

CHILD POVERTY INSIGHTS

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Child poverty in the EU: The breadth of poverty and cumulative deprivation

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Our recent work on multidimensional child poverty in the European Union is an attempt to add to the academic and policy debate around child poverty in the region, its measurement and the use of indicators to inform policy. We have information about child poverty from a macro-perspective, including the well-known UNICEF IRC Report Card 7 that has sparked intense policy debate in the United Kingdom after ranking bottom (UNICEF IRC, 2007). Recent studies have also considered child poverty from a micro-perspective, performing analysis at the level of the individual child (TARKI, 2011). However, no studies have considered the extent to which children experience multiple deprivations at the same and can be considered 'cumulatively deprived.' In this work, we sought to address questions around those patterns overlap and the 'breadth' of poverty, as well as the combination of information in measures of cumulative deprivation. Among other things, three facts become clear from this work:

- Indicators of monetary poverty and multidimensional poverty cannot serve as a proxy for one another;
- There are risk factors that increase a child's likelihood to be poor or deprived;
- Multidimensional poverty measures enables policy makers to identify the most vulnerable children and design holistic anti-poverty policies.

Why focus on child poverty in the European Union?

Moral, efficiency and rights-based arguments have sparked widespread acknowledgement in both academic and policy circles that children deserve a special focus in poverty measurement. Children can be considered to have a 'differential experience' of poverty in childhood, setting their situation apart from adults as well as from other children depending on their life-stage. The European Union (EU) is amongst those bodies which have recognized the need for child-focused indicators in monitoring poverty and social exclusion and is currently in the process of developing, testing and comparing single indicators of child well-being across member states.

In our working paper "The Breadth of Child Poverty in Europe: An Investigation Into Overlap and Accumulation of Deprivations", we seek to add to this debate by providing a micro-analysis of the breadth of child poverty in the European Union, considering both the degree of overlap and accumulation of deprivations across monetary and

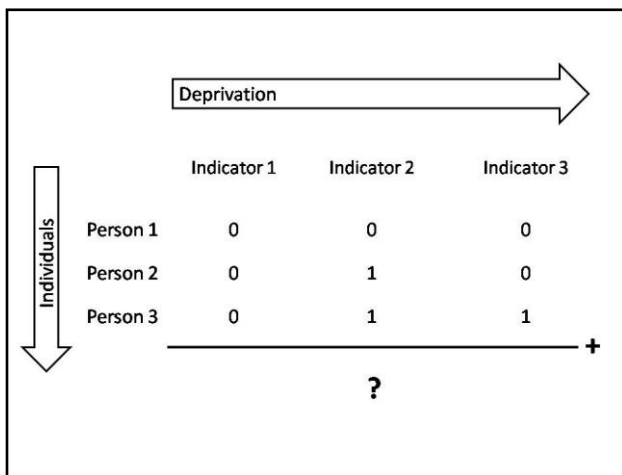
multidimensional indicators of poverty, and by testing various options for constructing measures of cumulative deprivation.

What do you mean by the 'breadth' of poverty and why is it important to consider?

The breadth of poverty refers to the extent to which households or individuals (including children) suffer multiple kinds of deprivation (i.e. cumulative deprivation). This is important for two reasons:

- 1) We can consider someone to be deprived in multiple areas to be worse off than someone who is deprived in few to no areas, and
- 2) We need to know about the extent to which a population is cumulative deprived to formulate an adequate poverty response.

The following figure illustrates the meaning of the breadth of poverty in a graphical manner:



The first person does not suffer from any deprivations while the second person is deprived in the second indicator and the third person is deprived in the second and third indicators. All other things equal, the third person is worse off than the other deprived persons, with larger breadth of poverty.

Note that the breadth of poverty is not the same as depth of poverty. The breadth of poverty refers to whether a person that experiences poor housing conditions is, at the same time, unable to afford meat every two days, for example. Information on the depth of deprivation would refer to the actual level of housing conditions, differentiating between whether one lives in a house with merely

one leak or in a house with multiple requirements for repair and maintenance. Unfortunately, such information is much less available because indicators are often binominal (informing whether someone experiences a particular condition but not how severe it is).

What do we know about the breadth of child poverty in the EU?

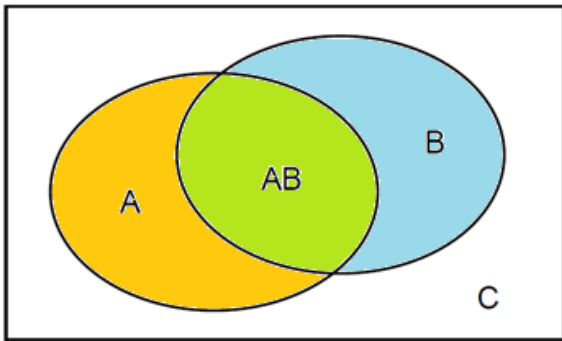
Analysis of European Union Statistics on Income and Living Conditions (EU-SILC) data from 2007 in Germany, France, the Netherlands and the UK points towards a diverse picture with respect to findings in terms of monetary and non-monetary domains of deprivation. Domains included in the analysis pertain to **income poverty** (60% of median income or below), **housing problems** (including housing conditions and overcrowding), **neighbourhood problems** (including crime and pollution), **access to basic services** (including accessibility of schools and health facilities) and **financial strain** (including the ability to make ends meet and the ability to afford an annual holiday).

| % of Children in households experiencing deprivations | | | | |
|---|-------------|-------------|-----------------|----------------|
| Domain | Germany | France | the Netherlands | United Kingdom |
| Housing problems | 25.7 | 29 | 24.3 | 28.5 |
| | [24.0,27.5] | [26.8,31.2] | [22.2,26.5] | [26.4,30.8] |
| Neighborhood problems | 26.4 | 25.3 | 26.7 | 35.2 |
| | [24.6,28.1] | [23.1,27.7] | [24.7,28.7] | [33.0,37.3] |
| Difficult access to basic services | 22.7 | 13.6 | 14.4 | 12 |
| | [21.1,24.5] | [12.2,15.2] | [12.8,16.2] | [10.4,13.8] |
| Financial strain | 37.5 | 41.4 | 21.5 | 41.3 |
| | [35.5,39.4] | [39.2,43.5] | [19.4,23.9] | [39.0,43.5] |
| Monetary (income) poverty | 13.9 | 15.7 | 13.9 | 23 |
| | [12.6,15.4] | [14.0,17.5] | [11.7,16.5] | [20.9,25.1] |

Source: authors' calculations with EU-SILC, wave 2007. Standard errors are calculated taking into account the survey sampling design.

A number of key lessons can be drawn from our research on the breadth of child poverty when considering the overlap and association between indicators of monetary and non-monetary poverty and between indicators of non-monetary poverty.

Firstly, ***the picture is diverse and diffuse***. There is limited overlap with considerable size and group differences between indicators of monetary and multidimensional poverty. None of the four countries ranks worst or best across all domains. Although the Netherlands can largely be considered to be performing very well with relatively low proportions of children being deprived, this does not hold true across all domains. Similarly, the United Kingdom can be considered a poor performer with relatively high deprivation rates, but this does not hold across the board either. The pattern is a bit more consistent across, with financial strain being the most prevalent problem across all countries. That said, size differences are considerable across countries, with the proportion of children suffering financial strain in the UK being 20 percentage points higher than in the Netherlands.



Secondly, ***indicators of monetary poverty and multidimensional poverty cannot serve as a proxy for one another***. Although findings suggest that there is positive association between being monetary poor and experiencing financial strain or housing problems, there is also considerable mismatch in terms of the actual groups being identified by either two indicators. In other words, although we find a strong association between financial strain and income poverty and between income poverty and housing problems, the overlaps analysis also points towards **considerable proportions of children that experience financial**

strain or housing problems without being income poor. In terms of the Venn diagram above, the areas A and B are considerable when combining two different indicators of child poverty.

Finally, this study confirms findings on ***risk factors that increase a child's likelihood to be poor or deprived***. Single parenthood, living in a rented dwelling, low work intensity and income poverty are strong recurrent risks for experiencing deprivation with respect to monetary poverty, financial strain and housing problems. The strength of these effects differs by country, however. Deprivation patterns point towards the Netherlands being the country where children are least likely to be affected by common risk factors.

Why construct a cumulative measure of deprivation?

The first figure above illustrated that, all things equal, a person suffering multiple deprivations at the same time is worse off. However, this difference goes unnoticed when only single indicators are reported. Fortunately, governments' social indicator portfolios have expanded, taking the multidimensionality of poverty into account. However, few-- if any-- of the indicators provide insight into the degree to which persons experience several unfavourable conditions at the same time. In the EU, many child-sensitive indicators have been proposed to complement the so called "Laeken indicators" on poverty and social exclusion¹, but none of the measures is sensitive to (changes in) cumulative deprivation (i.e. the degree to which a child simultaneously experiences a range of unfavourable conditions).

We reviewed and tested various indicators of cumulative deprivation that can be used to monitor child poverty and to identify vulnerable groups of children. These include headcounts (counting deprived individuals) and adjusted headcounts (counting deprivations of deprived individuals), while the cumulative threshold can be distribution dependent (relative) or

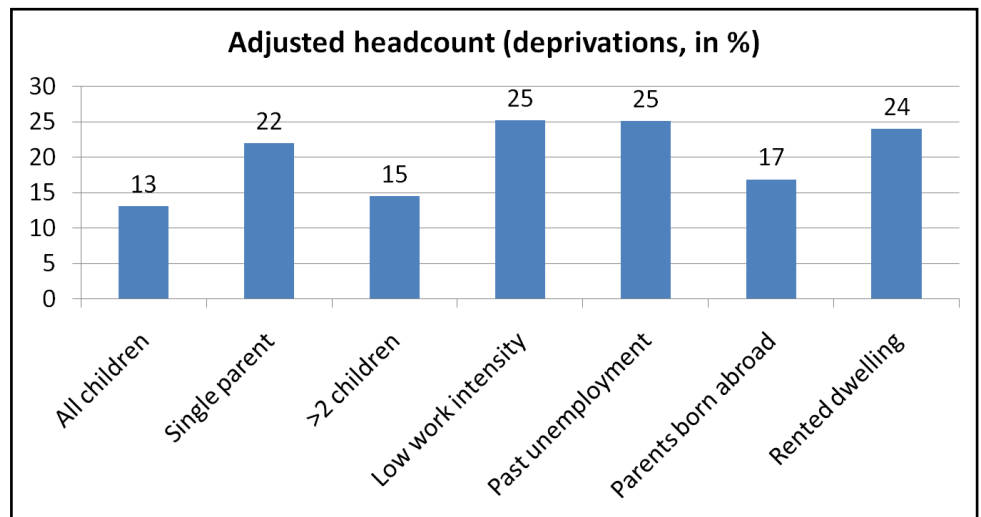
¹ Which include poverty rate, persistent poverty rate (crossed by age, gender, household type, activity status, work intensity and tenure status), S80/S20, Gini coefficient, and in-work poverty

not (absolute). The measures were empirically tested on the 2007 EU-SILC data for the United Kingdom, Germany, France and the Netherlands and findings indicate that **the absolute adjusted headcount with a cumulative threshold of one deprivation is the most attractive candidate**: it has an intuitive interpretation and is sensitive to the breadth of deprivations but not oversensitive to changes in the methodology.

How is an understanding of cumulative deprivation important for policy-making?

Information on cumulative deprivation is important for any population group, and has practical consequences: if 10% of the population lives in poor housing conditions and an equal percentage lives in a high crime / vandalism neighbourhood, persons experiencing both conditions, all other things equal, are worse off than persons experiencing one condition. For children, this distinction is even more pertinent: children's current well-being is a key determinant of their future well-being and, well-being in one domain (i.e. health) is often complementary to well-being in another domain (i.e. education).

The following bar graph presents findings for child poverty in the UK using the adjusted headcount with an absolute threshold of one deprivation. The first bar shows that children are deprived in 13 percent of all observed indicators (13 in total), which implies that the average child in the UK experiences one to two deprivations. However, children living in households with low work intensity, past unemployment, living in rented dwellings or in lone parent households have scores up to 25 percent, meaning that these groups suffer from three to four deprivations at the same time.



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Conclusions from this work are relevant beyond the context of the present EU discussion on child specific indicators; they also contribute to our understanding of multidimensional poverty measures and their potential to contribute to making better policy decisions. After all, the way we define and measure poverty can have a direct impact in the way we go about fighting it. This methodology can help policymakers better visualize the most vulnerable children who are affected by multiple deprivations, and who need a more holistic approach to anti-poverty policy.

Some general resources:

- Jones, N., & Sumner, A. (2011). *Child poverty, evidence and policy: Mainstreaming children in international development*. Bristol: Policy Press.
- Notten, G. and Roelen, K. (2011) [Monitoring child well-being in the European Union: measuring cumulative deprivation](#), Innocenti Working Paper 2011-03, UNICEF Innocenti Research Centre, Florence
- Roelen, K. and Notten, G. (2011) [The breadth of child poverty in Europe: an investigation into poverty overlap and accumulation of deprivation](#), Innocenti Working Paper 2011-04, UNICEF Innocenti Research Centre, Florence
- Notten, Geranda and Keetie Roelen (2010) "[Cross-national comparison of monetary and multidimensional child poverty in the European Union: puzzling with the few pieces that the EU-SILC provides](#)", BWPI Working Paper 135/2010, Brooks World Poverty Institute, Manchester
- TÁRKI (2011): [Child well-being in the European Union – Better monitoring instruments for better policies](#). Report prepared for the State Secretariat for Social Inclusion of the Ministry of Public Administration and Justice, Budapest.
- UNICEF (2007) Innocenti Report Card 7. [Child Poverty in Perspective: An Overview of Child Well-Being in Rich Countries](#), Florence: Innocenti Research Centre

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