Poverty Across Europe: The Latest Evidence Using the EU-SILC Survey

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The rate of poverty varies between 10% and 23% in the countries of the European Union. Low levels of poverty characterize the Scandinavian countries, the so-called Corporatist countries (Austria, Germany), and the Czech Republic, Slovakia and Slovenia among the ex-Socialist countries. In contrast, the risk of poverty tends to be relatively high in the Mediterranean and the Baltic states. This Policy Brief discusses the sensitivity of these estimates to the measures used and explores the underlying patterns across the vulnerable groups and the likely causes of poverty in these countries.

Methodology

The focus of policy attention across the EU so far as poverty and social exclusion are concerned tends to be on the relative number of people in each country with (equivalised) disposable income below 60% of the national median. This figure is now regarded as the main indicator of the risk of poverty.
The analysis is based on data from the 2006 EU-SILC, which covers 24 EU Member States, together with Norway and Iceland. The year of the survey is 2006, which refers to incomes from the year 2005. The original total sample size is 536,993, which falls to 533,488 largely due to missing values in the income variable.

Extent of Poverty in a European Comparison

The rate of poverty varies between 10% and 23% in the countries of the European Union: with poverty being the lowest in the Czech Republic and the Netherlands, and the highest in Latvia (see Figure 1). Low levels of poverty characterize the Scandinavian countries, the so-called Corporatist countries (Austria, Germany), and the Czech Republic, Slovakia and Slovenia among the ex-Socialist countries. In contract, the risk of poverty tends to be relatively high in the Mediterranean and the Baltic states. We estimated confidence intervals (at 95% level) to the poverty rates shown on Figure 1, in order to reveal whether there is statistically significant difference between the poverty rates of countries. For example, there is no such difference between the Czech Republic and the Netherlands, while poverty rates in the Netherlands and Belgium do significantly differ.

Two thirds of the total poor population in the European Union live in six countries: Germany, France, the United Kingdom, Italy, Poland and Spain (see Figure 2). Among these, the rate of poverty is lower than the EU average in Germany and France. Interestingly, the absolute size of the poor population is about the same in Germany as in Italy, while the former has a relatively larger total population (and a lower poverty rate), the latter country has a higher poverty rate and smaller total population.

We also explored the sensitivity of the estimates by complementing our main poverty measure with two alternative poverty thresholds: 50% and 70% of the national median equivalised disposable income (Figure 3). The ranking of countries does not change substantially when these alternative indicators are used. Exceptions are Finland, Ireland and to a lesser extent, Austria, where using the 50% threshold would improve the ranking of the countries substantially, while using the 70% threshold would deteriorate their ranking. The reason is that a relatively high number of people are concentrated around the mean of the income distribution, so the headcount figure of poverty (used here) is rather sensitive to the change of the threshold.
The national average at-risk-of-poverty rate, however, masks important differences within a country, including regional differences. Variation of poverty across population groups within countries is often wider than the variation across countries, as shown in the following sections.

**Absolute Poverty Rates**

The standard poverty rate used in this section (60% of the national median income) is a relative definition as it depends on the average income of the country. The implicit assumption is that people assess their situation compared to others. Poor are those who are not able to participate in the normal activities of the society, and such participation requires more resources in a more affluent nation. Relative definitions of poverty are widely used in Europe, while absolute measures tend to be applied for global comparisons. International development institutes have agreed to use a 1 dollar/day poverty threshold, adjusted for differences in purchasing power parities. This indicator is included among the UN Millenium Goals, which aims to halve the population living below 1 dollar/day between 1990 and 2015 (UNDP, 2004). Although these absolute measures are repeatedly criticized for not being universally comparable and not being adequate for meeting minimum calories intake, they appear to be useful in promoting to focus development efforts on the most needy (Ravallion, 2008).

We calculated two different threshold in order to compare poverty across countries in Europe with values of 5 euros/day and 10 euros/day. As these nominal amounts would allow the purchase of rather different basket of goods in the various countries, we adjusted these values with the purchasing power parities. The degree of adjustment is substantial: while the price level is only 50% in Slovakia compared to the EU27 average, it reaches 106-119% in Germany, France or Sweden.

The divergence of absolute poverty is much greater across countries than that of relative poverty (see Figures 1 and 4). While in the case of the latter the ratio between the lowest the highest rates of poverty is 2.3, in case of absolute poverty this ratio cannot be interpreted (one might conclude that there are 125 as many poor in Latvia than in Luxembourg). The reason for this is that this measure shows very low poverty rates in about third of the countries (below 1%). The Baltic states suffer from the highest rates of poverty within the European Union, although
with a significant variation across these countries: while 1 in 3 persons are regarded to be poor in Latvia according to this measure, the ratio is “only” 15% in Estonia. Absolute poverty is relatively high in Portugal, Greece, Italy and Spain, in parallel with their above average poverty levels in case of the relative poverty measure. This implies the “depth of poverty”, in other words, that the incomes of the poor are significantly below the standard relative poverty threshold (60% of national median).

Note, however, that these measures of absolute poverty might not reflect actual deprivation for various reasons.

They do not take account of
• the agricultural production for own consumption (which might be significant for countries with a significant farmer or rural population),
• the consumption of public services, such as health, and education (public provision and the share of private contributions is likely to differ across countries),
• differences in housing costs and housing ownership (imputed rents),
• potential differences in income underreporting, both across countries and within the population (this might be most accute when people participate in the black/grey economy)
• differences in the consumption basket of the rich and the poor within the countries (the PPS adjustment reflects an average measure across the whole population, which may be less adequate to the goods consumed by the poor).

Regional Differences

Regional disparity in terms of poverty is rather wide across those 11 countries for which such data is available. Note, however, that the number of regions per countries varies a great deal (between 3 and 22), which calls for caution with the interpretation, as we may compare a country with 3 regions with another consisting of 22 regions. The dispersion of poverty, the difference between the highest and lowest regional rates, is likely to be greater in the latter. Thus, these results are rather indicative. They, however, point to an interesting future research area, provided that the micro-data will contain adequate information at a more detailed regional level.
In Greece, Italy and Spain the difference between lowest and highest regional poverty rates is 3.5-4 fold (Figure 5). These are also countries where the national poverty rates are high in a European comparison. This might be related to the fact that these countries provide only few universal benefits, which could mitigate inequalities of market incomes. On the other hand, in Austria, France, Germany and Finland regional poverty rates vary little within the country. In these countries, the level of poverty at national level is low or medium in European comparison. This suggests that the regional differences of market incomes are mitigated by the social transfers system.

**Demographic Factors**

**Age**

Variation of poverty levels between age groups reveals a life-cycle effect in many countries: children and elderly are more likely to be poor than the working age population, although the extent of relative disadvantage varies (Figure 6). An interesting outlier is Germany, where there is no significant difference across age groups in their exposure to poverty.

Among children (defined as those between 0 and 15), the proportion with income below the poverty line in 2005 varied from 26% in Poland and Latvia and 24-25% in Spain, Hungary, Italy, Lithuania, and the UK, to 9% in Finland and Norway and 10% in Denmark, suggesting an over threefold difference. In these three latter countries poverty among children was lower than that of the total population, suggesting that families with children are relatively well protected against falling into poverty.

Poverty among the working age population (aged 16-64) tends to be lower than the national average. Exceptions are countries, where there is a sharp contrast in the relative situation of the young and the old, and thus the poverty of the working age group is around the national average: in the Czech Republic, Netherlands, Poland, and Slovakia. The poverty risk of the working age population is largely influenced by the presence of children in the household. The latter will be explored in the following section.

Among those 65 and over, the risk of poverty varies widely across the EU, ranging from 52% in Cyprus, 29%-30% in Latvia and in Spain, 27-28% in Ireland and the UK to 6% in the Czech Republic and the Netherlands. There are a number of countries, where poverty among old-age popula-
tion is much lower than the national average (at times even less than half), including the Czech Republic, the Netherlands, Slovak Republic, Luxembourg, Hungary, and Poland. In addition, the elderly are not worse off in Sweden and in Iceland: there is no significant difference in the poverty risk of elderly and the total population.

**Household structure**

There are two main risks related to the household structure: (greater) number of children, and perhaps less intuitively, living in a one-adult household, including both those with dependent child(ren) and those without.

Poverty among one-person households can be multiple times higher than among two-adult households (see Figure 7). The reason for this is partly income pooling: in households where two adults cohabit, the impact of temporary income shocks (such as unemployment, sickness) can be cushioned, since they normally affect one household member at a time. The other reason is the characteristics of one adult households: a large share of these are made up of young unemployed or elderly pensioner (dominantly women), groups with higher than average risk of poverty.

Poverty among one person households reaches over 40% in Cyprus, Estonia, Ireland, Latvia and Slovenia. In these countries, with the exception of Cyprus, this particular household type is exposed to multiple times higher risk of poverty than other childless households, including even pensioner aged. The peculiarity of the situation in Cyprus is the outstanding old-age poverty: every second couple where at least one of them is above the age of 65 lives in poverty. This is not a novel phenomenon and it cannot be attributed to one-off data quality problems.

The poverty rate of single parents reaches or surpasses 30% in the majority of the 26 countries examined here. Over 40% of single parents have incomes below the poverty line in the Czech Republic, Latvia, Lithuania, Luxembourg, Ireland, Portugal, and the UK. Contrary to these countries, the situation of single parents is relatively favourable in international comparison in Denmark, Finland and Norway, where the poverty rate of this group is not higher than 20%. Note, however, that this figure is still higher than national average poverty rates in these three countries.
The risk of poverty significantly rises with the number of dependent children in the household. In about half of the countries, poverty among families with two children is higher than those with one child. This characterises the Mediterranean countries and most of the Eastern European countries. The risk of poverty, however, rises substantially among those with three or more children. In countries, including Greece, Italy, Portugal, Spain, just as Hungary, Latvia, Lithuania and Poland at least one in three persons living in households with three or more children have incomes below the poverty line.

**Labour Market Factors**

A key indicator of labour market attachment is named work intensity of the household. Eurostat defines work intensity as the ratio between the number of months spent in employment during a year by household members of working age (i.e. aged 16-64) and the number of months during which household members are economically active. A work intensity index of 0 corresponds to jobless households, which means that none of the household members in working age is employed during a year. By the same token, a work intensity index equal to 1 corresponds to a situation in which all household members of working age are employed for the entire year, while an between 0 and 1 reflects a situation in which either only one household members is working for the full year or household members are working for part of the year.

As shown in Figure 8, jobless households show the highest rates of poverty in the majority of the EU Member States. The poverty rate of such households is particularly high (over 50%) in the three Baltic countries, Ireland, the United Kingdom and Spain as well as in Belgium, Cyprus, Portugal, Italy and Hungary where it is over 40%. In most countries, the risk of poverty significantly declines with entry into the labour market.

The situation of households where at least one person is employed, but not all members have worked full time during the year (which means a work intensity between 0 and 1) is more polarized. Poverty rates of households with work intensity between 0 and 0.5 are highest in Estonia (48.4%) and Latvia (45.1%), the same two countries which also exhibit the highest poverty rates for jobless households. In Iceland and Luxemburg, households where work intensity is between 0 and 0.5 show substantially higher poverty rates (43.5% and 36.6% respectively) both compared to jobless households and to the national rate. Although the poverty rates of
households with work intensity between 0.5 and 1 tend to be generally higher than the total national poverty rate there are a number of countries, including Iceland, the Netherlands, Slovakia, Luxemburg, Portugal, Italy and Lithuania where this is not the case.

Households with work intensity equal to 1 exhibit by far the lowest poverty rates compared to households with lower work intensity, which indicates that full employment of all adult household members seems the key condition to protect individuals and households against poverty. In all the EU Member States considered, poverty rates of households with such work intensity are lower than the national rates.

The Lisbon Agenda of the European Union equally promotes “more and better jobs” and greater social cohesion. Although there is no clear-cut causal relationship between the level of employment the national poverty rates at one point in time, these two indicators might provide a useful overview of the social situation across European countries. The lines in Figure 15 show the EU average in terms of employment rates and poverty, thus divide up the graph into four panes: the top left pane shows “laggards” both in terms of employment and poverty, while the bottom right pane marks “leaders” with above-average levels in both indicators.

The malaise of high poverty is coupled with low employment in some Mediterranean countries, where the level of unemployment benefits and social assistance is relatively low: in Greece, Italy, and Spain. It is less so in others like Portugal or Cyprus where the employment rates are above the EU average. Low employment, however, does not necessarily go together with high poverty levels. There is considerable variation among the new Member States which suffer from low employment: while poverty is high in Poland, it is at the EU average in Hungary, and it is low in Slovakia. Similarly, high levels of employment may go with either high or low levels of poverty. Note, that those countries which are “top performers” and have the highest levels of employment in the EU, tend to have low poverty levels as well, including Denmark, Netherlands and Sweden.
**Figure 1**  
At-risk-of-poverty rates across European countries  
Source: own calculations based on EU-SILC 2006

**Figure 2**  
The size of the poor population and the poverty rate across European countries (bubbles showing the size of the poor population)  
Source: own calculations based on EU-SILC 2006
Figure 3
Sensitivity of poverty rates to the threshold chosen:
Poverty rates at 50%, 60% and 70% of national median
equivalised income

Absolute poverty rates at 5EUR/day and 10EUR/day thresholds, adjusted for purchasing power parities
Source: own calculations based on EU-SILC 2006

Note: we excluded those with (entrepreneurial) negative or zero incomes (1356 observations)
Poverty thresholds had been adjusted with PPP (Eurostat, NewCronos, 2005). Extreme poverty threshold values per country (5 EUR/day, adjusted to price level difference):
Figure 5
At-risk-of-poverty by regions

Source: own calculations based on EU-SILC 2006

Notes: NUTS1 or NUTS2 level regions.
Number of regions per country: between 3 (e.g. Austria, Hungary) and 22 (France)
Outlier: FR Corse (regional poverty rate estimate only based on 48 observations)

Figure 6
At-risk-of-poverty rates in specific age groups

Source: own calculations based on EU-SILC 2006
Figure 7a
Risk of poverty by type of household (households without children)

Source: own calculations based on EU-SILC 2006

Figure 7b
Risk of poverty by household (households with children)

Source: own calculations based on EU-SILC 2006
Figure 8
At-risk-of poverty rates by work intensity of the household
Source: own calculations based on EU-SILC 2006

Figure 9
Level of employment and poverty in various welfare regimes
Source: own calculations based on EU-SILC 2006
<table>
<thead>
<tr>
<th>Country</th>
<th>At-risk-of-poverty rates (%)</th>
<th>Number of poor population (000s)</th>
<th>N (Sample size per country)</th>
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References


Notes:
1 For more information, and the downloadable annual reports, see: http://ec.europa.eu/employment_social/spsi/european_observatory_en.htm

2 Calculation of equivalised household size: the first member of the household is weighted by 1, following adults receive a weight of 0.5 each, and children (defined as those aged 13 or less) receive the weight of 0.3 each.

3 There is no data for Malta, while Romania and Bulgaria were not members at the time of the survey.

4 The indicator of poverty is the so-called “at-risk-of-poverty rate”, which is part of the portfolio of indicators adopted by the Laeken European Council. It shows the share of persons with an equivalised disposable income below the at-risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income after social transfers.

5 Pashardes (2003), using the Family Expenditure Survey of 1996-97, found that those aged 65 or over have a 58% higher probability of being poor than the younger, other things being equal.
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