator of the 'relative severity of work poverty' reflects the diversity in these patterns; in countries above the trend line in Figure 5, relative severity of work poverty is higher than average; in countries below the trend line relative severity is lower than average. Relative severity of work poverty ranges from less than 15% in Luxembourg, Cyprus, Romania, Switzerland and Poland to 35% in the UK and Lithuania, 36% in Bulgaria and more than 42% in Belgium, Denmark and Ireland. Belgium has a more or less median position with regard to work poverty; with regard to severe work poverty it is in the top range. Figure 5 shows that this Belgian specificity is driven by the Walloon figures. In Section 5 we pursue the analysis of these different patterns. But before digging deeper into these patterns of household employment, we return to their explanatory power with regard to child poverty.

Obviously, the fact that the relative share of income-poor children belonging to work-poor and very work-poor households is so high in Belgium (when we compare this relative share with the corresponding figures in other countries, as we do in Figure 4, above), may be attributable to two factors: a comparatively high share of children – financially poor and non-poor alike – living in (very) work-poor households; and/or, a comparatively high risk of income poverty for those children who live in (very) work-poor households. In other words, to account for this structural difference between Belgium and other countries, we must disentangle the impact of cross-country differences in (severe) work poverty on the one hand, and the impact of cross-country differences in income poverty in the subgroup of (very) work-poor households, on the other hand. This can be done by means of a decomposition, as will be shown in Section 6. Section 5 explains the formal structure of our decomposition analyses; it can be skipped by readers knowing this technique or only interested in the results.

5. DECOMPOSITION ANALYSIS: A FORMAL DESCRIPTION

The decompositions we apply in this paper always focus on a characteristic P^{total} of the total child population, which can be written as a weighted average of that characteristic within subgroups of the child population. If T is the number of subgroups, k indicates the subgroup, s^k represents the share of children living in subgroup k, and P^k is the value of P within each of the subgroups, the population characteristic P^{total} can be written as follows:

(1) $$P^{total} = \sum_{k=1}^{T} s^k P^k$$

(8) For an illustration for the non-elderly population, including individual employment rates, see Vandenbroucke and Diris (2014, Figure 1.7, p. 18).

The population characteristics P^{total} under review in this paper are, first, the at-risk-of-poverty rate of children (which we decompose on the basis of subgroups defined by the work intensity of households to which children belong, in Sections 6 and 9) and, second, the work intensity of the households to which children belong (which we decompose on the basis of subgroups defined by the number of working-age adults in the household, in Section 7).

Equation (1) is the starting point for decomposing cross-country differences or intertemporal changes in P^{total}. In the cross-country decompositions Δx represents the difference between the value of an observation for a benchmark country (in this paper always Belgium) and the corresponding value for the country (or region) we compare with Belgium. In the intertemporal decompositions Δx represents the change in the value of an observation over time (in this paper always a change from EU-SILC 2006 to EU-SILC 2011). Formally,

(2) $\Delta x \equiv x_B - x_A$

with *B* indicating Belgium and *A* indicating the country we compare with Belgium; or, *B* indicating observations in EU-SILC 2011 and *A* indicating observations in EU-SILC 2006. With we represent the average value of the observation over Belgium and the country used for comparison, or the average value of the observation over EU-SILC 2006 and EU-SILC 2011. It follows from equation (1) that we can decompose those differences or changes as follows:

(3) $\Delta P^{total} = \sum_{k=1}^{T} \Delta(s^k P^k) = \sum_{k=1}^{T} \Delta s^k \overline{P^k} + \sum_{k=1}^{T} \overline{s^k}\, \Delta P^k$

If *P* represents at-risk-of-poverty rates, *k* indicates different work intensity subgroups, s^k is the share of the child population in subgroup *k*, and Δ represents the difference between Belgium and another country, then the *first term* in the equation on the right hand side represents the difference between the Belgian poverty rate and the poverty rate of the other country that can be accounted for by differences in the distribution of the population by household work intensity (in the hypothesis that there would be no cross-country differences in poverty rates characterising these work intensity subgroups). The *second term* represents the difference between Belgium and the other country that can be accounted for by differences in the poverty rates characterising these work intensity subgroups (in the hypothesis that the distribution of the population by work intensity would be identical). We label the first term 'differences between' and the second term 'differences within'. In the same vein one can decompose a change in poverty rates over time (in one country) in 'changes between' (due to changes in the distribution of the population by work intensity in that country) and 'changes within' (due to changes in the poverty rates within each of the work intensity subgroups in that country).

If the population is divided in two subgroups ($T=2$), equation (3) can be reduced to the following simple formula (since $s^1 + s^2 = 1$ and $\Delta s^1 = -\Delta s^2$):

$$(4)\quad \Delta P^{total} = \sum_{k=1}^{T} \Delta(s^k P^k) = \sum_{k=1}^{T} \Delta s^k \overline{P^k} + \sum_{k=1}^{T} \overline{s^k}\, \Delta P^k$$

For example, we can partition the population in 'work-poor' and other households (the 'work-rich'). If children living in work-rich households constitute subgroup 1, and children living in work-poor households constitute subgroup 2, we can decompose the difference between the at-risk-of-poverty figures for Belgium and the other countries on the basis of three contributory factors:[9]

i. the contribution by the difference in the share of children living in work-rich households $[\Delta s^1(\overline{P^1} - \overline{P^2})]$;
ii. the contribution by the difference in the poverty rate in work-rich households $[\overline{s^1}\Delta P^1]$;
iii. the contribution by the difference in the poverty rate in work-poor households $[(1 - \overline{s^1})\Delta P^2]$.

The factor (i) reflects the 'difference between' that comes out of this particular decomposition; the factors (ii) and (iii) together constitute the 'differences within'. To the extent that the subgroups used in equation (3) are smaller than the subgroups used in equation (4), cross-country differences in the underlying components of the decomposition will more often be statistically significant in the latter exercise (taking into account the relatively small sample sizes of EU-SILC), which may admit more robust conclusions. In the next section we first present a decomposition on the basis of equation (3), and then pursue the analysis with a decomposition on the basis of equation (4). But, before proceeding with our empirical illustrations, a number of *caveats* must be taken on board. Decomposition analysis does not reveal causality: it is basically an accounting device. The essence of this accounting technique is that it presupposes that changes in one contributory factor can be dissociated from changes in other contributory factors. For instance, in the former example, we presuppose that cross-country differences in poverty rates within work intensity subgroups are not intrinsically associated with cross-country differences in the distribution of the population over work intensity subgroups. Since the accounting technique by definition presupposes that these cross-country differences can be dissociated from each other, it has a 'mechanical' character. Obviously, the overall result (i.e. what comes out as salient determinants of cross-country differences) is determined by the particular structure of the country used for benchmarking (in our case, Belgium), or, in the intertemporal application, by the particular selection of the period.[10] Decom-

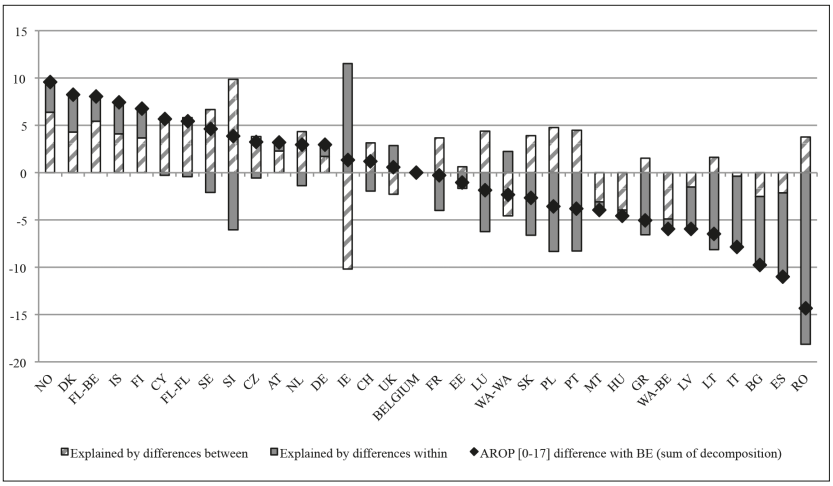
(9) In the decompositions presented in the following sections there are small residual factors, which we do not show. This is linked to the fact that we did not have work intensity data available for some children in the sample for which the poverty rate is calculated. See Vandenbroucke, 2013, Appendix 2 for a formal description of this residual. The residual factors are too small to be included in the graphs. But, to avoid any misunderstanding, for this reason, the total differences (or changes) in our graphs are equal to the 'sum of the decomposition' (i.e. the sum of the components without the residual), rather than to the total differences (or changes) as observed.
(10) Using EU-SILC 2005 instead of EU-SILC 2006 would yield rather different results, as explained in section 8.

position thereby provides a different perspective than regression analysis: the latter explores overall correlations between observations in a whole sample (examining, for instance, to what extent child poverty correlates with severe work poverty in a sample of welfare states, taking into account other explanatory variables); decomposition focuses on the specific differences between the observations in one welfare state and the observations in another welfare state. For instance, it may be the case that levels of child poverty do not correlate with severe work poverty across European welfare states, but that severe work poverty plays a key role in the specific difference between Belgium and most of the other countries. In other words, when we use the expression 'cross-country differences' in the context of the decompositions that follow, the reader should always read this as 'differences with Belgium': rather than explaining cross-country differences in general, we explain differences with our particular benchmark. However, notwithstanding these *caveats,* decomposition yields interesting descriptions of such cross-country differences or intertemporal changes, *a fortiori* when combined with the insights of regression analysis.

6. DECOMPOSING CROSS-COUNTRY DIFFERENCES IN CHILD POVERTY

Figure 6 represents the result of a decomposition analysis of cross-country differences in child poverty, using Belgium as the benchmark country. ('Cross-country' differences include Wallonia and Flanders, which are also compared with Belgium.) The child population is subdivided into five subgroups, depending on the work intensity of the household in which children live, with work intensities of 20, 45, 55 and 85 per cent as cut-offs. We distinguish 'differences within' and 'differences between' to account for the differences in child poverty between Belgium and the other countries, applying equation (3). 'Differences between' are differences that can be accounted for by differences in the distribution of the population by household work intensity (in the hypothesis that there would be no cross-country differences in the at-risk-of-poverty rates characterising these work intensity subgroups). 'Differences within' are differences that can be accounted for by differences in the poverty rates characterising these work intensity subgroups (in the hypothesis that the distribution of the population by work intensity would be identical).

FIGURE 6: DECOMPOSITION OF CROSS-COUNTRY DIFFERENCES IN CHILD POVERTY ON THE BASIS OF 5 WORK INTENSITY SUBGROUPS



Source: compiled by the authors, using EU-SILC 2011.

Countries on the left side of Figure 6 have a lower child poverty rate than Belgium. For example, the Norwegian poverty rate is 9.2 percentage points below the Belgian rate. We decompose this difference as follows:

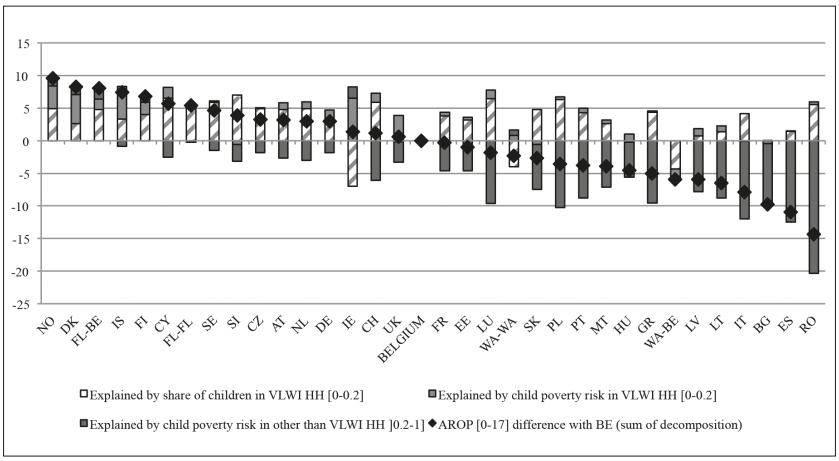
- a difference of 6.4 percentage points can be accounted for by the fact that the distribution of children over household work intensity subgroups is more favourable in Norway than in Belgium (the 'between difference');
- a difference of 3.2 percentage points can be accounted for by the fact that the poverty rates within the household work intensity groups are more favourable in Norway than in Belgium (the 'within difference');
- the sum of these two contributory factors is slightly larger than the observed difference in child poverty rates because of a residual factor (0.4 percentage points), which is not shown in Figure 6.[11]

In other words, Norway (but also Denmark, Iceland and Finland) outperforms Belgium with regard to the pattern of labour market participation of households and the poverty risk within households with various degrees of labour market participation. In contrast, in countries with child poverty rates that are significantly higher than the Belgian rate, such as Italy, Spain, Romania, etc. the main contributory factor stems from 'differences within'.

(11) See footnote 9.

Figure 7 shows the result of a decomposition of cross-country differences, focusing on the role of severe work poverty. We partition the population into children living in very work-poor households and children living in other households, and apply equation (4). The underlying figures are reported in Table A1 in Appendix 2.

FIGURE 7: DECOMPOSITION OF CROSS-COUNTRY DIFFERENCES IN CHILD POVERTY ON THE BASIS OF SEVERE WORK POVERTY (TWO SUBGROUPS)



Source: compiled by the authors, using EU-SILC 2011.

Taking the Norwegian example again, the difference with the Belgian poverty rate (9.2 percentage points) is now decomposed as follows:

- a contribution of 4.9 percentage points by the lower share of Norwegian children living in very work-poor households;
- a contribution of 3.5 percentage points by the lower level of poverty in Norwegian very work-poor households;
- a contribution of 1.2 percentage points by the lower level of poverty in Norwegian households that are not very work-poor (though the underlying difference is not statistically significant), and a residual factor (-0.4 percentage points).

Norway, Denmark, Iceland and Finland outperform Belgium both with regard to the share of children in very work-poor households and with regard to the poverty risk in very work-poor households. Flanders does rather well with regard to the share of children in very work-poor households, but these children run a high poverty risk, compared to these Nordic countries. In Wallonia both the share of children in very work-poor households and the poverty risk in those households is very high.

The difference between the Walloon figures and the Belgian figures is explained largely by the share of children in very work-poor households.

In Spain child poverty is 11.0 percentage points higher than in Belgium. Work poverty is higher in Spain than in Belgium (in EU-SILC 2011). However, severe work poverty is smaller in Spain: if this would be the only difference between the two countries, child poverty would be lower in Spain than in Belgium, as can be seen in Figure 7. In this decomposition, the difference in child poverty is entirely attributable to the poverty level in the other segment of the population, i.e. households that are *not* very work-poor: their poverty risk is much higher in Spain than in Belgium.

The underlying figures are point estimates with large confidence intervals around them. Nevertheless, some tentative conclusions can be drawn:

- Countries that perform significantly better than Belgium do so mainly because of a smaller share of children in very work-poor households and lower levels of poverty in very work-poor households.
- Hence, there is no 'trade-off' between a smaller share of children in very work-poor households and less poverty in very work-poor households, at least not in a cross-country comparative perspective assessing *ex post* outcomes on a macro level.
- The worse performance in a number of countries (as compared to Belgium) is mainly explained by their relatively higher poverty risks among households that are not very work-poor. This is notably the case in the Southern European countries.
- The Belgian pattern is driven by severe work poverty in Wallonia and by the high rate of income poverty in very work-poor households in both Wallonia and Flanders (although the latter is lower in Flanders than in Wallonia, when measured on the basis of the Belgian poverty threshold).[12]

This leads to two further questions. First, why is the relative severity of work poverty so high in Belgium and Wallonia? Second, why is the poverty rate within this subgroup of the population so high in Belgium, Wallonia and Flanders (whilst that in the work-richer segments appears as relatively low in a comparative perspective). In Section 7 we explore the first question, again on the basis of a decomposition. In Section 8 we touch upon the second question.

(12) The share of children living in very work-poor households equals 19.5% in Wallonia, where Flanders has 6.6%. On average, 13.8% of Belgian children live in these households with little or no labour market attachment. The income poverty rates in very work-poor households are high, both in Flanders and Wallonia: in Flanders, 65.1% of the children living in these households experience a poverty risk (using the Belgian threshold), making use of the regional poverty threshold, this risk increases to 75.1%. In Wallonia we observe a poverty risk of 87.7% of the children from these households (using the Belgian poverty line), when applying the regional variant this risk decreases to 76.0%.

Obviously, one may wonder why we chose to decompose on the basis of severe work poverty, rather than on the basis of work poverty (by subdividing the child population into children living in work-poor households and other children). The reader should note that in the sample and year under review, child poverty correlates with work poverty rather than with severe work poverty (see footnote 7). In other words, a decomposition on the basis of severe work poverty does not focus on a factor that explains much of the *general* pattern of child poverty in Europe, as observed in EU-SILC 2011. However, in a within/between decomposition of differences *with Belgium* on the basis of five work intensity subgroups (as shown in Figure 6, using equation 3), the share of children in very work-poor households dominates as explanatory factor in the 'between differences'; and the distinction between 'very work-poor' and 'not very work-poor' dominates many of the 'within differences' that emerge. As a matter of fact, a decomposition on the basis of work poverty yields results that go in the same sense as the decomposition on the basis of severe work poverty, though they are different in some respects (see Appendix 3).[13] This illustrates that the choice of the subgroups, on the basis of which we decompose, drives the conclusions to some extent. But in this case our conclusions would remain basically the same.

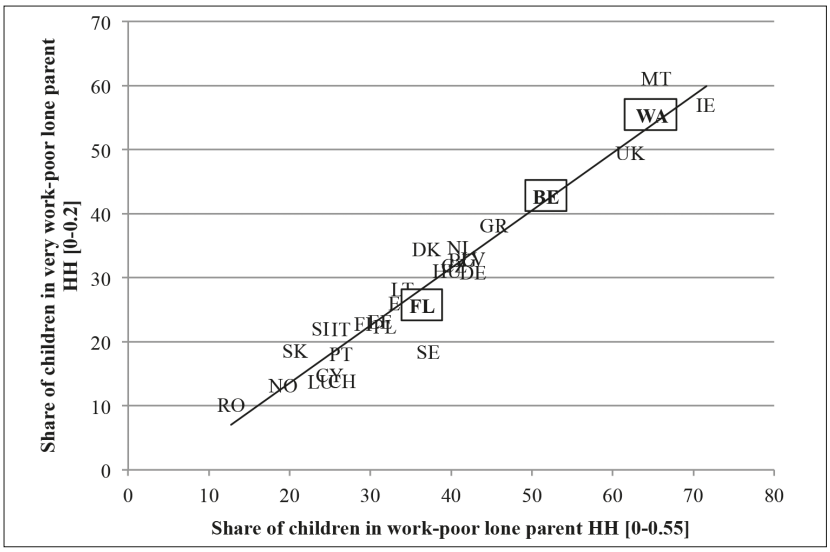
7. PATTERNS OF HOUSEHOLD EMPLOYMENT AND HOUSEHOLD SIZE STRUCTURE: A FURTHER DECOMPOSITION

In Section 4, we showed that European welfare states display different patterns with regard to work poverty and severe work poverty. We can expect that the size of households plays a role in these cross-country differences: in countries where the average household size is comparatively large, 'extended families' imply a larger degree of 'pooling' of non-employment risks in households, and hence less work poverty and severe work poverty at the level of households for any given rate of individual non-employment. But, are cross-country differences in household size structure a sufficient explanation for cross-country differences in the relative severity of work poverty? We can explore that question on the basis of a simple decomposition, by dividing the child population in children living with lone-parents on the one hand, and other children on the other hand.

Figure 8a reiterates the data on work poverty and severe work poverty, shown in Figure 5, but now only for children living in lone-parent households. Figure 8b presents the same data for children living in other households with children.

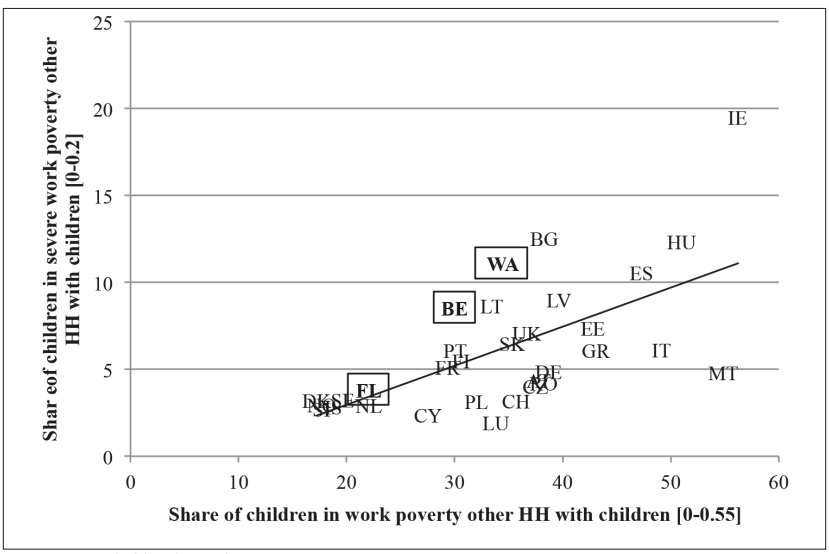
(13) For instance, since the income-poverty risk in the subgroup that is 'not work-poor' is higher in Norway and Denmark than in Belgium, this appears as a 'within' factor that diminishes the child poverty gap between Belgium and Norway/Denmark in a decomposition on the basis of work poverty; cf. Appendix 3. Or, since severe work poverty is comparatively lower in Italy and Spain than in Belgium, while the reverse is true for work poverty, the 'between differences' with these countries have a different shape in a decomposition on the basis of work poverty.

FIGURE 8A: WORK POVERTY AND SEVERE WORK POVERTY IN LONE-PARENT HOUSEHOLDS



Source: compiled by the authors, using EU-SILC 2011.

FIGURE 8B: WORK POVERTY AND SEVERE WORK POVERTY IN OTHER HOUSEHOLDS WITH CHILDREN



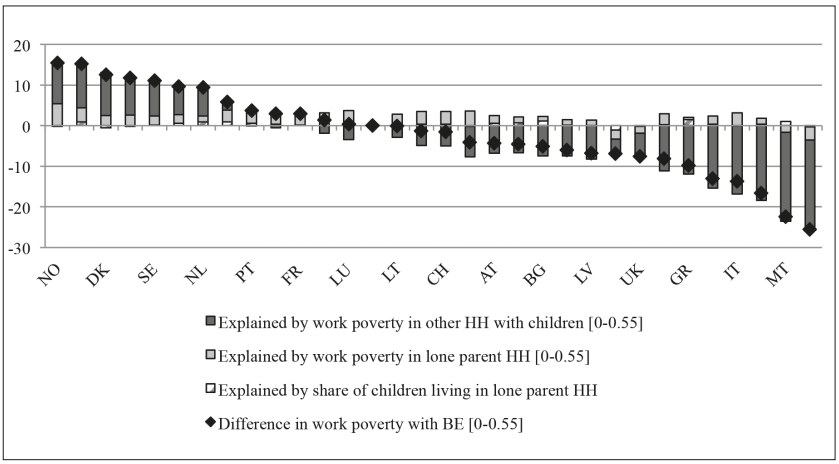
Source: compiled by the authors, using EU-SILC 2011.

Figures 8a and 8b illustrate four observations:

i. work poverty is only marginally higher among lone-parent households than among other households with children (across the welfare states under review, the unweighted average of work poverty is 36.4% in the first category, and 34.7% in the second category);
ii. severe work poverty is much higher among lone-parent households than among other households (the unweighted average of severe work poverty is 28.3% in the first category, and 6.1% in the second category);
iii. as a corollary, the relative severity of work poverty is much higher among lone-parent households than among other households with children: the big majority of work-poor lone-parent households is very work-poor (the unweighted average of relative severity of poverty in this category is equal to 76.7% across the European welfare states under review); in other work-poor households only a minority is very work-poor (the unweighted average of relative severity of poverty in other households with children is 17.2%);
iv. in a comparative perspective, relative severity is quite uniform across countries in lone-parent households; but it is more diversified in households with more adults.

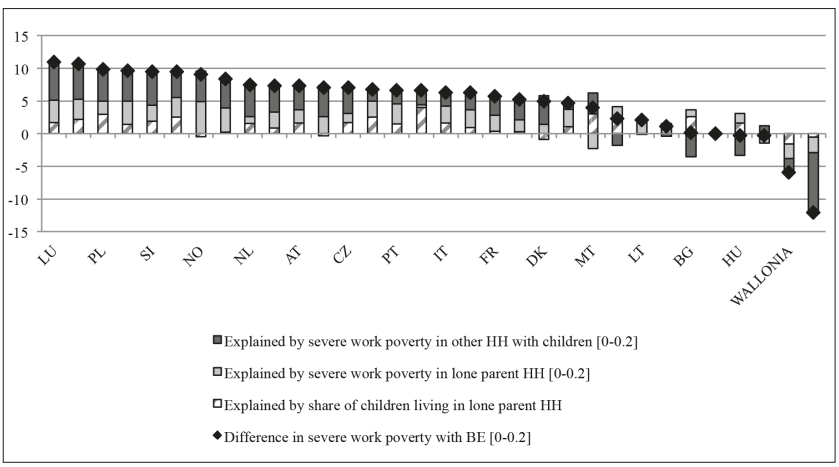
In other words, *ceteris paribus*, countries with a higher share of lone-parents will be characterised by a marginally higher level of work poverty, a higher level of severe work poverty, and a higher relative severity of work poverty. But how important is the 'lone-parent' factor in explaining the Belgian pattern of household employment? To answer that question, Figures 9, 10 and 11 decompose the difference between Belgium and other countries (including Flanders and Wallonia) with regard to work poverty, severe work poverty and the relative severity of work poverty, on the basis of the share of children living with lone-parents (i.e. we use equation 4). Countries with a *lower* level of work poverty (severe work poverty) than Belgium are on the *left* side of these figures.

FIGURE 9: DECOMPOSITION OF CROSS-COUNTRY DIFFERENCES IN WORK POVERTY



Source: compiled by the authors, using EU-SILC 2011.

FIGURE 10: DECOMPOSITION OF CROSS-COUNTRY DIFFERENCES IN SEVERE WORK POVERTY



Source: compiled by the authors, using EU-SILC 2011.

In EU-SILC 2011, Belgium appears as a country with a comparatively large share of lone-parents: the share of children living with a lone-parent is significantly larger in Belgium than in 19 other countries (in a total of 30); the Belgian share is smaller than the share of children with lone-parents in Denmark, Norway, Ireland,

Iceland, the UK and Lithuania. However, as we may expect (see item [i] in the comments to Figures 8a and 8b supra), Figure 9 shows that differences in work poverty with Belgium are not explained by differences in the share of lone-parents. The 'within differences' explain the differences. First, most countries (except the UK, IE and MT) have less work poverty in lone-parent households than Belgium. But the main contribution to the cross-country differences in work poverty is linked to cross-country differences in work poverty within other households with children. Figure 10 shows that differences in the share of lone-parents explain part of the cross-country differences in severe work poverty, but only to a limited extent. The 'within differences' dominate, both with regard to lone-parent households and other households with children.

Figure 11 pursues a decomposition of differences in the relative severity of work poverty. Using *WP* for work poverty and *RSWP* for the relative severity of work poverty (superscript 1 for the lone-parent subgroup and 2 for children living in other households, *total* for the total child population), and s^l for the share of children living with lone-parents, we can write the relative severity of work poverty for the total child population as a weighted average of the relative severity of work poverty in each of the two subgroups:

(5) $$RSWP^{total} = \left(s^1 \frac{\bar{WP}^1}{WP^{total}}\right) RSWP^1 + \left(1 - s^1 \frac{\bar{WP}^1}{WP^{total}}\right) \bar{RSWP}^2$$

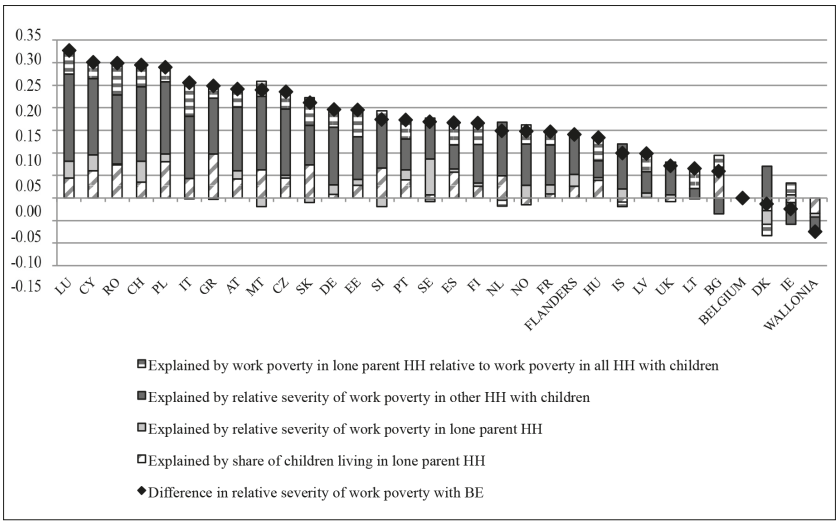
This yields (with Δ indicating a difference between Belgium and other countries/regions):

(6) $$\Delta RSWP^{total} = \overline{\left(s^1 \frac{WP^1}{WP^{total}}\right)} \Delta RSWP^1 + \overline{\left(1 - s^1 \frac{WP^1}{WP^{total}}\right)} \Delta RSWP^2 + \Delta s^1 \overline{\left(\frac{WP^1}{WP^{total}}\right)} \left(\overline{RSWP^1} - \overline{RSWP^2}\right) + \Delta \left(\frac{WP^1}{WP^{total}}\right) \bar{s}^1 \left(\overline{RSWP^1} - \overline{RSWP^2}\right)$$

Thus, differences with regard to relative severity of work poverty between Belgium and other countries (and the Belgian regions) are explained by:

i. the contribution of differences in the relative severity of work poverty in the subgroup of lone-parent households, ceteris paribus (1st term in equation 6);
ii. the contribution of differences in the relative severity of work poverty in the other households, ceteris paribus (2nd term in equation 6);
iii. the contribution of differences in the share of children living with lone-parents, ceteris paribus (3rd term in equation 6);
iv. the contribution of differences in the ratio of work poverty in the lone-parent subgroup on work poverty in the total child population, ceteris paribus (4th term in equation 6).

FIGURE 11: DECOMPOSITION OF CROSS-COUNTRY DIFFERENCES IN RELATIVE SEVERITY OF WORK POVERTY



Source: compiled by the authors, using EU-SILC 2011.

The diagonally striped parts of the bars in Figure 11 present the differences in the relative severity of work poverty that can be accounted for by differences in the share of children living with lone-parents, if all other factors contributing to relative severity of work poverty would be equal (3rd term of the equation). Visual inspection of Figure 11 reveals that differences in household size only play a minor role in explaining the differences with Belgium. In contrast, differences in the relative severity of work poverty in other households with children do play an important role in explaining the difference between Belgium and other countries. We can conclude from the results presented in Figure 11 that differences in household size only explain a relatively small part differences in the relative severity of work poverty between Belgium and other countries. Wallonia is characterised by a comparatively high share of lone-parents, which does play a role in the Walloon result; but there again, the relative severity of work poverty in other households with children carries a heavy weight in the decomposition.

The observation that European welfare states are characterised by different patterns of distribution of jobs over households with the same size raises important questions for research and policy. Corluy and Vandenbroucke (2013a, 2013b) explore the same observation on the basis of 'polarisation indices', inspired by research by

Gregg, Scutella and Wadsworth (2008, 2010). Using EU-SILC and a notion of 'jobless household' defined with reference to the so-called ILO concept of employment (a jobless household is a household where no working-age adult was in work in the weeks before the survey), a polarisation index is calculated for each EU welfare state in terms of the difference between, the actual share of individuals living in jobless households on the one hand, and the hypothetical share of individuals living in jobless households on the other, given the specific household size structure in each welfare state, but assuming that individual employment is distributed randomly across households. The present paper does not contrast empirical observations about (severe) work poverty with what one might have expected if the 'individual employment intensities' of adult household members would have been matched at random in the formation of households. Introducing such an 'at random' counterfactual highlights what is to be explained by sociological and cultural factors, but is mathematically much easier with the binary notions 'jobless/non-jobless' on which the ILO employment concept is based. Yet, there is an important correlation between polarisation, so defined, and the 'relative severity of work poverty' indicator we employ in this paper.[14]

Traditionally, within the EU15, polarisation as defined by Gregg, Scutella and Wadsworth, was very high in the United Kingdom and Belgium; in contrast, the Southern extended family model was associated with negative polarisation index (i.e. less individuals lived in jobless households than one would expect on the basis of their individual employment record and household size structure). Polarisation became an issue in the British policy agenda from the end of the nineties onwards, and has been declining during the 2000s. Overall, since 1995 there was convergence in levels of polarisation in the EU: where it was initially low, it tended to increase. Belgium constitutes an exception in this respect, moving from a high level of polarisation in the nineties, to an even higher level by the mid 2000's. Corluy and Vandenbroucke (2013a) analyse changes in polarisation over time, their impact on changes in non-elderly poverty, and examine the social stratification of household employment. Corluy and Vandenbroucke (2013b) dig deeper into polarisation on the Belgian labour market on the basis of long-term employment data series and regional data (space forbids pursuing this here). This research agenda needs to be enriched by a sociological inquiry into factors influencing household formation and employment decisions in households.

(14) For all SILC years between SILC 2005 and SILC 2010 (except SILC 2008), this correlation is around 0.80; for a graphical illustration of this correlation, see Vandenbroucke, Diris and Verbist, 2013, Figure 4.

8. PATTERNS OF SOCIAL SPENDING AND CHILD POVERTY

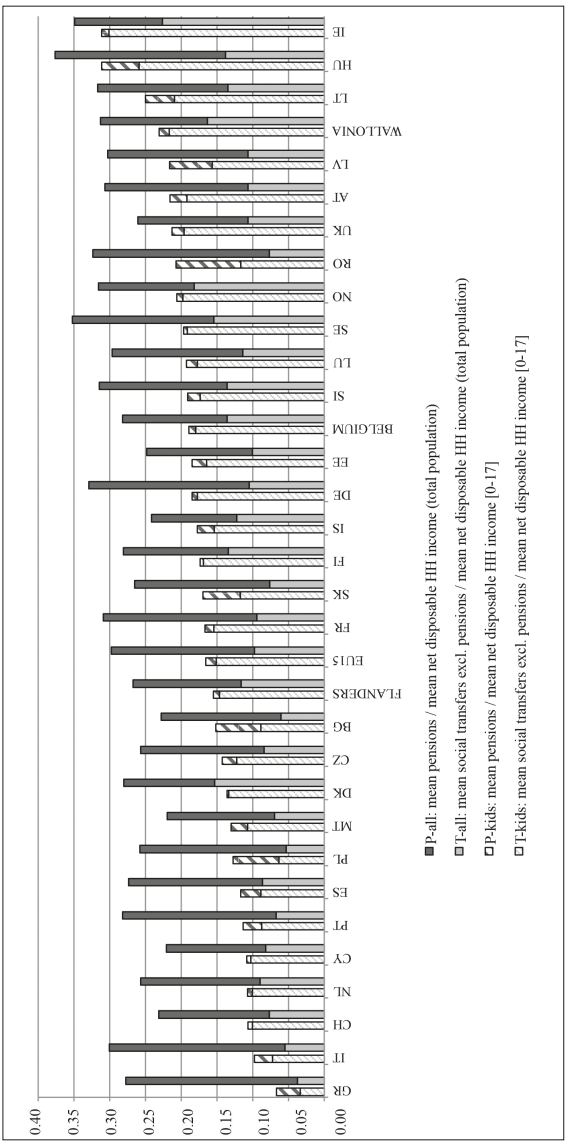
We cannot study poverty without examining social spending. How should we characterise social spending in Belgium in a broad, comparative perspective? Figure 12 brings together the following data on social spending, retrieved from EU-SILC 2011:[15]

i. transfers, excluding pensions, as a percentage of household income, for the population below the age of 18 (indicated by 'T-kids');
ii. pensions as a percentage of household income, for the population below the age of 18 (P-kids);
iii. transfers, excluding pensions, as a percentage of household income, for the total population (T-all);
iv. pensions, as a percentage of household income, for the total population (P-all).

'Household income' is the net disposable household income, standardised with the usual equivalence scale to take the size and structure of the household into account; transfers and pensions are standardised in the same way.

(15) It is common practice to use the administrative data on public social protection spending, as published by Eurostat on the basis of the ESSPROS classification, to gauge the importance of social spending. A well-known problem is that these data refer to gross public spending, and do not account for cross-country differences in the taxation regime for benefits; hence, they tend to overestimate the real impact of benefits on household incomes in Scandinavian countries, compared to countries like France, Belgium and Germany (Adema et al., 2011, Chart I.11). Another problem is that these data do not allow us to assess the real importance of public spending on pensions on the one hand, and spending on other transfers on the other, for demographic subgroups of the population. One should note, however, that that working on the basis of SILC changes the picture of social protection spending in Europe thoroughly, compared to working on the basis of the administrative data and GDP (see Vandenbroucke, Diris and Verbist, Figures 6 and 7 and Appendix 1).

FIGURE 12: PATTERNS OF SOCIAL SPENDING IN EUROPEAN WELFARE STATES



Notes: Household income is net disposable household income. All income components are standardised according to the OECD modified equivalence scale.
Source: compiled by the authors, using EU-SILC 2011.

Visual inspection of Figure 12 allows us to assess four important features of social spending:

i. First, the *level of spending benefiting households with children*, which we can measure by the relative importance of spending on cash transfers and pensions for the incomes of households to which children belong, i.e. *T-kids* + *P-kids*. In Figure 12, countries are ranked from left to right according to the share of cash benefits in children's household incomes. So conceived, social spending in Belgium is comparatively more important for children than the EU15 weighted average, but Belgium is not the biggest spender in the European league.[16]

ii. Second, the *share of pension spending in total spending*, i.e. the share of *P-all* in (*P-all* + *T-all*), which can be assessed in Figure 12 by comparing the solid dark grey bars with the solid light grey bars. Some welfare states, such as Greece, Italy, Portugal, Bulgaria, Romania, Poland, etc. are 'pension heavy'. Today, Belgium is not 'pension heavy', so conceived.[17]

iii. Third, the *child orientation* of social spending, i.e. the importance of spending on cash benefits (both transfers and pensions) for the incomes of households to which children belong, as compared to the importance of spending for all households, i.e. the ratio of (*T-kids* + *P-kids*) on (*T-all* + *P-all*). In Figure 12, the child orientation can be assessed by comparing, for each country, the left bar (which measures the importance of spending for households with children) with the right bar (which measures the importance of spending for all households). For obvious reasons related to pension spending, spending is relatively more important for all households than it is for households with children. However, there is a large variety in this respect: in pension-heavy welfare states, such as Greece and Italy, households with children receive much less income support than households in general. Spending in Belgium is slightly more 'child oriented' (so conceived) than the EU15 average.

iv. Fourth and rather surprisingly, Figure 12 shows that pensions are important for household incomes of children in a number of welfare states. The share of pensions in the cash benefits that support household incomes of children, i.e. the ratio of *P-kids* on (*T-kids* + *P-kids*), is larger than 20% in Greece and Poland (where it even amounts to 50%), Romania, Bulgaria, Slovakia, Latvia, Italy, Spain and Portugal.[18] In Belgium this ratio is only 5.3%; in Germany, Ireland and the Nordic welfare states the pension share in social spending supporting children's households is less than 5%.

(16) The picture is rather different on the basis of administrative spending data, where Belgium appears as one of the biggest spenders on non-pension benefits. See the previous footnote, and Vandenbroucke, Diris and Verbist (2013), Figures 6 and 7.

(17) Obviously, cash benefits that support *de facto* early retirement are not necessarily registered as pensions, which may influence the Belgian picture.

(18) As illustrated in the report Employment and Social Developments in Europe 2012 on the basis of data for 'poverty reduction by pensions', the share of the population living in multigenerational households seems to play a role here (European Commission, 2013, Chart 40, p. 222). In these countries, data on cash transfers underestimate the public effort to support the incomes of families with dependent children; see Vandenbroucke, Diris and Verbist (2013) for further comments.

We should emphasise that all these observations are *ex post*. For instance, if a country is hit by an economic crisis which makes it spend more on unemployment benefits that also support families with children, it will become more 'child oriented' and/or less 'pension heavy'. In theory, a country with comparatively high levels of work poverty in households with children may appear as comparatively generous with regard to social spending for children, but it is not *per se* doing well for children. The *ex post* character of these observations is underscored by the differences between Flanders and Wallonia: they belong to the same *ex ante* policy framework, but, *ex post*, spending in Flanders is less important, less child oriented and more tilted towards pensions than spending in Wallonia; nonetheless child poverty is much higher in Wallonia than in Flanders. Hence, one should be cautious when assessing the quality and orientation of spending on the basis of these *ex post* observations. However, *prima facie*, neither the level nor the general orientation of spending seem to explain the mediocre performance of Belgium with regard to child poverty.

The level and general orientation of spending is one thing, its effectiveness 'per euro' is another. How 'efficient' is our social spending with regard to fighting poverty? That question is notoriously difficult to answer on a macro-level. If we use 'efficiency' in the strict Paretian sense of the word, it even appears quasi-impossible to assess 'the efficiency of social spending' (see Lefebvre and Pestieau, 2012, and Vandenbroucke, Diris and Verbist, 2013, pp. 16-18). Vandenbroucke, Diris and Verbist (2013) develop a conceptually less ambitious 'efficiency scoreboard': rather than assessing Pareto-efficiency, they measure the productivity of social spending, conditional on other 'inputs', such as the pattern of household employment, and taking into account the 'pro-poorness' of spending. This analysis is not conclusive, since it still leaves us with substantial disparities in poverty rates across European welfare states. On a structural level, the 'unexplained disparity' in child poverty rates reflects differences in the underlying social fabric of welfare states, which correlate with differences in the level and architecture of social spending, GDP per capita and investment in human capital, but are not readily 'explained' by any of these factors separately (as they correlate strongly with each other). What comes out for Belgium in this macro-comparative analysis, is that our mediocre performance with regard to child poverty is first of all explained by work poverty and the relative severity of work poverty: if we control for these household employment parameters, the comparative position of Belgium in the 'efficiency scoreboard', so conceived, improves somewhat. *When the impact of household employment rates is neutralised, the Belgian performance becomes slightly better than the average performance of the European welfare states under review, but it remains worse than what we observe for the Nordic and Continental welfare states. In this type of scoreboard, when discounting for our bad household employment record, the Belgian performance emerges as slightly better than 'mediocre' but far from excellent* (see Vandenbroucke, Diris and Verbist, 2013, Figure 9). Given the tentative character of this analysis – it does not allow one to say much about the impact of social spending

as such, since the whole underlying societal fabric of welfare states is at play – it leads to a research agenda rather than unambiguous practical conclusions. However, with regard to Belgium, it certainly indicates room for improvement, rather than the existence of good practice.

Can the architecture of our social spending be improved? Micro-simulation is helpful in this respect, as Maréchal, Perelman, Tarantchenko and Van Camp (2010) show in an interesting study of family allowances. Up to now, only lone-parents and specific categories of social security beneficiaries (i.e. unemployed, disabled and pensioners) are entitled to social supplements in the child benefit system. The simulated reforms extend these social supplements to other children, mainly those living in 'working poor' households (i.e. households that are not jobless, but nevertheless income-poor), on a means tested basis. With regard to the child poverty headcount, the authors qualify the results of the simulated reforms as 'modest' (i.e. these reforms only attain a limited amount of people who are at the edge of passing the poverty line with the additional benefits, while they would remain below this line without the benefits): child poverty decreases with 0.5 to 1.2 percentage points. Simultaneously, they stress that these reforms reach a very considerable amount of children below the poverty line. In the baseline scenario presented by the authors (no reform), taking into account all kind of social family allowances, 53.3% of poor children benefit from them. This percentage increases to more than 70% for all reforms and reaches 97% for some reforms. Interestingly, the budgetary impact of these reforms is rather limited as they imply an increase of between 1.6 and 5.1% of the actual budget for family allowances.[19] Hence, taking into account that the budget for family allowances represents roughly 2% of GDP, with reference to GDP the budgetary effort is very limited. By way of example, the 5th reform scenario under review increases the budget for family allowances by 4.3%, and reduces the child poverty headcount by 0.9 percentage points, while extending social supplements to 96.5% of poor children. This seems a very cost-effective operation, indicating 'room for improvement' in the current architecture. Since this reform extends social supplements to households that are not jobless, its impact on the incentive to make the transition from inactivity to work is not negative. (As the supplement is means-tested, the proposed reforms might create 'income traps' when the household income increases because of additional hours worked by members of the household or because of pay increases. At first sight, that should not be the main worry, since our central challenge seems to be to increase the labour market participation of *very* work-poor households; but this is a matter for further study.) Admittedly, the types of reform studied in this review mainly benefit 'working poor' couples, rather than single parents. They are less an answer to the observation that lone-parent households are confronted with higher poverty risks than couples with children when they

(19) We thank Guy Van Camp for giving us the calculations on the budgetary impact of these reform scenarios.

are relatively 'work-rich' (as shown in Figure 3).[20]

We should not expect miracles from reforms in the child benefit system. However, revisiting the role of child benefits is necessary as part of a broader re-examination and reconsideration of the household dimension in our social policies, which should go beyond the domain of child benefits. In a society where the standard of living of work-rich *dual earner* households increasingly determines what is necessary for a decent standard of living for *any* household, social policy is confronted with a dilemma. It is not just the case that most work-poor households cannot reach this standard, whatever the number of working-age adults in the household. Next to the problem of work poverty (which call for targeted employment creation and activation), differences in the constellation of households create a dilemma that is structural. On the one hand, individual income replacement benefits are constrained, since they must not create employment disincentives (notably with regard to the level of minimum wages, i.e. the 'glass ceiling' as it is called by Cantillon and Van Mechelen (2014)), and the level of minimum wages is in turn constrained by considerations of cost competitiveness. On the other hand, income replacement benefits are insufficient to protect single adult households against poverty (and even a comparatively decent minimum wage, as the Belgian one, is insufficient to protect single adult households against poverty risks if the parent cannot work full-time, or if there are more than two children.[21] Hence, the challenge is to improve social protection *at the household level*, whilst avoiding 'work poverty traps' (and, in Belgium, especially 'severe work poverty traps') *at the household level*, both for lone-parents and for other households with children. Cantillon and Van Mechelen (2014) make a similar point, putting it in context of the history of social security reform in our country. We should reconsider the need for schemes designed to alleviate 'household costs' facing singles and single-income households as well as dual earners, including the cost of child-rearing, healthcare or housing. This would imply that, within the social security toolset, greater weight is assigned to so-called 'cost-compensation' benefits as supplements to individual replacement incomes, and intelligent and nuanced principles of household income selectivity are applied to those supplements (as is, today, for instance the case with the maximum billing system in health care). Simultaneously, the development and design of social services that support families is of utmost importance.

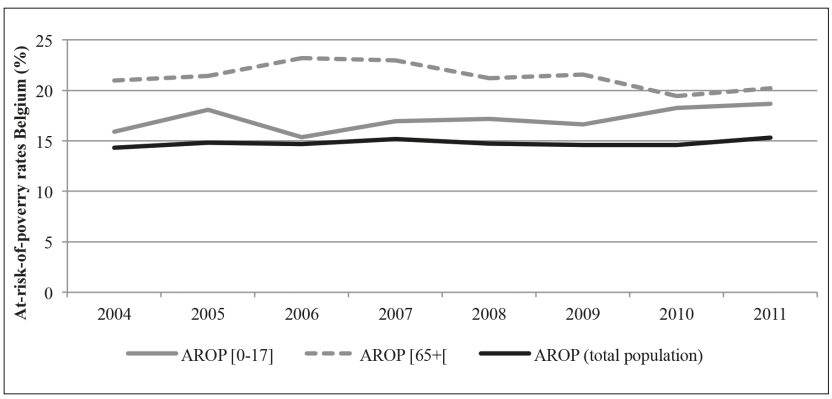
(20) That observation appears also, at least partially, in Table 7 of Maréchal et al. (2010): the child poverty risk is not high in the case of a lone parent working full-time, but it is – comparatively – much higher than the poverty risk in a household where two parents work full-time.

(21) See Van Mechelen, Bogaerts and Vandelannootte (2013), Figure 2: the household income of a single parent with two children, working full-time at a minimum wage just reaches the level of the poverty threshold. This example illustrates why nearly 9% of single parent households with a very high work intensity nevertheless face poverty risks, as reported in Figure 3 of the present paper: with 3 children, or with a less than 100% work intensity, this household would be below the poverty threshold.

9. DISQUIETING DEVELOPMENTS: DECOMPOSING INTERTEMPORAL CHANGES

With regard to child poverty, the Belgian record is mediocre, to say the least. The fact that it is increasing adds to our worry. Figure 13 shows the evolution of Belgian at-risk-of-poverty rates for children, individuals of 65 years and older, and the total population as registered by Eurostat on the basis of all SILC surveys since 2004.

FIGURE 13: BELGIAN AT-RISK-OF-POVERTY RATES FOR CHILDREN, ELDERLY AND THE TOTAL POPULATION



Source: EUROSTAT.

Figure 13 illustrates that assessing changes over time with SILC is hazardous, given the instability of SILC-based estimates until SILC 2006. Compared to SILC 2006, the succeeding point estimates are increasing for child poverty and decreasing for elderly poverty, at least until SILC 2010. If we were to choose SILC 2005 as starting point, we would not say that child poverty has increased. However, it seems fair to use SILC 2006 as starting point, because trends are more or less consistent since then. Compared to SILC 2006, the overall poverty rate was stable in Belgium, but it conceals an intergenerational shift in social risks: in the mid 2000's, the child poverty rate was equal to the overall poverty rate; today there is a clear gap, as child poverty increased by 3.4 percentage points (which is a statistically significant change); meanwhile, the trend also suggests a decrease in poverty risks in the elderly population, at least when starting from EU-SILC 2006.[22] Over the same period, child poverty increased by 5.7 percentage points in Wallonia and 0.2 percentage points in

(22) Assessing the trend with regard to elderly poverty in Belgium is strongly influenced by the year one starts from; see Van den Bosch and De Vil (2013) for an assessment focusing on the whole period covered by EU-SILC 2003-2011 (which is, for that reason, less optimistic about elderly poverty) and for questions about results based on SILC 2011.

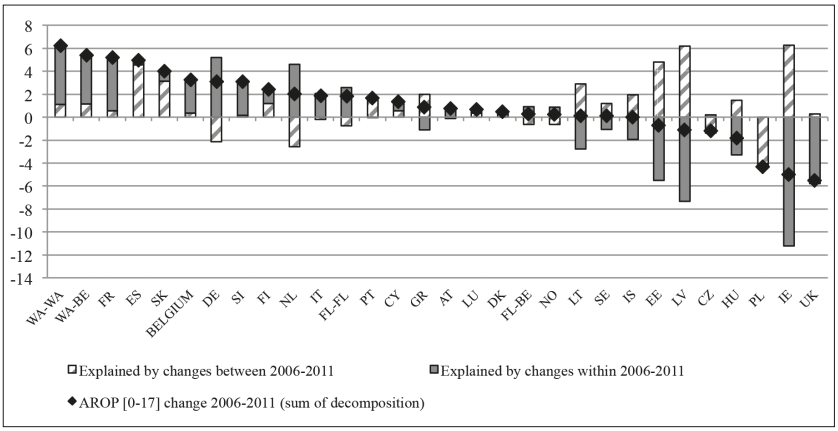
Flanders (when using the Belgian poverty thresholds), and by 6.1 percentage points in Wallonia and 1.8 percentage points in Flanders (when using the regional poverty thresholds). The increase in child poverty in Wallonia on the basis of the Walloon threshold is also statistically significant.

These rather alarming Belgian and Walloon figures should not make Flemish policy-makers complacent. The Flemish agency *Kind en Gezin* collects fine grain data on the situation of children in Flanders in the age bracket [0-3]. They calculate an index for 'kansarmoede' for this age bracket, encompassing the income and the labour market participation of the parents, their level of education, the housing situation, the degree of stimulation of the children by the parents, and their health status. They register a strong upward trend in this index since the mid 2000's – notably in urban contexts –, which is driven mainly by lower labour market participation, income problems and lower levels of education. These worrying findings may be seen as an early warning that the increases in financial child poverty registered in SILC for the whole age bracket [0-17], which are not yet statistically significant for Flanders, may soon become significant as well. The data provided by *Kind en Gezin* show the considerable impact of migration on these figures: in 2012, 28.4% of children with a mother of non-Belgian origin were registered as 'kansarm', versus only 4.5% of children with a mother of Belgian origin; the demographic share of children in the non-Belgian group is growing, and the degree of 'kansarmoede' is increasing within both groups, but most markedly so in the non-Belgian group (Kind en Gezin, 2013). The *Kind en Gezin* index is highly interesting because it includes non-monetary and non-material aspects of poverty and exclusion. The underlying partial indicator for the education level of the parents (which decreases markedly in the Kind en Gezin data) also highlights the link with inadequate social integration of migrant households.

Figure 14a shows the result of a decomposition of changes in poverty rates between SILC 2006 and SILC 2011, on the basis of five work intensity subgroups with 20, 45, 55 and 85 per cent as cut-off (using equation 3). The evolutions presented in Figure 14a are broken down in pre- and post-crisis years in Figures 14b and 14c.

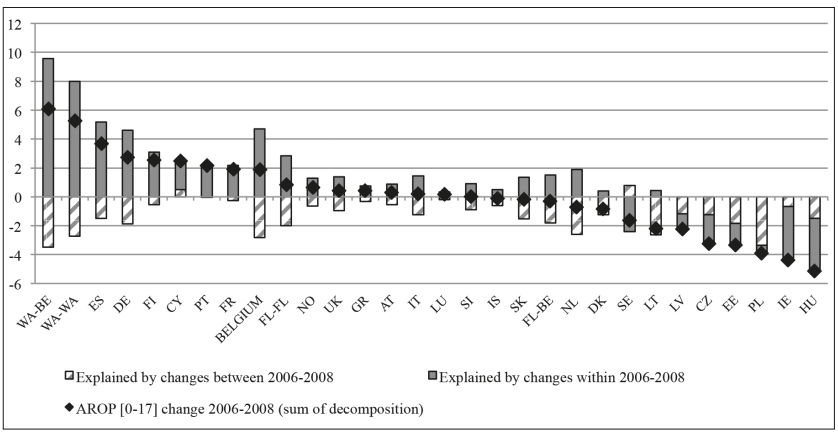
'Changes within' are attributable to changes in the poverty rates within each of the subgroups (keeping their shares constant). 'Changes between' are attributable to changes in the relative shares of each of the subgroups (keeping the at-risk-of-poverty rates in each of the subgroups constant). In most European welfare states (except Germany, the Netherlands, Italy, Norway, the Czech Republic, Poland and Flanders) 'changes between' contributed to an increase in poverty (i.e. the deteriorating pattern of household employment contributed to increasing child poverty), but in the majority of welfare states 'changes within' were more important as the explanatory factor for the overall change in poverty.

FIGURE 14A: DECOMPOSITION OF CHANGES IN CHILD POVERTY BETWEEN SILC 2006 AND SILC 2011



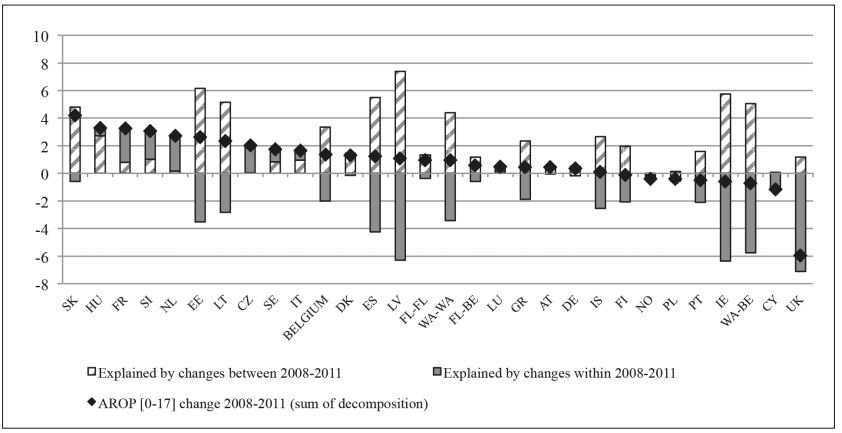
Source: compiled by the authors, using EU-SILC 2006, 2011.

FIGURE 14B: DECOMPOSITION OF CHANGES IN CHILD POVERTY BETWEEN SILC 2006 AND SILC 2008



Source: compiled by the authors, using EU-SILC 2006, 2008.

FIGURE 14C: DECOMPOSITION OF CHANGES IN CHILD POVERTY BETWEEN SILC 2008 AND SILC 2011



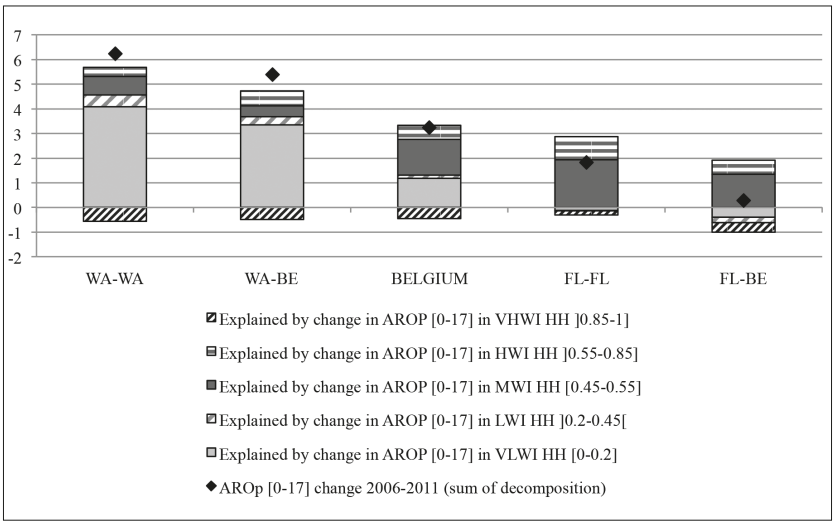
Source: compiled by the authors, using EU-SILC 2008, 2011.

Figure 14b shows that the 'gain' in poverty rates due to improving household work-intensities between SILC 2006 and SILC 2008 was neutralised or even more than neutralised by the increase of poverty risks within the subgroups of the work-poor, at least using the point estimates we have on the basis of SILC. Between SILC 2008 and SILC 2011 the dynamics change, as shown in Figure 14c: poverty rates increased in many countries, mainly as a consequence of 'changes between', i.e. deteriorating household work intensities. Figures 14a, 14b and 14c together illustrate that the overall increase in poverty rates by the end of the decade can be seen as the *combined result of a boom without declining poverty in many Member States – as the gain in household employment was offset in many countries by increasing poverty risks within vulnerable subgroups of the population –, followed by a crisis with increasing poverty in many Member States.* When interpreting the national figures, one must not forget that we use a floating poverty threshold, i.e. in times of crisis median incomes decrease in many countries (or increase less than in times of boom). This explains why 'within changes' are positive in a number of countries in Figure 14c.

Figure 15 gives the detail of the 'changes within', as reported in Figure 14a, for Belgium and its two main regions. A striking observation concerns the relative weight in the overall change in the poverty rate in the very work-poor group: in Wallonia (both when measured with a regional threshold and when measured with the Belgian threshold), the main part of the increase in child poverty can be accounted for by increasing child poverty in households with very low work intensity.

Next to that observation, child poverty seems to increase[23] within all work intensity subgroups of the population, except children living in households with very high work intensity. Consequently, poverty increased in about half of the child population, if we partition it on the basis of the work intensity criterion (in EU-SILC 2011, children in households with very high work intensity constitute 47.1% of the child population in Belgium, 42.7% in Wallonia and 53.6% in Flanders).

FIGURE 15: DECOMPOSITION OF CHANGE IN BELGIAN CHILD POVERTY EU-SILC 2006-2011 WITHIN CHANGES



Source: compiled by the authors, using EU-SILC (2006, 2011).

This pattern of change raises important questions. It should be related to the observation that the median household income of children evolved in a less favourable way than the median income of the total population (in SILC 2006, the median household income of children was more or less on the same level as the median household income of the total population; by SILC 2011, it was about 5% less).[24] As already indicated on the basis of the Flemish *Kind en Gezin* data, migration plays an important role in this development. EU-SILC shows that the poverty rate is higher for children in households with no adult born in Belgium, and much higher

(23) We formulate this cautiously, because the confidence intervals around these point estimates are very large.
(24) If we were to recalculate child poverty rates on the basis of the median household income of children, rather than on the basis of the median household income over the entire population, 'child poverty' (so conceived) would increase by 1.3 percentage points, not by 3.3 percentage, points between SILC 2006 and SILC 2011.

for children in households where all working-age adults were born outside the EU25 (that is, the EU27 without Bulgaria and Romania). Household work poverty is one factor: Belgium has a particularly high rate of children in households with low or very low work intensity (less than 45%) in the 'non-EU25' segment. However, the prevalence of (very) low work intensity among migrant households does not explain everything. Both in households with low and very low work intensity and in other households (with medium work intensity or relatively more 'work-rich' households), financial poverty rates are considerably higher in the non-EU25 households (Vandenbroucke, 2013, pp. 100-102). In other words, even when migrant households do participate in the labour market, that participation does not seem to generate the same protection against financial poverty as it does for native households.

In Belgium, the first part of the period under review (SILC 2006-SILC 2008) coincided with economic prosperity and the deliberate turn towards an activating strategy vis-à-vis the unemployed. Should we conclude from this that the activation turn has been a failure – at least assessed on the basis of child poverty? Cantillon and Vandenbroucke (2014) examine the disappointing poverty record in the non-elderly population during the European boom years, and conclude that the transition from the old distributive welfare state to a new social investment state, as called for by the European Lisbon Strategy in March 2000, was more difficult than expected. Hence, one should not deny tensions and trade-offs in such a strategy. Vandenbroucke (2013) pursues a similar soul-searching question, focusing on the Belgian case: under the banner of 'the active welfare' state, employment incentives were incrementally improved, not by lowering benefits but by lowering personal social security contributions at the bottom end of the wage scale and taxes on earned income, linked with an activation model based on close monitoring of the unemployed rather than on harsh sanctions or lower benefit levels. Nevertheless, child poverty increased. The foregoing summary analysis suggests three possible reasons for that failure, already prior to the economic crisis, which point to three policy challenges:

i. The traditional 'financial incentive' arsenal of the active welfare state is ill-equipped to take up the challenge of migration. Making a bigger success of migration requires reform in our education systems (to reduce the number of unqualified early school leavers) and labour markets (to create more possibilities for the existing stock of low-skilled labour).
ii. The skewed distribution of jobs over households calls for a better targeting of activation policies (to reach out to jobless households, including lone-parents) and a well-designed development of childcare facilities (to make labour market participation possible and affordable for low-skilled women with a low earnings potential, notably for lone mothers).
iii. The social protection of families with children must be enhanced without damaging employment incentives, e.g. by improving the selectivity of child benefits or by introducing selective housing support.

10. CONCLUSION: POLICY CHALLENGES IN A CONTEXT OF PERSISTENT DUAL POLARISATION

The Belgian welfare state is characterised by dual polarisation. Looked at from a household perspective, the gap between the 'haves' and the 'have nots' is exceptionally large, both with regard to labour market participation and with regard to the consequences of labour market participation for poverty. On the one hand, many children live in households that are very work-poor; on the other hand, the financial poverty risk for children in very work-poor households is high. At first sight, one might think that this pattern reflects 'haves' in one region and 'have nots' in another region; but the picture is more complicated, with a similar pattern of polarisation *within* Wallonia, and high financial poverty risks for households with very low work intensity in Flanders (notably when compared to Nordic countries). Child poverty is increasing, in Belgium and Wallonia in a statistically significant way. For Flanders, SILC is not conclusive with regard to an increase in child poverty, but the data provided by *Kind en Gezin* about the youngest generation constitute a lead indicator that may forecast growing social inequality in the future.

A cross-country comparison of *ex post* outcomes on a macro-level shows no trade-off between a smaller share of children in very work-poor households and less poverty in very work-poor households: we are not doomed to choose between more employment and less poverty. Activation and social investment policies as traditionally organised in Nordic Europe are not a recipe for child poverty – on the contrary. However, SILC surveys since 2005, i.e. since the first 'activation turn' in Belgium, suggest that, before the crisis, increasing employment rates went hand in hand with increasing poverty risks in vulnerable households with children. Since the crisis, child poverty is increasing further, now driven by the worsening employment situation.

Next to policies to redress the current economic situation and to enhance employment creation in general, three policy challenges follow from this analysis:

i. The traditional incentive arsenal of the active welfare state is ill-equipped to take up the challenge of migration. We need reform in our education systems (to reduce the number of unqualified early school leavers) and labour markets (to create more opportunities for the existing stock of low-skilled labour).
ii. The skewed distribution of jobs over households calls for a thorough analysis; it signals the need for a better targeting of activation policies and a well-designed development of childcare facilities.
iii. The 'work-rich dual earner standard' that characterises our society today, creates a structural dilemma for the architecture of our welfare state. The challenge is to improve social protection at the household level, whilst avoiding '(severe) work poverty traps' at the household level, both for lone-parents and for other households with children. We should reconsider schemes designed to alleviate 'household costs' facing singles and single-income households as well as dual earners, including the cost of child-rearing, healthcare or housing. Possibilities

to improve the social protection of families with children without damaging employment incentives, e.g. by improving the selectivity of child benefits or by introducing selective housing support, should be examined. Simultaneously, the development and design of social services supporting families is of utmost importance.

In short, both social protection and social investment policies should be reconsidered in the light of increasing child poverty. Together with further reform of the pension system, this must be the priority number one of social policy at all levels of government.

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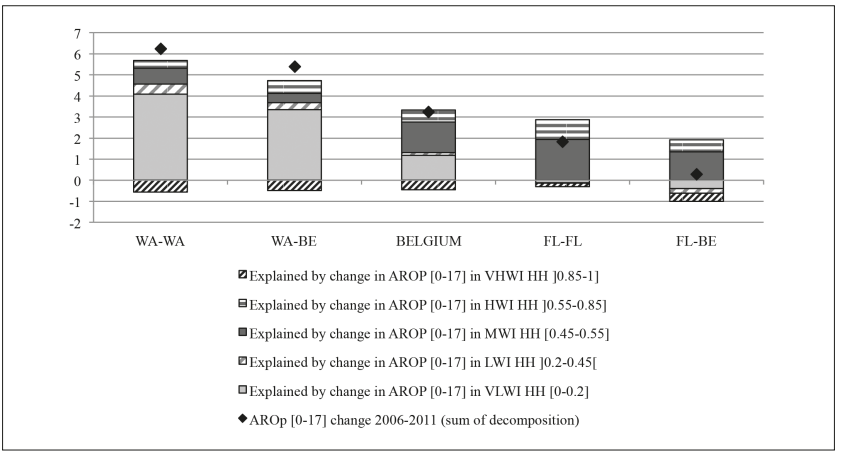
APPENDICES

APPENDIX 1: DECOMPOSITION OF THE DIFFERENCE IN POVERTY RISK BETWEEN LONE-PARENT HOUSEHOLDS AND OTHER HOUSEHOLDS WITH CHILDREN

In all European welfare states, poverty risks for children are much higher in lone-parent households than in other households with children. We decompose differences between the at-risk-of-poverty rate for children in lone-parent households and the at-risk-of-poverty rate in other households with children, using equation 3 (see Section 5). The decomposition is based on 5 work intensity subgroups (cut-offs: 20-45-55-85). 'Differences between' are differences that can be accounted for by differences between lone-parent households and other households with regard to the pattern of household work intensity (in the hypothesis that there would be no differences, between those two categories, in the at-risk-of-poverty rates characterising the 5 work intensity subgroups). 'Differences within' are differences that can be accounted for by differences between lone-parent households and other households with regard to the poverty rates characterising the 5 work intensity subgroups (in the hypothesis that the distribution of the population by work intensity would be identical in the two categories). In short, 'differences between' refer to differences in work intensities; 'differences within' refer to differences in poverty risks within each of the work intensity subgroups. For instance, in Belgium the poverty rate in lone-parent households is 28,5 percentage points higher than in other households with children; 24 percentage points are accounted for by 'differences between', i.e. by the fact that the pattern of household employment is much less favourable in the lone-parent group; only 4,5 percentage points are accounted for by 'differences within'.

FIGURE A1: DECOMPOSITION OF THE DIFFERENCE IN POVERTY RISK BETWEEN LONE-PARENT HOUSEHOLDS AND OTHER HOUSEHOLDS WITH CHILDREN



Notes: The countries on the left hand side of Figure A1 have the largest difference between the at-risk-of-poverty rate for children living in lone-parent households and children living in other households. The countries on the right hand side have the smallest difference between the at-risk-of-poverty rate for children living in lone-parent households and children living in other households. In all European welfare states under consideration the at-risk-of-poverty rate for children living in lone-parent households is higher than for children living in other households.
Source: compiled by the authors, using EU-SILC 2011.

APPENDIX 2

TABLE A1: (SUPPORTING FIGURE 7) DECOMPOSITION OF CROSS-COUNTRY DIFFERENCES IN CHILD POVERTY ON THE BASIS OF SEVERE WORK POVERTY

Country with which Belgium is compared	AROP [0-17] 2011	Explanatory factors			Difference in AROP [0-17] with Belgium	Difference explained by			Sum of decomposition	Residual
		Share of children VLWI [0-0.2]	Poverty risk of children VLWI [0-0.2]	Poverty risk of children other than VLWI [0.2-1]		Share of children VLWI [0-0.2]	Poverty risk of children VLWI [0-0.2]	Poverty risk of children other than VLWI [0.2-1]		
NO	9.4	4.8	43.6	7.2	9.2	4.9	3.5	1.2	9.6	0.3
DK	10.2	8.9	41.5	7.1	8.4	2.6	4.5	1.2	8.3	-0.2
FL-BE	10.4	6.6	65.1	6.6	8.2	4.8	1.6	1.7	8.1	-0.2
IS	11.2	6.9	33.0	9.4	7.4	3.3	5.0	-0.9	7.4	0.0
FI	11.8	7.6	62.9	7.5	6.8	4.0	1.9	0.9	6.8	0.0
CY	12.8	3.2	61.6	11.2	5.8	6.5	1.6	-2.5	5.7	-0.2
FL-FL	13.1	6.6	75.1	8.7	5.6	5.0	0.6	-0.2	5.4	-0.2
SE	14.5	5.5	78.8	10.1	4.1	5.9	0.2	-1.5	4.6	0.5
SI	14.7	4.4	87.5	11.3	4.0	7.0	-0.6	-2.5	3.9	-0.1
CZ	15.2	6.9	79.9	10.5	3.4	4.9	0.1	-1.8	3.3	-0.2
AT	15.4	6.6	70.6	11.4	3.3	4.8	1.1	-2.6	3.2	-0.1
NL	15.5	6.3	70.3	11.8	3.1	4.9	1.1	-3.0	3.0	-0.2
DE	15.6	8.6	69.2	10.5	3.0	3.4	1.3	-1.8	2.9	-0.1
IE	17.1	26.0	48.2	6.3	1.5	-6.9	6.5	1.8	1.3	-0.2
CH	17.3	4.2	66.0	15.1	1.4	5.9	1.4	-6.1	1.2	-0.2
UK	18.0	14.1	53.1	12.1	0.7	-0.1	3.9	-3.2	0.6	-0.1
BELGIUM	18.7	13.8	81.0	8.5	0.0	0.0	0.0	0.0	0.0	0.0
FR	18.8	8.2	75.9	13.7	-0.2	3.8	0.6	-4.6	-0.3	-0.1
EE	19.5	9.2	77.5	13.7	-0.9	3.2	0.4	-4.6	-1.0	-0.1
LU	20.3	2.9	64.9	19.0	-1.6	6.4	1.3	-9.6	-1.8	-0.2
WA-WA	20.8	19.5	76.0	7.4	-2.1	-4.0	0.8	0.8	-2.3	-0.2
SK	21.2	7.1	86.6	16.1	-2.5	4.8	-0.6	-6.9	-2.7	-0.2
PL	22.0	4.1	76.3	19.7	-3.4	6.3	0.4	-10.3	-3.5	-0.2

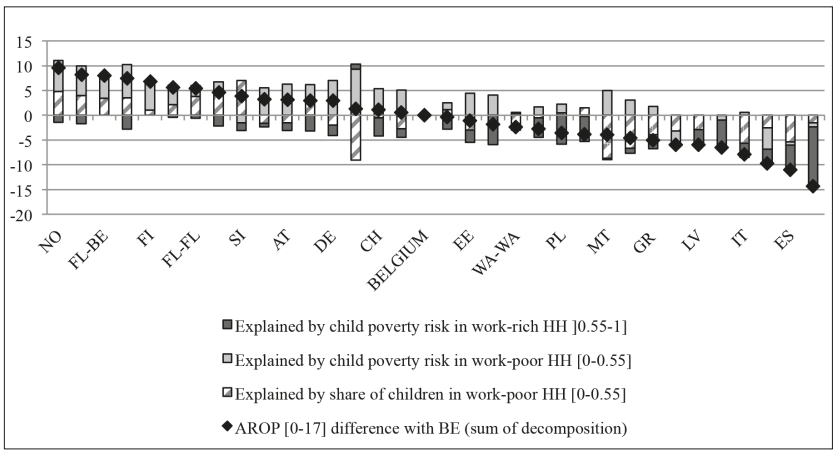
Country with which Belgium is compared	AROP [0-17] 2011	Explanatory factors			Difference in AROP [0-17] with Belgium	Difference explained by			Sum of decomposition	Residual
		Share of children VLWI [0-0.2]	Poverty risk of children VLWI [0-0.2]	Poverty risk of children other than VLWI [0.2-1]		Share of children VLWI [0-0.2]	Poverty risk of children VLWI [0-0.2]	Poverty risk of children other than VLWI [0.2-1]		
PT	22.4	7.2	74.2	18.3	-3.7	4.3	0.7	-8.8	-3.8	-0.1
MT	22.4	9.9	76.0	16.6	-3.8	2.6	0.6	-7.1	-3.9	-0.2
HU	23.0	14.1	73.7	14.7	-4.3	-0.2	1.0	-5.4	-4.6	-0.2
GR	23.7	7.2	79.5	19.2	-5.0	4.4	0.2	-9.6	-5.0	0.0
WA-BE	24.9	19.5	87.7	9.1	-6.2	-4.3	-1.1	-0.5	-6.0	0.3
LV	24.7	12.6	73.0	17.4	-6.0	0.8	1.1	-7.8	-6.0	0.1
LT	25.2	11.7	74.0	18.5	-6.5	1.4	0.9	-8.8	-6.5	0.1
IT	26.3	7.6	81.6	21.8	-7.7	4.1	-0.1	-11.9	-7.8	-0.2
BG	28.4	13.7	84.1	19.3	-9.8	0.1	-0.4	-9.4	-9.7	0.0
ES	29.5	11.6	80.8	22.7	-10.9	1.5	0.0	-12.5	-11.0	-0.1
RO	32.9	4.4	76.2	30.8	-14.2	5.5	0.4	-20.3	-14.3	-0.1

Source: compiled by the authors, using EU-SILC 2011.

APPENDIX 3: DECOMPOSITION OF DIFFERENCES IN CHILD POVERTY ON THE BASIS OF WORK POVERTY

The decomposition shown in Figure A2 is similar to the decomposition shown in Figure 7, but now we use a work intensity of 55% as cut-off to divide the child population in two groups. Thus we distinguish households that are 'work-poor' from other households with children; see footnote 14 for a comment.

FIGURE A2: DECOMPOSITION OF CROSS-COUNTRY DIFFERENCES IN CHILD POVERTY ON THE BASIS OF WORK POVERTY (TWO SUBGROUPS)



Source: compiled by the authors, using EU-SILC 2011.

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