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## Successful policy mixes to tackle child poverty: an EU-wide comparison

*András Gábor*

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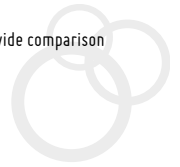
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# Abstract

The development of the presently young generations and their coming performance as adults strongly determines the future outcomes of the societies: socially and financially sustainable economic growth, quality and quantity of employment, social cohesion and maintainable welfare systems. The EU objective of promoting sustainable development by combining economic growth and more and better jobs with a strong emphasis on social cohesion reinforces the importance of these outcomes. Poverty and social exclusion are obstacles for children in achieving their full potential, over which they have no control. Societies would clearly benefit as a whole by investing public resources to alleviate child poverty, to promote the social inclusion of children and to foster their human capital. However, one of the most striking challenges to policy makers, in light of the present economic crisis, is the expected increase in child poverty and therefore in income and social inequalities due to decreasing public and private investments in children. This can be seen in the main finding of this study which is that parents with weak labour market attachment are especially vulnerable to economic and labour market shocks.

Member States of the European Union show great variation in terms of how children who are at risk of poverty are dealt with from a policy perspective. This paper comparatively evaluates the key challenges of the countries, their relative performance and their outcomes in terms of child poverty and well-being. A country typology is formed based on relevant indicators related to the household level (e.g. labour market participation of parents) and institutional determinants of child poverty and also to the effectiveness of policies in place. EU-SILC is used as a main data source for the analytical assessment, complemented with the portfolio of agreed Social OMC indicators. The methodological tools include the analytical framework proposed by the EU Task-Force (2008) report and standard hierarchical cluster analysis. The main conclusion of the paper is that best performances across the Members States in the field of child poverty are the result of a combination of three main factors: strong work attachment of parents, low risk of poverty associated with being in employment and effective income support.

Keywords: child well-being, child poverty, European Union



# Introduction

More than one out of five European children live in a household where the income does not exceed the poverty threshold, being at a higher than average risk of poverty in the European Union as a whole, but also in the overwhelming majority of the Member States. Living in poverty and social exclusion negatively affects child development, constituting an obstacle to the achievement of the full potential of children as adults as well as strongly determining the future outcomes of our societies. These outcomes include: socially and financially sustainable economic growth, quality and quantity of employment, social cohesion and maintainable welfare systems. Public policies that aim to remove these barriers, benefit not only the eligible children and their families, but society as a whole.

Known as the process of child mainstreaming, child poverty became a key issue on the EU policy agenda when it was initiated by the Luxembourg presidency in 2005. This was followed-up on one year later by the Commission Communication, which expressed the need for regular reporting on the situation of child poverty and social exclusion in the Member States. The means at the hand of the European Union to influence the social policy practice of Member States is restricted. Among these tools we may enlist the setting of strategic targets at the EU level, including the Social Open Method of Coordination (OMC) and the regular reporting commitment of the Member States. Further, there are key issues on the policy agenda of the European Union, which themselves may serve as incentives for Member States to focus on these areas. Among these issues, fighting poverty and social exclusion is of major interest. Accordingly, a poverty target has just been recently adopted by the European Council, as part of the Europe2020 strategy (EC 2010).

This paper aims to evaluate the relative performance of EU-27 Member States in the field of child poverty using standard and simple tools and to draw policy conclusions for future practice on both the EU and country levels.<sup>1</sup> The analysis includes two main dimensions: one on outcomes and another on determinants. The latter consists of two sub-dimensions, namely labour-market attachment of parents (measured by both the share of children in jobless households and the poverty risk of children living in in-work households) and the effectiveness of government intervention. The comparative evaluation of the country performances is built exclusively on indicators that are parts of the agreed Social OMC portfolio of indicators.

The paper is structured as follows. First, we present the situation of children along the above mentioned dimensions and sub-dimensions. The second section concludes on the relative performance of the Member States in the field of child poverty, by replicating the analytical framework set-up by the EU Task-Force on Child Poverty and Well-being (2008) - later applied by the TÁRKI-Applica (2010) and the TÁRKI (2011)

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<sup>1</sup> The analysis strongly builds on the report commissioned by the Directorate General for Employment, Social Affairs and Equal Opportunities and prepared by the international consortium lead by TÁRKI and Applica (Brussels) (TÁRKI 2010). The project was carried out between December 2008 and December 2009 and was commissioned by the Directorate General of (contract No: VC/2008/0287). The outcome of the project is a joint work of an international research group, being coordinated by TÁRKI Social research Institute (Budapest) and Applica (Brussels) (project directors: István György Tóth and Terry Ward). More details about the project are available on

reports. Section 3 presents the results of a classifying task using standard hierarchical cluster methods to identify both child poverty and policy clusters among EU Member States. Ireland and Cyprus are missing from these analyses, since they are not part of the EU-SILC 2010 UDB (version 01.03.2012.), for which this dataset (along with EUROSTAT data) is the main source for our results.

# 1. Outcomes and determinants of child poverty – an EU overview

The aim of this section is to provide a descriptive analysis of the situation of children along indicators of selected dimensions and sub-dimensions, in a cross-country comparative frame. First, child poverty outcomes are presented, including the at-risk-of-poverty rate and the relative median poverty gap of children. Second, the risk of children living in households with no employed adult member is dealt with, followed thirdly by the presentation of the poverty risk of children living in in-work households. Finally, the effectiveness of cash benefits to reduce poverty is assessed. These outcomes are shown against both the EU and the national averages, with the exception of the effectiveness of governmental intervention, for which only the EU average is considered as a benchmark.

## 1.1 Child poverty outcomes

### *The extent of income poverty*

On average, about one child in five lives in poverty in the European Union as a whole (Figure 1). However, the risk of poverty among children varies considerably across the Member States. Children face the highest risks in Romania (31%), Bulgaria, Latvia (27-27%), Spain (25%) and Italy (24%) and the lowest in the Nordic countries (Denmark 11%, Finland 12% and Sweden 13%), Slovenia (13%), the Netherlands and the Czech Republic (14-14%). The countries of Continental Europe and many of the new Member States fall in the middle.<sup>2</sup>

The risk of poverty among children is 4 percentage points higher than for the general population (16%) in the European Union as a whole.<sup>3</sup> This pattern is evident in most of the Member States: the at-risk-of-poverty rate for children exceeds the overall poverty rate. The exceptions are Denmark and Finland, where the at-risk-of-poverty rate among children is lower than the overall at-risk-of poverty rate. In Slovenia and Sweden, the child poverty rate appears to be approximately equal to the overall poverty rate. The poverty risk of children relative to the overall population is highest in Hungary, where it exceeds that of the overall population by 65%; the figure is also higher than 50% in Czech Republic, Luxembourg, Romania and Slovakia.

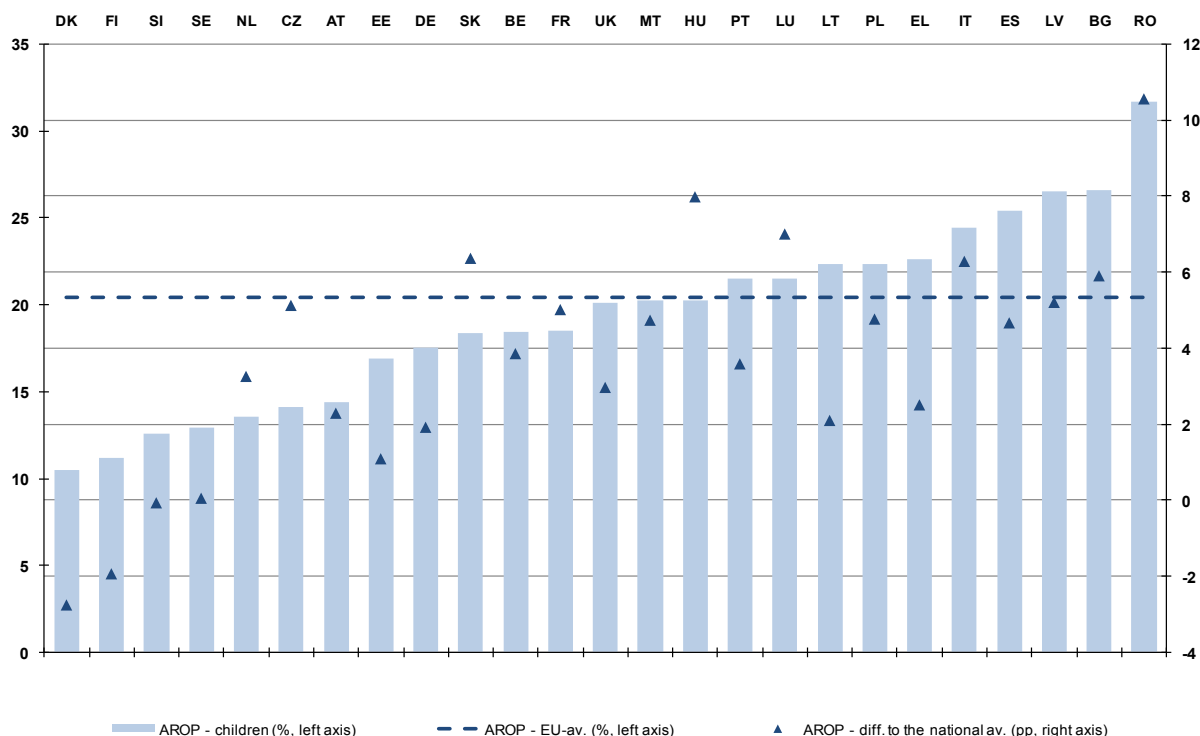
The value of the poverty threshold (set at 60 per cent of national equivalised median income), expressed either in Euro or in purchasing power standard (PPS), is correlated with the country's economic development, and provides an indication in the differences in the general standard of living of countries (TÁRKI 2010). However, the risk of poverty of children does not strongly relate to the general income

<sup>2</sup> Taking into account that the relative concept of poverty is applied throughout this paper, we need to mention that the risk of poverty for a specific social group is related to the risk of others. In the case of children, their risk of poverty is, to some extent, conditional on that of adults, mainly of the elderly. As an extreme case, Cyprus may be mentioned: there the risk of poverty among the elderly is the highest of all Member States.

<sup>3</sup> All figures referring to the European Union as a whole in this report are weighted averages of all member states (EU-27 minus Ireland and Cyprus) in analysis, unless otherwise specified.

level across the Nordic or the Continental European countries: the value of the poverty threshold varies within a relatively narrow range, while the at-risk-of-poverty rate varies within a somewhat larger range. In other words, very different levels of poverty risks belong to similar thresholds. There is a negative relationship, however, between the value of the poverty threshold and the at-risk-of-poverty rate for children throughout the new Member States: the higher the value of the threshold, the lower the poverty risk of children. On the other hand, the opposite is true of the Southern countries: the level of the at-risk-of-poverty rate increases with the poverty threshold value.

**Figure 1. Child poverty risk outcomes – the risk of poverty, EU-27, 2010**



Source: EUROSTAT, own estimations based on EU-SILC 2010 version 1 (01.03.2012). Data for Ireland and Cyprus are not available in the data file.

Notes: AROP – at-risk-of-poverty rate. The income reference year of the EU-SILC 2010 is 2009. An exception in this respect is the United Kingdom for which the reference year is 2010. Since the practice of the EUROSTAT refers to these data as 2010, we keep it to avoid ambiguity in the interpretation of results. *At-risk-of-poverty rate (left-hand axis)*: proportion of people at risk having an income lower than the 60 percent of the national equivalent median income. Countries are ranked according to the at-risk-of-poverty rate of children.

*The severity of income poverty*

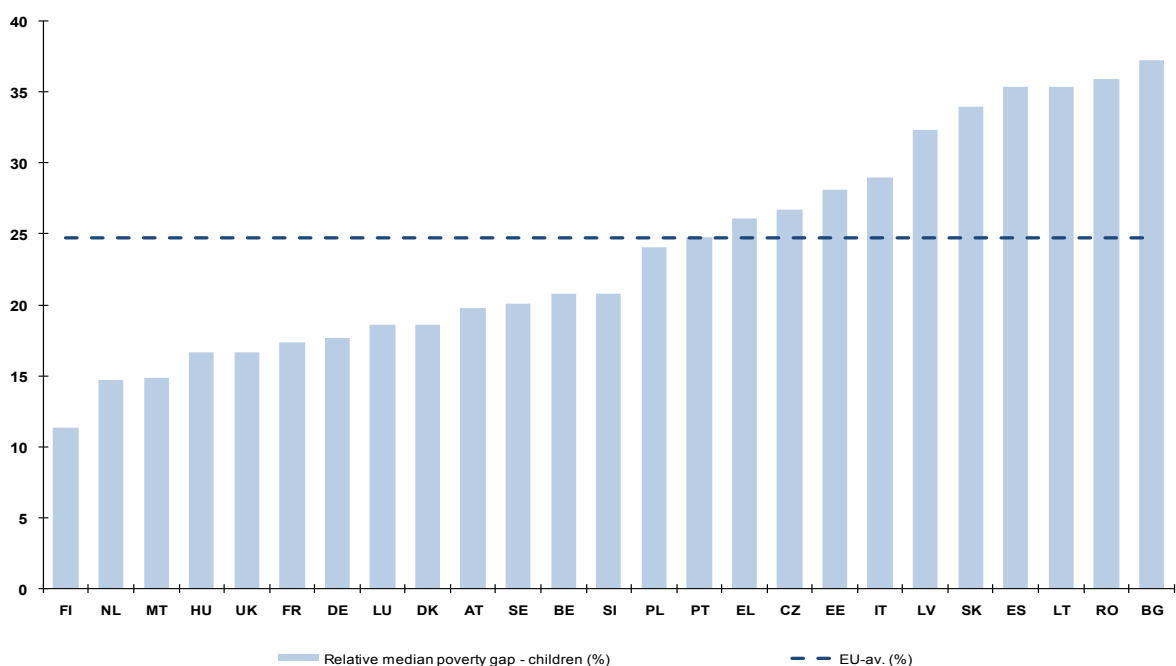
In the European Union as a whole, the median income of those at risk of poverty falls 23% short of the poverty line (see Figure 2). The relative median poverty gap of children has a similar value, being only slightly higher than for the overall population (25%). The lowest poverty gap of children is observed in

Finland, the distance between the income of children<sup>4</sup> at risk of poverty and the poverty line being 11% of the poverty threshold. Bulgaria, Spain, Lithuania, Romania and Slovakia record the highest poverty gaps among children. In those countries, the median income of children at risk of poverty is 34-37% lower than the poverty line.

#### *An overview of income poverty outcomes*

Table 1 summarizes the main patterns that are observed across countries with respect to the two already discussed child poverty outcomes: extent and severity. In addition, the table also includes the persistence of poverty as a third dimension with the aim to put emphasize on a relatively disregarded issue.

**Figure 2. Child poverty risk outcomes – the severity of poverty, EU-27, 2010**



*Source:* EUROSTAT, own estimations based on EU-SILC 2010 version 1 (01.03.2012). Data for Ireland and Cyprus are not available in the data file.

*Notes:* The income reference year of the EU-SILC 2010 is 2009. An exception in this respect is the United Kingdom for which the reference year is 2010. Since the practice of the EUROSTAT refers to these data as 2010, we keep it to avoid ambiguity in the interpretation of results. *Relative median poverty gap:* the distance between the median income of people at-risk-of-poverty and the poverty threshold.

The severity of poverty among children tends to be high where the incidence of poverty is also high. Most of those countries with a risk of poverty lower than the EU average also have a relative median poverty gap lower than (or similar to) the EU benchmark. In all countries where the extent of poverty among children is low, the severity of poverty stays below or near the EU average. The severity of poverty

<sup>4</sup> As a main rule, children are units of analysis in this paper. The income of household is equally distributed across their members; the income of children should be interpreted within this frame.

varies across countries where the incidence of poverty among children is close to the EU average. In Germany, France, Luxembourg, Hungary, Malta and the United Kingdom, the relative median poverty gap is at least 5 percentage points lower than the EU benchmark, while in Lithuania and Slovakia the poverty gap exceeds the EU average by the same amount. In countries, where the risk of poverty is high compared to the EU-average, the severity of poverty also tends to be high among children. Three Eastern countries, Bulgaria, Latvia and Romania, as well as two Southern countries, Spain and Italy, show much higher than average figures in both dimensions. Persistent poverty is also higher than the EU-average in these latter member states.

**Table 1. Summary table of child poverty risk outcomes: extent, severity, persistence – an EU-wide comparison, European Union, 2010**

	At-risk-of-poverty rate lower than the EU average (by at least 4 pps)	At-risk-of-poverty rate around the EU average	At-risk-of-poverty rate higher than the EU average (by at least 3 pps)
Relative median poverty gap lower than the EU average (by at least 5 percentage points)	<u>NL</u> , AT, FI	DE, FR, LU, HU, MT, UK	
Relative median poverty gap around the EU average	CZ, DK, AT, SI, SE	BE, EE, <u>EL</u> , <u>PL</u> , <u>PT</u>	
Relative median poverty gap higher than the EU average (by at least 5 percentage points)		LT, SK	<u>BG</u> , <u>ES</u> , <u>IT</u> , <u>LV</u> , <u>RO</u>

*Source:* own classification based on own estimations and EUROSTAT data on at-risk-of-poverty rate and relative median poverty gap. Data on persistent poverty are not reported for FR, MT and SK. Ireland and Cyprus are not included in the analysis.

*Notes.* When using our own estimations based on the EU-SILC 2010 database, version 01.03.2012, Denmark and Austria enters the cluster with lower than average relative median poverty gap instead that one with average poverty gap. In the case of Italy, our estimations place it in the cluster with around average poverty gap. Ireland and Cyprus are missing from the EU-SILC UDB.

*Persistent at-risk-of-poverty rate:* the share of persons with an equivalised disposable income below the risk-of-poverty threshold in the current year (2010 for this paper) and in at least two of the preceding three years. Countries are classified as having children at below above (incl.) 12.4% of persistent poverty (EU-27 average).

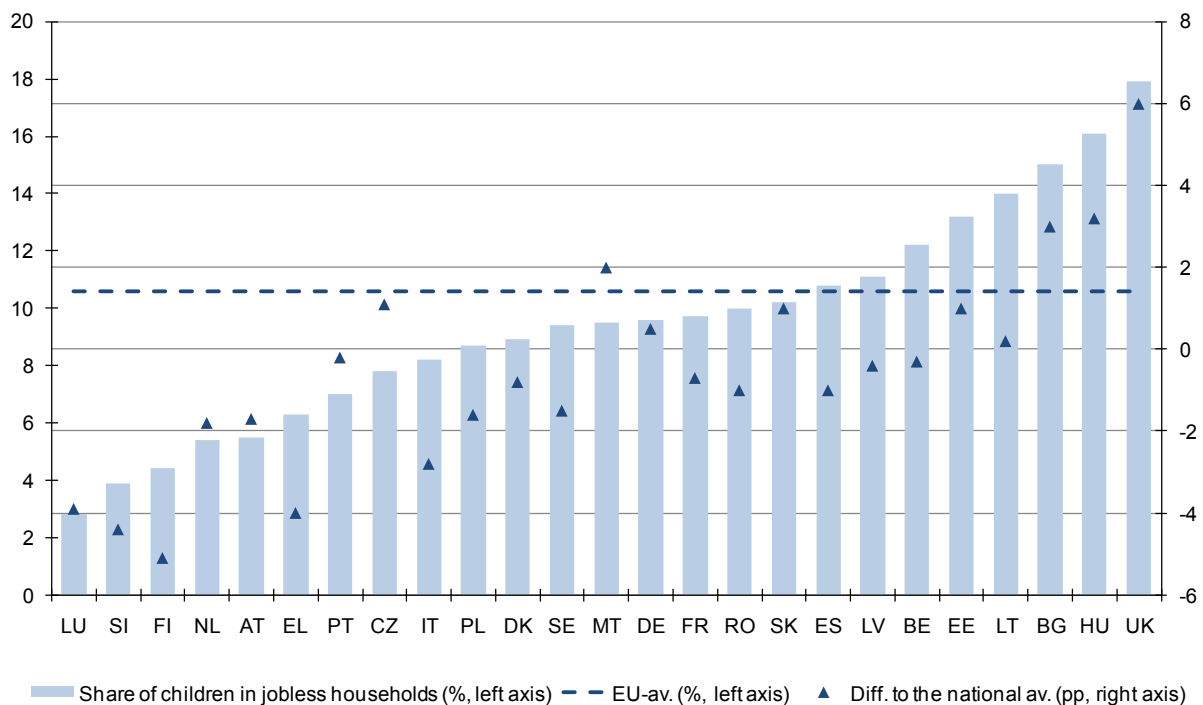
## 1.2 Joblessness

One of the indicators used at the EU level to monitor social inclusion in the different Member States – i.e. one of the so-called ‘Laeken indicators’ – is the proportion of children living in jobless households, which are defined as households in which no one of working age is employed. The source of this indicator is the European Labour Force Survey (LFS), which defines employment as ‘being in work for at least one

hour during the reference week of the survey’. In other words, if no one in the household was employed in the week concerned – even for as little as one hour – then the household is classified as jobless.

According to this source, 10.6% of children in the EU lived in jobless households in 2010; the figure was the same for the EU countries on average (10.4%). By far the highest proportion of children in jobless households is to be found in the United Kingdom (17.9%), but more than one child in 10 lives in a jobless household in Hungary (16.1%), Bulgaria (15%), Lithuania (14%), Estonia (13%) and Belgium (12%) and Bulgaria (11%), as Figure 3 shows. At the other end of the scale are Luxembourg (2.8%), Slovenia (3.9%) and Finland (4.4%).

**Figure 3. Children in jobless households – EU-LFS, European Union, 2010 (%)**



Source: EUROSTAT, based on EU-LFS.

Notes: Adults are people aged 18–59, living in non-student households. Countries are ranked according to the share of children in jobless households.

Adults (aged 18–59, except students) in jobless households represent the same share of the reference population as children at the EU level (10.4% in 2010). The differences between child and adult figures displayed in Figure 3 indicate a positive correlation between these indicators. The values of these differences range from -5.1 percentages points (Finland) to 6.0 pp (UK). Accordingly, the distance between the adult and the child figures is greatest for the bottom- and the top-ranked countries.

Although the share of children living in jobless households is relatively low compared to the number of all children in that country, their risk of poverty is extremely high and this is how joblessness contributes in a most direct way to child poverty. Analyses based on the EU-SILC (households with zero work intensity being considered as jobless) show that the risk of poverty for these children is near 70% in the



European Union as a whole (TÁRKI 2010; Gábos 2010). Accordingly, in some countries (Belgium, the Czech Republic, Ireland and the UK) the share of children in jobless households might reach two-fifths of those at-risk-of-poverty, while in Southern countries this proportion is only around 10-15%. More detailed analyses also show that in the above-mentioned countries where the challenge of joblessness is among the strongest in Europe (Belgium, the Czech Republic, Ireland, the UK), living in jobless households is often associated with living in single parent families for children (TÁRKI 2010).

### 1.3 In-work poverty

Previously, we could see that while the share of children in jobless households is relatively low in an EU-wide comparison, their risk of poverty is extremely high, these children living almost certainly in poverty. Analyzing EU-SILC data however, show that most of children at-risk-of-poverty live in families where at least one adult is employed full-time, while the work intensity of the household reaches or exceeds 0.45 (*in-work* households<sup>5</sup>). The so defined household-level *in-work poverty* may occur due to four main reasons (being also correlated with one another): (1) the number of actives among the 18-59 aged household members and their level of activity; (2) the high number of inactive members; (3) low earnings, and (4) characteristics of the social transfer system. The number of active members affects in the most direct way the risk of poverty of children in in-work households, and the labour supply of the mother is crucial in this respect.

We chose 0.45 as a cut-off point to define in-work households. In practice, the range between 0.45 and 1.0 may hide very different combinations of household structure and adult work attachment. Obviously, the risk of poverty strongly differs across these groups (TÁRKI 2010). Moreover, the magnitude of this difference may also vary largely across Member States.

There are important differences across the EU Member States in what labour market portfolio the parents in in-work households manage, whether only one of them or both of them is working, and whether the employment is full-time or part-time (TÁRKI 2010). In general, the ‘two-earner’ model is dominant in the Nordic countries, where any active-age adult in the household works either full-time (which is typical), or part-time. Slovenia and Cyprus belong to the same group of countries, but part-time work is rare in these member states. In other countries, the ‘one and a half earner’ model prevails, the father usually working full-time, while the mother half-time. The idealtypic case for this model is the Netherlands, where the two-thirds of mothers are in a part-time job, but we can also mention the United Kingdom, Belgium, Germany, Austria, Luxembourg and France where the share of mothers in part-time employment is considerably high.

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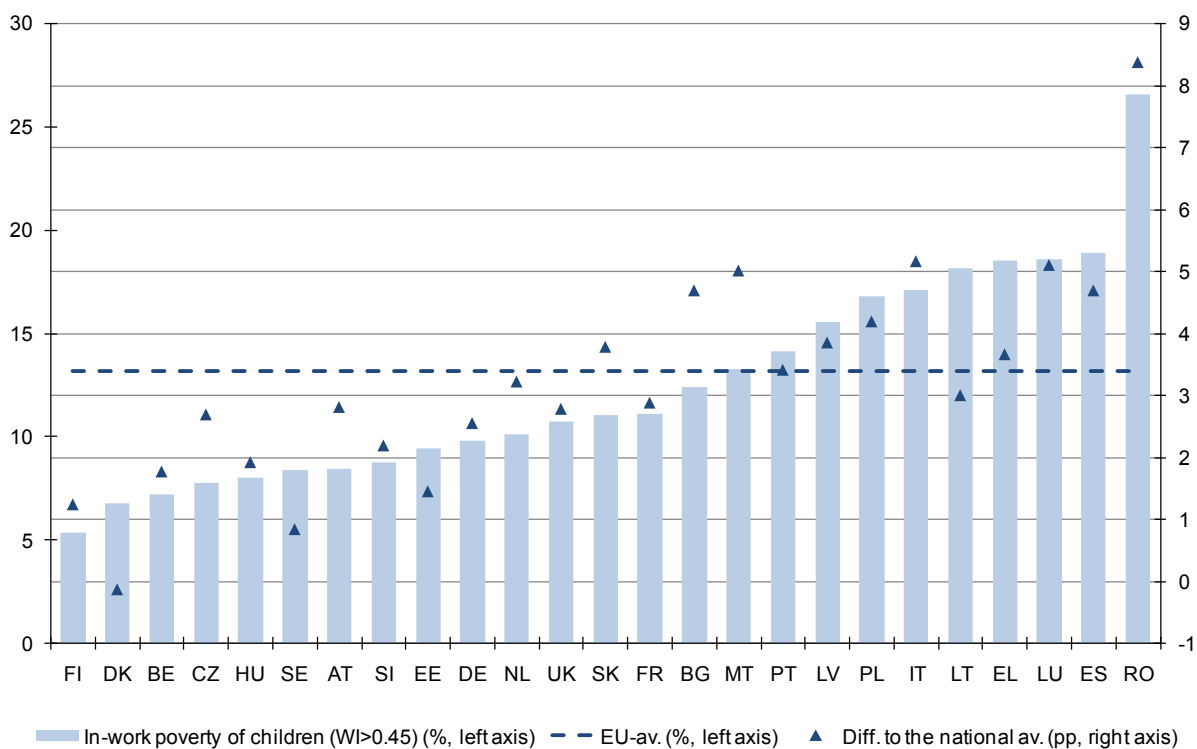
<sup>5</sup> The concept of *in-work poverty* obviously differs when both the activity status and the income position of the unit of analysis (of the child in our case) is defined at household level. Depending on the applied criteria, the risk of child poverty and its main determinants in in-work households may greatly differ, as may do the social and labour market policies to be applied. At this stage, the present paper raises alternative options to define the status of children in other than low work intensity households.

The cut-points defining the categories of work intensity indicator have been changed recently. In this paper we use the most recent categorisation protocol by choosing the value of 0.45 as differentiating between low or very work intensity households and in-work households.

The ‘one earner’ model is widespread also in Germany and Austria, but it mostly characterises the Southern and the Eastern-European countries, where the incidence of part-time work is extremely low.

At the EU average children living in in-work households face a considerably higher risk of poverty (13%) compared to the overall population (10%). This correspondence holds for all Member States, except Denmark (Figure 4). Moreover, the higher the overall risk is, the higher the difference between the child poverty rate and the overall figure is. The risk of poverty of children living in in-work households is the highest in Romania (27%). We may also find high figures in the Mediterranean (17-19%) and some Eastern-European countries (Lithuania, Latvia, Poland 16-18%), as well as in Luxembourg (19%). In these countries the share of children in ‘one earner’ households is the highest. On the other end of the range stay countries predominantly characterised by the ‘two full-time earner’ model (Finland, Denmark, the Czech Republic and Slovenia, 5-9%) and those where the part-time employment of mothers is high: Belgium, Sweden, Austria and Germany (7–10%). The risk of poverty of children in such households is also low in Hungary (8%) and Estonia (9%). Looking at the EU-average, four-fifths of all children live in in-work households, while they count for half of children at-risk-of-poverty (TÁRKI 2010).

**Figure 4. In-work poverty among children, European Union, 2010 (%)**



Source: EUROSTAT, own calculations based on EU-SILC 2010 UDB (version 01.03.2012).

*Notes.* The income reference year of the EU-SILC 2010 is 2009. An exception in this respect is the United Kingdom for which the reference year is 2010. Since the practice of the EUROSTAT refers to these data as 2008, we keep it to avoid ambiguity in the interpretation of results.

Children facing in-work poverty are those living in households of which work intensity is greater or equal than 0.45. The work intensity indicator of the EUROSTAT monitors the extents to which household members of working age are employed relative to the theoretical situation when all such household members are full-time employed during the whole year. The measure may take values in a range between 0 and 1.

Countries are ranked according to the poverty rates of children for category  $\geq 0.45$ .

When looking at the ‘one earner’ or medium work intensity households defined as having the value of work intensity between 0.45 and 0.55 (incl.), the picture is not completely different, but shows very important dissimilarities as well. Generally, the pattern across countries is similar to the previous case. Since countries in this figure are ranked according to the risk of poverty of children estimated for households with  $WI \geq 0.45$ , the main differences can be easily detected: Slovenia, Lithuania, the Netherlands, Belgium, but also Sweden, Finland, France and Bulgaria. In these member states the risk of poverty of children in medium work intensity households is higher compared to what we would expect based on the the same measure for in-work households defined as  $WI \geq 0.45$ .

## 1.4 The effectiveness of the government intervention: the poverty reduction effects of income supports

The effectiveness of various policies in reducing child poverty has been the subject of a large number of studies.<sup>6</sup> Both cross-sectional and longitudinal surveys, using a standardised methodology, have been carried out on a regular basis in many European countries, enabling an analysis of policies to be undertaken. Cross-country databases have been constructed and are now available to analyse the performance of different national policies and welfare regimes in this respect. Although there are standardised indicators to assess the role of policies in alleviating income poverty among children and to describe trends over time, the problem remains of linking ‘input’ (public and family resources) with ‘output’ (future health status, educational attainment, economic and social well-being) in an unambiguous way.<sup>7</sup>

We rely on the impact of income support on child poverty by taking the effectiveness of transfers as main indicator, by looking at the extent of reduction in poverty achieved through benefits. The poverty-reduction impact of public cash transfers can be estimated in many ways, but there are two that are most commonly applied. The withdrawal-effect method seeks to show how much higher the extent of poverty would be if cash transfers did not exist. This method first estimates poverty rates using household disposable income (including transfers) and then calculates poverty rates once the transfers have been removed from the total household income. The policy-impact method (used in EU Task-Force 2008 report,

<sup>6</sup> A non-exhaustive list would include Oxley et al. (2001), Ruhm (1998), Apps and Rees (2001), Chevalier and Viitanen (2002), Del Boca et al. (2003), Jaumotte (2003), Bradbury and Jäntti (2001), Chen and Corak (2005), UNICEF (2005), Corak et al. (2005), Immervoll et al. (2001), Matsaganis et al. (2006), Tóth and Gábos (2005), Förster and d’Ercole (2005).

<sup>7</sup> Garfinkel et al. (2004).

among others) first estimates poverty rates before transfers and then adds specific transfers to evaluate the poverty-reduction effect of income supports. Both methods are counterfactual and have severe limitations, but are widely used in the literature since they are easy to interpret.<sup>8</sup> We rely on the second method, since conceptually it is closer to what was done when the streamlined social inclusion portfolio of Social OMC indicators was set.

In this part of the report, we first examine the incidence of social transfers (excluding pensions), covering unemployment benefits, sickness benefits, disability benefits, education-related allowances, family- or child-related allowances, housing allowances and other social assistance benefits not classified elsewhere – according to the EU-SILC UDB description.

About two-fifths of children in the European Union as a whole would be at risk of poverty if social transfers (excluding pensions) were not in place (Figure 5, Table A2). Considering the 20% at-risk-of-poverty rate among children for the EU-27, this implies a poverty-reduction effect of 22 percentage points (compared to 42% being the at-risk-of-poverty rate before transfers in the EU as a whole) among children on average.

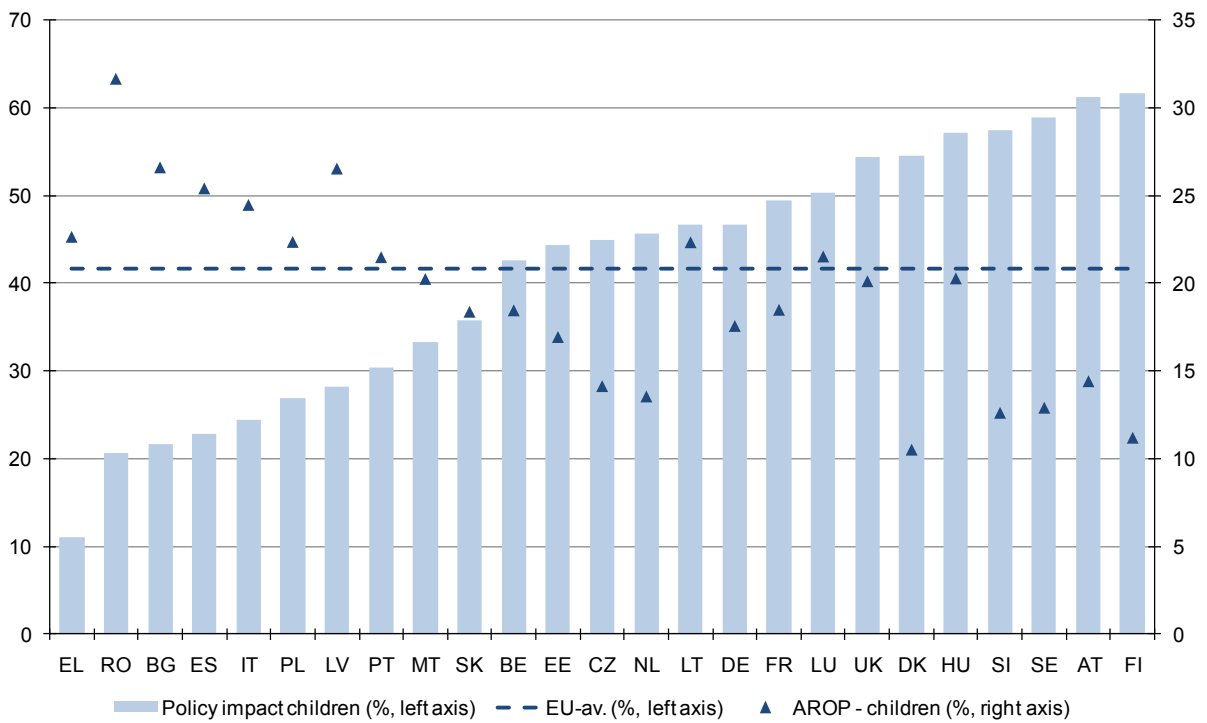
The impact of income supports varies greatly from country to country, ranging from 11% (3 percentage points) in Greece to 62% in Finland (19 pps) and 61% in Austria (22 pps). Social transfers have the greatest impact (at least 50%) on child poverty in the Nordic states, the Czech Republic, Germany, Ireland, France, Austria, Slovenia and Hungary. Social transfers have a very limited impact on child poverty in Greece, Romania, Bulgaria, Spain, Italy, Latvia and Poland (below 30%).

According to Figure 5, the at-risk-of-poverty rate of children after transfers and the poverty reduction effects of cash transfers (excl. pensions) are strongly and negatively correlated: the more effective the income supports in a country are in reducing poverty among children, the smaller the risk of poverty among them.

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<sup>8</sup> While the assumed withdrawal of taxes and benefits is indicative of the effect of policy, there are significant limitations on the results obtained. First and foremost, this method cannot control for behavioural responses. Withdrawing any kind of social transfer or changing any parameter of the tax system would, in practice, lead to alterations in the behaviour of household members (UNICEF 2005: 20). Second, the data sources used for such analyses do not always enable different types of transfer to be distinguished. Third, household income surveys are not able to capture the full complexity of national tax and benefit systems. As Immervoll et al. (2001) argue, in order to explore how well benefits perform in alleviating child poverty, there is a need to be able to focus on particular aspects of their design. The use of withdrawal methods does not provide a satisfactory answer to the question: ‘What if family benefits were abolished throughout Europe?’ (*ibid.*: 414).

**Figure 5. The effectiveness of social transfers (excluding pensions), European Union, 2010**



Source: Own calculations based on EU-SILC 2010 (version 01.03.2012).

Notes: Countries are ranked according to the magnitude of the poverty reduction of social transfers (excl. pensions) for children.

## 2. International benchmarking and key challenges for each Member State

As shown in the previous sections, member states of the European Union show a great variation in terms of poverty risk of children, main factors affecting these outcomes and the performance of policies aimed at reducing child poverty. This section comparatively evaluates the key challenges of member states, their relative performance and their outcomes in terms of child poverty. A country typology is formed based on the already presented indicators: poverty outcomes, the labour market attachment of the household and the institutional determinants of child poverty and also to the effectiveness of policies in place. The 2010 wave of the EU-SILC is used as a main data source for the analytical assessment. The methodological tools include the analytical framework proposed by the EU Task-Force (2008) report and standard hierarchical cluster analysis.

The EU Task-Force report (2008) developed a common framework to analyse and monitor child poverty and social exclusion at EU and national levels. This addresses the key challenges, including the poverty risk outcomes of children and the main factors that lie behind these outcomes. Member States agreed on the monitoring framework in the Social Protection Committee. In its recommendations, the EU



Task-Force encouraged Member States to ensure that their monitoring systems fed into the common EU framework.

Here, we validate this analytical framework on 2010 data, following earlier works. The EU-Task-Force report (2008) did the validation on 2005 data, a short paper prepared by the DG Employment (EC 2008) on 2006 data, the TÁRKI report (2010) on 2007 data, while the TÁRKI (2011) report on 2008 data. An earlier version of this paper proceeded with the 2009 data. Table A3 provides an overview of each Member State's presence in different country groups during the 2005-2010 periods (six waves in total), while following the same analytical framework.

The framework includes two main dimensions: one on outcomes and another on determinants. The latter consists of two sub-dimensions (labour-market participation and government intervention), including three main indicators: number of children in jobless households, in-work poverty and policy impact. Indicators involved in the process are as follows.

1. Child poverty risk outcomes: at-risk-of-poverty rate and relative median poverty gap; the difference between the national figure for children and the overall national figure for both the at-risk-of-poverty rate and the poverty gap is calculated, as is the difference between the national figure for children and the EU average for children in the case of the at-risk-of-poverty rate; these three measures are standardised and added together, without weighting, to obtain the score for child poverty outcomes (see Table A4 for the values of z-scores).
2. Number of children in jobless households: the standardised distance from the national average and the standardised distance from the EU average are added together (as described above).
3. In-work poverty of children: similarly, the standardised distance from the national average and the standardised distance from the EU average are added together.
4. The effectiveness of government intervention, measured by the poverty-reduction effect of social transfers (excluding pensions): the standardised distance from the EU average is considered only in this case.

In each dimension, countries are assessed by their relative performance, using a six-level categorisation: from *highest performance* (++++) to *lowest performance* (---).<sup>9</sup> Table 2 includes the validation of this analytical framework based on the 2010 data.<sup>10</sup>

Four country clusters can be identified. While in many respects the country clusters stay stable, we may register some important changes during these four waves as well. The validation of the EU Task-Force analytical framework has been carried out in all years in the 2005-2010 period. These results are summarised in a simplified form in Table A4.

<sup>9</sup> For further methodological description and supporting tables see Annex.

<sup>10</sup> The validation closely followed the methodology described in detail in EU Task-Force (2008). However, we cannot exclude the possibility of minor biases. We are aware of three deviations. First, not being part of the publicly available EU-SILC dataset, Malta can be assessed in only three of the four dimensions considered in this analysis. Second, neither France is part of the EU-SILC 2008 UDB, therefore figures on in-work poverty for this country are from 2007. Third, data on joblessness in Sweden were taken from the EU-SILC dataset, the jobless status of household members being estimated according to the ILO definition.

**Group A** includes countries with good child poverty outcomes and that are also good performers in all determinant-side dimensions: the Nordic countries (Finland, Denmark, Sweden), Slovenia, the Netherlands, Austria, Germany, France and the Czech Republic. The cluster proved to be quiet stable over time, six countries being classified in Group A in each wave of validation: Denmark, Cyprus (5 out of 5 waves in analysis), Austria, Slovenia, Finland and Sweden. Also, the Netherlands missed this group only once, while France missed twice out of the six waves. There were however three countries, which entered this cluster only one (Belgium, Estonia) or two (Germany) times, all of them shifting from group B.

High labour-market participation of both parents is the key factor behind good outcomes in most of these countries. In Denmark, Finland, Sweden and Slovenia (and also Cyprus, according to previous analyses), children live predominantly with two-earner couples. In Denmark and Finland, the share of children with one parent working full time is also considerable; in Slovenia (and also Cyprus), the ‘single-breadwinner’ arrangement is still widespread. In the Netherlands, the role of the second earner in a part-time job is dominant, and it is not common to have both parents in full-time employment. As an outlier, in Austria and at a lower extent in Germany, the ‘single-breadwinner’ model is dominant, high earnings and income support compensating for the lack of a second earner, though the role of the model featuring one full-time earner and a part-time earner is also considerable.

In the Nordic countries, France and Slovenia, childcare provisions are a great help to parents participating in the labour market. Social transfers in Group A countries are not specifically targeted at children – only in France and Austria are they preferred by the benefit system; however, their effectiveness is generally high.

**Group B** includes countries with high numbers of children in jobless households and low in-work poverty: Belgium, Estonia, Hungary and the United Kingdom. This group shows a considerable level of fluctuation. As shown in Table A4, 11 member states were classified at least once during the six waves in analysis, and only Ireland was consistently identified as part of this cluster during the 2005-2010 period (although, Ireland was missing in one of the years). Some countries, like Bulgaria, Malta and Slovakia are more likely to belong to Group C (below average performance in each dimension), while others, like France to Group A (above-average performance in all dimensions) (EC 2008, TÁRKI 2010).

Within this group, Belgium, Estonia and the United Kingdom have above-average child poverty outcomes, though no country performs really poorly in this respect (not even Hungary, where the risk of poverty of children relative to the overall population lies behind the slightly above average aggregate outcome). One explanation could be that relatively effective income supports in all these Member States result not only in a considerable reduction in the extent of poverty, but also in narrower-than-average relative median poverty gaps. Also, some countries perform really well in the field of in-work poverty, resulting in levels of poverty incidence that are lower than the EU average.

**Table 2. Relative outcomes of countries related to child poverty risk and main determinants of child poverty risk, 2010**

		Child poverty risk outcomes	Joblessness: children living in jobless households	In-work poverty: children living in households confronted with such poverty	Impact of social transfers (cash benefits excl. pensions) on child poverty
Group A	Finland	+++	+++	++	+++
	Denmark	+++	+	+++	++
	Sweden	++	+	++	++
	Slovenia	++	+++	+	++
	Netherlands	++	++	+	+
	Austria	++	++	+	+++
	Germany	++	+	+	+
	France	+	+	+	+
	Czech Republic	+	+	+	+
Group B	United Kingdom	+	---	+	++
	Belgium	+	--	++	+
	Estonia	+	-	++	+
	Hungary	-	--	++	++
Group C	Bulgaria	--	--	-	--
	Slovakia	--	-	-	-
	Lithuania	--	-	-	+
Group D	Malta	+	+	-	-
	Portugal	-	+	-	-
	Greece	-	++	-	---
	Luxembourg	-	+++	--	+
	Poland	-	+	-	-
	Italy	--	++	--	--
	Latvia	--	+	-	-
	Spain	--	+	--	--
	Romania	---	+	---	--

Source: own calculations based on data from EUROSTAT and EU-SILC 2009 UDB (version 01.03.2011), following the methodology developed by the EU Task-Force (2008).

Notes. In each dimension, countries are assessed by their relative performance, using a six-level categorisation: from +++ (highest performance) to - - - (lowest performance).

In some of these countries, joblessness is strongly related to living in single-parent families. In Belgium (and also Ireland based on earlier assessments) the share of children with lone parents is high; furthermore, these parents are also highly likely to be jobless. On the other hand, in Hungary, joblessness and weak labour-market attachment mainly affects children in large families, and is compensated for by generous income supports (mostly cash family benefits).

**Group C** consists of Member States with below-average performance in all dimensions. Poor outcomes are rooted mainly in the inadequate labour market participation of families with children and we could also observe that income support in these countries do not prevent children to a large extent from staying poor. Members of this group are Bulgaria, Lithuania and Slovakia. Undoubtedly, Group C is the most unstable group out of the four identified by the analytical framework in the 2005-2010 period. No



members state was classified more than three times into this cluster, the most frequent members being Latvia, Lithuania, Slovakia and the United Kingdom (three times out of six) and Bulgaria (twice out of three).

**Group D** includes countries with poor poverty outcomes and where children experience high levels of in-work poverty, but where their share in jobless households is low: all the Southern countries (Greece, Spain, Italy and Portugal), Latvia, Luxembourg, Poland and Romania. The overwhelming majority of these countries have stayed in the same cluster across all validation waves (Table A4). In some of the earlier validation waves, Lithuania was also classified in this group, and that happened also with the Netherlands according to the 2009 data. Otherwise however, Group D proved to be by far the most stable cluster.

None of the countries in this group have child poverty outcomes near (or above) the average. In fact, these Member States have the worst performance in this respect. Not only is the extent of poverty high, but the poverty gap is likewise wide.

High levels of in-work poverty can be attributed to the high share of children in single-breadwinner households, and to the high risk of poverty among them. In all Member States concerned, the share of children in families where one parent works full time while the other is not in employment exceeds 40% of all children at risk of poverty, and they even account for the majority of such children in Italy, Spain and Greece. In Portugal, the high presence of mothers in the labour market (partly facilitated by the childcare services available) results in a relatively low share of all children with only one parent in employment – but also in the highest risk of poverty for those children in any country. In Poland, the relatively high level of full-time employment among mothers is associated with the highest risk of poverty of children in two-breadwinner households anywhere in the EU.

In countries where joblessness is defined as a key challenge, the problem is mostly associated with single-parent households. By contrast, in Group D Member States, in-work poverty is mostly related to couples with at least two dependent children; the share of children in single-parent families among those at risk of poverty is low, despite the high risk of poverty among them. In most of these countries, it is the children in households of couples with three or more dependent children that are most severely affected – except for in Greece, where those in households with two dependent children face a similar risk of poverty to children in large families, accounting for more than half of all children in poverty. In Luxembourg, children in single-breadwinner households form not only the largest group of all children, but also the largest among those at risk of poverty. There, the main difference (compared to other countries in the group) is the extremely high risk of poverty (the highest in any Member State) faced by children in single-parent families and the relatively high proportion of them among those at risk of poverty, despite the lower than EU average share of all children in such households and the high participation of single parents in the labour market.



## 3. Country clusters mapping the situation of child poverty across the member States

The present section provides a methodologically alternative way of clustering the EU Member States based on their performance in the field of child poverty. The exercise is complemented with the formation of so-called policy clusters based on a restricted set of contextual indicators indicating the main characteristics of the country level policies related to the cash transfers oriented to families with children and of the labour market policies aimed at enhancing maternal participation in the labour market. The results of the standard hierarchical cluster analysis are presented. When doing this, country groups are formed along the similarities and dissimilarities observed in poverty outcomes and household employment on the one hand, and along the main characteristics of social policy and employment context on the other hand. The second exercise aims to identify policy responses that are suitable to reduce the risk of poverty among families with children.

### 3.1 Child poverty clusters

The alternative way of clustering is understood in statistical terms. We built on the same set indicators as used in the previous section and we standardised all of them in a z-score format and summed across the four dimensions used previously: (i) child poverty outcomes, (ii) joblessness, (iii) in-work poverty, and (iv) policy impact.

We applied then the hierarchical cluster classifying tool using the Ward's linkages method to identify key challenges the Member States face and to assess the most effective policy mixes in this field by forming country clusters among the EU member states.

To get a better impression of what makes these country clusters homogenous, we tested the results of the cluster analysis with two statistical methods. First, F-values were calculated, which indicate the homogeneity of the clusters that have been formed in the foregoing cluster analysis and is therefore a validation measure. The second is the t-values of the country clusters, which indicate the features of a cluster that differentiate it from the other clusters that have been formed. These measures did not only validate the cluster analysis that has been performed, but do also tell a lot about the characters of the different country clusters. The results of these tests are presented in Table A5.

Based on the results of these analyses, we formed five country clusters in total, presented in Table 3. One out of these five country groups includes only one member state, namely Romania, which performance is by far the worst where child poverty outcomes are concerned. Romania also scores extremely poor in the in-work poverty dimension and the policy impact dimension. The only dimension where Romania does not stand out as a very bad performer is the rate of children living in jobless households. As a result of these facts, Romania stands alone at chosen value of the dissimilarity measure between clusters during the classifying process. However, the results of the hierarchical analysis also indicate that the value of the

dissimilarity measure at which Romania and cluster C would merge is lower than that between clusters A and B.

**Table 3. Relative outcomes of countries related to child poverty risk and main determinants of child poverty risk, 2010**

	Short description	Cluster members	Cluster members according to Section 5.1
<b>Cluster A</b>	Good performance in all dimensions	Denmark, Netherlands, Austria, Slovenia, Finland, Sweden	The Czech Republic, Denmark, Germany, France, Netherlands, Austria, Slovenia, Finland, Sweden
<b>Cluster B</b>	The joblessness of the household is the main concern	Belgium, the Czech Republic, Germany, Estonia, France, Hungary, the United Kingdom	Belgium, Estonia, Hungary, the United Kingdom
<b>Cluster C</b>	Lower than average performance in all dimensions	Bulgaria, Spain, Italy, Latvia, Lithuania, Slovakia	Bulgaria, Lithuania, Slovakia
<b>Cluster D</b>	In-work poverty is the key challenge	Greece, Luxembourg, Malta, Poland, Portugal	Greece, Spain, Italy, Latvia, Luxembourg, Malta, Poland, Portugal, Romania
<b>Cluster E</b>	-	Romania	-

*Source:* own calculations based on data from EUROSTAT and EU-SILC 2010 UDB (version 01.03.2012).

Under Section 5.2.3, the other four country clusters are presented in more detail. To check for the robustness of the child poverty clusters, alternative classifying procedures were performed: both by leaving out Romania from the list of countries in analysis, and by dropping the policy impact indicator. The detailed presentation of clusters in section 5.2.3 is based on the version when both Romania and the policy impact indicator are dropped. For the latter, the output in terms of cluster membership is exactly the same as clusters A – D, when both Romania and the policy impact indicator were included.

### 3.2 Policy clusters mapping the main institutional and policy settings related child poverty across the Member States

Five indicators in total were used to provide a country classification in respect with the policy regimes that might affect overall child poverty risk, in line with the dimensions used to establish child poverty clusters previously (for descriptive statistics see Table A6 in the annex). The aim was to distinguish main patterns across Member States based on their policy outcomes in the field of (a) cash transfers, (b) maternal activation policies and (c) enabling services. Similarly to the methodology presented earlier, we standardised all values in a z-score format before applying the same hierarchical method tool. The five indicators selected for this exercise are as follows:



- (i) social protection benefits as percentage of GDP (Children/family function according to the ESSPROS protocol);
- (ii) poverty reduction effect of social transfers (excl. pensions) among children (the difference between at-risk-of-poverty rate before and after transfers as % of at-risk-of-poverty before transfers);
- (iii) female employment rate (% of employed women relative to the female population aged 15-64);
- (iv) female part-time employment rate (% of women employed part-time relative to all women employed);
- (v) children in formal child care (children aged 0-2 in formal childcare cared for at least 1 hour as % of age group 0-2).

According to the results of the analysis, five policy clusters emerged. For cluster memberships see Table 4, for the validation results of the cluster analysis see Table A7. In the following paragraphs, we summarise of our analysis.

- Countries in both clusters A and B are characterized by effective governmental intervention in these dimensions. Their dissimilarity compared to other clusters is assured by good performances across all indicators. This is especially the case of cluster A (Denmark, the Netherlands, Sweden), which countries excels mainly according to the proxy indicators of activation policies and good enabling services. On the other hand, the extremely high levels of Dutch part-time employment results in a relatively high heterogeneity related to this indicator, but even higher within-group differences can be observed in the level of family-related public expenditure. As for countries in cluster B (Belgium, Germany, France, Luxembourg, Austria and the United Kingdom), within group differences proved to be low, except, at a certain level, the overall governmental spending on family-related transfers.
- Member states from cluster C (Estonia, Lithuania, Hungary, Slovenia and Finland) have a high record in the field of the effectiveness of cash transfers, the highest among all clusters, which differentiate them from countries in clusters D and E. On the other hand, the low performance according to female employment and child care enrolment make them stand aside from clusters A and B. This cluster is formed almost exclusively from countries accessing the EU in 2004, Finland being an exception in this respect.
- As clusters A and B emerged as separate country groups mainly due to their high performance according to all indicators in analysis, the opposite is true for the reminder clusters D and E: worse than average performance across all dimensions. What differentiates among them, are part-time employment and formal child care use, which are close to average for countries within cluster E (Spain, Italy, Malta and Portugal) compared to those from cluster D (Bulgaria, the Czech Republic, Greece, Latvia, Poland, Romania and Slovakia). Both clusters seem to be relatively

heterogeneous in all dimensions, with the exception of cluster E for overall female employment (which might be attributed to the relatively high employment levels of Portuguese women). Examining the composition of these clusters, we may conclude that cluster E is formed exclusively by Mediterranean countries, while the EU-12 Member States dominate cluster D, Greece being an exception here.

Interestingly, when included in the classification procedure, Romania does not stand out as a stand-alone bad performer, as it does when the child poverty clusters were identified.

**Table 4. Policy clusters based on indicators related to government intervention through cash transfers, enabling services and employment policies, European Union, 2010**

Policy clusters	Countries
(A) Complex and effective intervention	Denmark, the Netherlands, Sweden
(B) Effective intervention, cash transfer focused	Belgium, Germany, France, Luxembourg, Austria, the United Kingdom
(C) Cash transfer oriented	Estonia, Lithuania, Hungary, Slovenia, Finland
(D) Weak intervention I.	Bulgaria, the Czech Republic, Greece, Latvia, Poland, Romania, Slovakia
(E) Weak intervention II.	Spain, Italy, Malta, Portugal

*Source:* own calculations based on data from EUROSTAT and EU-SILC 2010 UDB (version 01.03.2012).

### 3.3 Description of child poverty clusters

Hereby, we present in detail the four child poverty clusters identified under Section 3.1, including the results of the policy cluster analysis performed under 3.2.

#### Cluster A

This cluster consists of Austria, Denmark, Finland, Netherlands, Sweden and Slovenia. These countries differ most from other Members States by their higher than average performance in all the three dimensions considered here: child poverty outcomes, joblessness and in-work poverty (see t-values in Table A5). They prove to be homogeneous according to these dimensions at an acceptable level (see F-values in Table A5). These countries were part of Group A (good performers in all dimensions) each time, according to the exercise carried out and presented under Section 5.1 (except the Netherlands, classified as a one time member of cluster D). Also, Cyprus, which misses our present analysis, entered Group A (according to the method presented in Section 5.1) every time when in analysis.

The member states belonging to this cluster are by far the best performers concerning poverty outcomes: the risk of poverty of children in these countries shows only slight differences compared to that estimated for the overall population and is much lower than the EU average; the same holds for the poverty



gap. In some countries, like Denmark, Slovenia and Finland, the at-risk-of-poverty rate among children is even lower than the national average.

Countries in Cluster A are also good performers in terms of household revenues from employment: adults living with children do have a job (low joblessness) and income from employment is adequately high to avoid poverty (low in-work poverty at the level of the household). This means in the case of joblessness that the difference between the rate of children living in jobless households and the one of the whole population is low, while the national rates of the countries in this cluster are also lower than the EU average. The in-work poverty of children is much lower than the EU average, the difference between the in-work poverty rate (work intensity above 0.45) of children and that of the whole population is reduced.

### *Policy analysis*

The member states forming the child poverty cluster A belong to three different country groups identified by our policy analysis.

- Three of them, *Denmark, the Netherlands and Sweden*, are characterized by complex effective intervention, both providing generous and effective cash transfers and following employment policies that enable parents to be present in the labour market and to successfully combine duties related work and family life. Their performance mostly excels in the field of labour market participation of mothers, either in full-time (Denmark) or part-time (the Netherlands) arrangements, as well as in providing child care services which allows this participation.
- *Austria* was included in policy cluster B, being also characterized by effective governmental intervention in the field of child poverty, which is achieved mostly via cash transfers, while the higher than average level of maternal employment is assured at a considerable extent by part-time employment.
- *Slovenia and Finland* stay in policy cluster C, which includes Member States where policies are strongly cash transfer oriented. While the dissimilarity of this cluster compared to clusters A and B are assured by a far weaker performance in the field of maternal employment and child care enrolment, we need to mention here that this holds least for full-time female employment, mainly due to the relatively high levels of female participation in these two countries.

### **Cluster B**

According to our estimates, the second cluster of countries (B) consists of Belgium, the Czech Republic, Germany, Estonia, France, Hungary and the United Kingdom. Group B is performing better than the EU average on the poverty outcome dimension, but by far not as well as group A. F-values indicate that there is a considerable homogeneity in this respect across the cluster members. For most of them both the at-risk-of-poverty and the relative median poverty gap is below or near the EU-average. Out of these member states, France has been classified four times (out of six) as member of Group A according to the

analysis presented under Section 5.1, while the same happened twice with Germany and once with Belgium and Estonia.

On the other side, this cluster performs very badly in the joblessness dimension and this seems to be the main constituent factor of cluster B (see t-values in Table A5), even though, as the F-values indicate, this cluster is pretty heterogeneous on this dimension. While Belgium, Estonia, Hungary and the United Kingdom have very high rates of children living in jobless households, it is not so much the case in Germany and France. What also defines the cluster is the good performance of its members in the field of in-work poverty.

### *Policy analysis*

Similarly to cluster A, the member states forming the child poverty cluster B belong to three different country groups identified by our policy analysis.

- Most of them were classified as members of policy cluster B (Effective intervention, cash transfer focused): *Belgium, Germany, France* and *the United Kingdom*. The existence of effective policies partly explains the good child poverty outcomes for these countries, despite above average or even very high joblessness among households with children.
- Both *Estonia* and especially *Hungary* follow a highly cash transfer focused strategy in alleviating poverty as indicated by their policy cluster C membership. Both perform better than the EU-average in this respect, Hungary spending more on families, while also reaching higher policy impact in reducing child poverty.
- Finally, *the Czech Republic* belongs to the policy cluster D characterized by relatively weak governmental intervention. Again, we should mention here that the relatively high heterogeneity within the cluster members according to the policy impact indicator is partly due to the moderately good performance of the Czech Republic in this field.
- Childcare arrangements for children below 3 years differ highly across these countries. While France, Belgium and the UK are performing well, Germany and Estonia are in the middle category and Hungary and the Czech Republic at the bottom.

### **Cluster C**

Cluster C consists of Bulgaria, Spain, Italy, Lithuania, Latvia and Slovakia. What makes this cluster different from the other three is that their members perform worse than average in all examined dimension. This mostly holds for the child poverty outcomes and least to the share of children living in jobless households (as t-values in Table A5 indicate). The average of in-work poverty rates high, too. The homogeneity of the groups is acceptable across all dimensions (all F-values in Table A5 are far below 1.0).

When comparing the composition of this cluster to the results of the similar analyses presented in Section 5.1, we may see that the instability of Group C from Section 5.1 is somehow reflected by our results. Spain and Italy had been regularly classified earlier as members of Group D (in-work poverty as the

main challenge), while Lithuania and Latvia proved to be swing countries (belonging three times out of six to each of Groups C and D). On the other hand, Slovakia was twice included in Group B as confronting relatively high joblessness. Members of child poverty cluster C are either Mediterranean countries (Spain and Italy) or countries from the Eastern region of Europe.

#### *Policy analysis*

Similarly to clusters A and B, member states forming the child poverty cluster C belong to three different country groups identified by our policy analysis.

- Out of the countries from Cluster C, only *Lithuania* was classified as a country with a cash transfer oriented policy regime, with higher than average (2.8% of the GDP) spending on family-related benefits and above average poverty reduction effectiveness.
- *Bulgaria*, *Latvia* and *Slovakia* are parts of policy cluster D, with a weak governmental involvement in this field.
- Finally, *Spain* and *Italy* belong to policy cluster E, spending less on family protection (1.4-1.5% of the GDP), but scoring better in terms of part-time female employment (20-30% of total female employment) and child care availability (mainly in Spain, 40% of children aged 0-3 being enrolled in the formal childcare) compared to countries in policy cluster D.

#### **Cluster D**

Child poverty cluster D is formed by Greece, Luxembourg, Malta, Poland and Portugal, according to our analysis. This cluster shows strong dissimilarities compared to Cluster C by having poverty outcomes below average, but by far not as bad as countries from Cluster C. Also, their performance in the joblessness dimension is (and even better compared to countries in Cluster B). While the main constituent factor of this cluster is the poor performance of its members in terms of in-work poverty, they do not differ too much from cluster C in these terms. There is not, within-group, much variation according to the dimensions involved in the analysis (see F-values in Table A5).

All these countries, except Malta were classified each year in Group D when the methodology presented under Section 5.1 was applied. With the exception of Luxembourg, all countries of this cluster are Southern Member States.

#### *Policy analysis*

Similarly to clusters A, B and C Member States forming the child poverty cluster D belong to three different country groups identified by our policy analysis.

- Out of the countries from Cluster D, only *Luxembourg* was classified as a country with cash transfer focused effective intervention (policy cluster B), showing the highest spending on family-related benefits (4% of the GDP), accompanied with an above average poverty reduction effectiveness. Figures related to part-time employment and childcare enrolment places the country



around the middle of the range. On the other hand, however, full-time female participation rate is below 60%.

- *Greece* and *Poland* are parts of policy cluster D, with a weak governmental involvement both in terms of family-related cash transfers, maternal participation and childcare availability. The level of family-related spending in Poland is the lowest within the EU, while in Greece the poverty reduction impact of transfers is the lowest, despite the level of expenditure being at 1.8% of GDP.

Finally, *Malta* and *Portugal* belong to policy cluster E, spending less on family protection (1.3-1.5% of the GDP). Portugal scores better in terms of full-time female employment (61% of women aged 15-64). The availability of childcare in Portugal (37%) is at the level of Belgium and Spain (36 and 38%, respectively).



# Conclusions

More than one out of five European children lives in a household where the income does not exceed the poverty threshold, being at a higher than average risk of poverty in the European Union as a whole, but also in the overwhelming majority of the Member States. Living in poverty and social exclusion negatively affects their development during the childhood and their coming performance as adults, constituting an obstacle to achieve their full potential and strongly determining the future outcomes of our societies. These outcomes include: socially and financially sustainable economic growth, quality and quantity of employment, social cohesion and maintainable welfare systems. Public policies that aim to remove these barriers benefit not only the eligible children and their families, but the whole society as well.

This paper evaluated the relative performance of EU-27 Member States in the field of child poverty in order to draw policy conclusions. The analysis included two main dimensions: one on outcomes and another on determinants (labour-market participation of parents and effectiveness of government intervention). As a second step, the set of policy variables has been extended beyond the poverty reduction effect of cash transfers, by forming policy clusters including additional variables as the importance of social benefits, the labour market participation of women and the use of childcare. As a final step in the analysis, the child poverty and policy clusters were evaluated together to draw policy conclusions.

Some countries of the European Union perform much better than others in terms of child poverty outcomes (Cluster A in Table 3). The Nordic countries, some of the continental European countries (Austria, the Netherlands, and France) and Slovenia as the lonely New Member State form this group. In these countries, the work attachment of adults in families with children is strong and economic activity provides an effective protection against the risk of poverty. High maternal employment (either full-time or part-time) facilitated by advanced opportunities to use formal child care facilities. The labour market side is further strengthened by social (and partly also by labour market) policies. The role of social expenditure and in accordance, the poverty reduction effect of cash transfers in these countries is also better compared to other member states. These effects lead either to a top performance (Denmark, Sweden, the Netherlands) on the outcome side (low absolute and relative risk of poverty compared to an estimated narrow gap) or to a solid compensation for the relative weakness in labour market attachment (Slovenia and Finland).

Negative outcomes are associated in the first place with high in-work poverty instead of high share of children in jobless households, which becomes evident when child poverty clusters B and D are compared. Cluster B countries (joblessness is the key challenge) perform better than the EU average in terms of child poverty outcomes. Contrarily, worse outcomes are observed for countries where the risk of poverty of children in in-work households is well-above the EU and national average (Southern countries, Latvia, Poland and Romania). Institutions and policies make a definite impact here. Most of the countries (Belgium, Germany, France and the United Kingdom) in child poverty cluster B belong to the policy cluster B, characterised by effective, cash transfer oriented governmental interventions. Furthermore, the highly cash transfer focused interventions play a hard role in improving Hungary's performance on the

outcome side. However, the strong correlation between joblessness and strong cash transfer focused interventions raises the problem of an inactivity trap.

Our analysis was based on 2010 data, with 2009 as the income reference period, meaning that the results could not fully reflect the effects of the financial and economic crisis. Our results are therefore not suitable for the evaluation of the crisis and of the austerity measures, but a next wave of evaluation may provide important information both on the performance of policies, as well as on the performance of the evaluation framework presented in this paper.



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# Annex

## Table A1. Main indicators of child poverty, European Union, 2010 (%)

	At-risk-of-poverty rate	At-risk-of-poverty rate of children	Relative median poverty gap of children	Share of population in jobless households	Share of children in jobless households	In-work poverty population aged <60 (>.45)	In-work poverty of children (>.45)	Poverty rate before social tr. (excl. pensions) – children
BE	14.6	18.5	20.8	12.5	12.2	5.4	7.2	31.8
CZ	20.7	26.6	37.2	12.0	15.0	7.7	12.4	34.2
DK	9.0	14.1	26.7	6.7	7.8	5.1	7.8	26.0
DE	13.3	10.5	18.6	9.7	8.9	6.9	6.8	24.0
EE	15.6	17.6	17.7	9.1	9.6	7.3	9.8	32.9
EL	15.8	16.9	28.1	12.2	13.2	8.0	9.5	31.1
ES	20.1	22.6	26.1	10.3	6.3	14.9	18.5	25.8
FR	20.7	25.4	35.4	11.8	10.8	14.2	18.9	33.9
IT	13.5	18.5	17.4	10.4	9.7	8.2	11.1	36.5
LV	18.2	24.5	29.0	11.0	8.2	11.9	17.1	32.7
LT	21.3	26.5	32.4	11.5	11.1	11.7	15.6	37.0
LU	20.2	22.3	35.4	13.8	14.0	15.1	18.2	43.6
HU	14.5	21.5	18.6	6.7	2.8	13.5	18.6	43.1
NL	12.3	20.3	16.7	12.9	16.1	6.1	8.1	47.4
AT	15.5	20.2	14.9	7.5	9.5	8.3	13.3	29.8
PL	10.3	13.5	14.7	7.2	5.4	6.9	10.1	25.3
PT	12.1	14.4	19.7	7.2	5.5	5.6	8.4	36.8
SI	17.6	22.4	24.1	10.3	8.7	12.6	16.8	30.8
SK	17.9	21.5	24.8	7.2	7.0	10.7	14.1	32.2
FI	21.1	31.7	36.0	11.0	10.0	18.2	26.6	39.4
SE	12.7	12.6	20.8	8.3	3.9	6.6	8.8	31.9
UK	12.0	18.4	34.0	9.2	10.2	7.3	11.1	29.7
MT	13.1	11.2	11.4	9.5	4.4	4.1	5.4	29.8
BG	12.9	12.9	20.1	10.9	9.4	7.5	8.4	29.3
RO	17.1	20.1	16.7	11.9	17.9	8.0	10.8	44.6
EU-av.	16.4	20.4	24.8	10.4	10.6	9.7	13.2	42.1

Source: EUROSTAT, own estimations based on EU-SILC 2010 version 1 (01.03.2010). Data for Ireland and Cyprus are not available in the EU-SILC UDB.

**Table A2. At-risk-of-poverty rates before and after transfers (excluding pensions) and the impact of transfers for children European Union, 2010**

Country	At-risk-of-poverty rate after transfers (excl. pensions) for children (%)	At-risk-of-poverty rate before transfers (excl. pensions) for children (%)	Impact of transfers	
			percentage points	% of at-risk-of-poverty rate before transfers
Belgium	18.5	31.8	13.3	42.6
Bulgaria	26.6	34.2	7.6	21.7
Czech Republic	14.1	26.0	11.9	45.0
Denmark	10.5	24.0	13.5	54.5
Germany	17.6	32.9	15.4	46.8
Estonia	16.9	31.1	14.2	44.3
Greece	22.6	25.8	3.2	11.0
Spain	25.4	33.9	8.5	22.8
France	18.5	36.5	18.0	49.5
Italy	24.5	32.7	8.2	24.4
Latvia	26.5	37.0	10.4	28.2
Lithuania	22.3	43.6	21.3	46.6
Luxembourg	21.5	43.1	21.6	50.3
Hungary	20.3	47.4	27.2	57.1
Malta	20.2	29.8	9.5	33.3
The Netherlands	13.5	25.3	11.7	45.7
Austria	14.4	36.8	22.4	61.3
Poland	22.4	30.8	8.4	26.9
Portugal	21.5	32.2	10.7	30.4
Romania	31.7	39.4	7.8	20.6
Slovenia	12.6	31.9	19.3	57.4
Slovakia	18.4	29.7	11.3	35.8
Finland	11.2	29.8	18.6	61.7
Sweden	12.9	29.3	16.4	58.9
United Kingdom	20.1	44.6	24.5	54.4
EU-average	20.4	42.1	21.7	41.6

Source: own estimations based on EU-SILC 2010 (version 01.03.2012). Data for Ireland and Cyprus are not available from the EU-SILC UDB.

**Table A3. Relative outcomes of countries related to child poverty risk and main determinants of child poverty risk – overview across the 2005–2010 period**

Country	Group A	Group B	Group C	Group D	Other	Total number of presence in analysis
Belgium	x	xxxxx				6
Bulgaria		x	xx			3
Czech Republic	xx	xxxx				6
Denmark	xxxxxx					6
Germany	xx	xxxx				6
Estonia	x	xxxx			x	6
Ireland		xxxxx				5
Greece				xxxxxx		6
Spain				xxxxxx		6
France	xxxx	xx				6
Italy				xxxxxx		6
Cyprus	xxxxx					5
Latvia			xxx	xxx		6
Lithuania			xxx	xxx		6
Luxembourg				xxxxxx		6
Hungary		xxxx	xx			6
Malta		x	xx	x		4
The Netherlands	xxxxx			x		6
Austria	xxxxxx					6
Poland				xxxxxx		6
Portugal				xxxxxx		6
Romania			x	xx		3
Slovenia	xxxxxx					6
Slovakia		xx	xxx		x	6
Finland	xxxxxx					6
Sweden	xxxxxx					6
United Kingdom		xxx	xxx			6

Source: EU Task-Force (2008), TÁRKI – Applica (2010), TÁRKI (2011), own estimations.



**Table A4. Overall z-scores by main dimensions of the analytical framework set up by the EC (2008), European Union, 2010**

Country	Child poverty outcomes	Joblessness	In-work poverty	Policy impact
Belgium	-0.60	0.81	-1.93	0.09
Bulgaria	3.82	2.89	0.82	-1.36
Czech Republic	-0.21	0.20	-1.27	0.26
Denmark	-4.65	-0.27	-3.12	0.92
Germany	-1.85	0.44	-0.94	0.38
Estonia	-0.86	1.61	-1.66	0.21
Greece	1.67	-2.26	1.44	-2.10
Spain	1.69	0.16	2.11	-1.28
France	-0.66	-0.02	-0.50	0.57
Italy	2.45	-1.26	2.03	-1.17
Latvia	2.92	0.48	0.96	-0.91
Lithuania	1.47	1.50	0.98	0.37
Luxembourg	0.76	-3.15	2.30	0.63
Hungary	0.59	3.27	-1.67	1.10
Malta	-0.75	1.02	1.19	-0.55
The Netherlands	-2.55	-1.61	-0.49	0.31
Austria	-2.04	-1.54	-1.07	1.39
Poland	0.88	-0.65	1.40	-0.99
Portugal	0.41	-0.54	0.42	-0.75
Romania	6.19	-0.06	5.80	-1.43
Slovenia	-3.04	-3.06	-1.36	1.13
Slovakia	1.99	0.80	0.02	-0.38
Finland	-5.21	-3.21	-2.60	1.42
Sweden	-3.04	-0.42	-2.23	1.22
United Kingdom	-1.14	4.88	-0.63	0.91

Source: own estimations based on EU-SILC 2010 (version 01.03.2012). Data for Ireland and Cyprus are not available from the EU-SILC UDB.

**Table A5. Validation of child poverty clusters: reporting t-values and F-values for each cluster and dimension**

Clusters	t-values			F-values		
	Poverty outcomes	Joblessness	In-work poverty	Poverty outcomes	Joblessness	In-work poverty
<b>A</b>	-1.310	-0.825	-0.991	0.274	0.393	0.397
<b>B</b>	-0.146	0.821	-0.622	0.104	0.839	0.123
<b>C</b>	1.241	0.401	0.881	0.121	0.483	0.251
<b>D</b>	0.287	-0.641	1.004	0.075	0.442	0.180

Source: own estimations based on EU-SILC 2010 (version 01.03.2012). Data for Ireland and Cyprus are not available from the EU-SILC UDB.

Notes. Estimates based on Ward's linkage hierarchical clustering, excl. RO and the policy impact indicator.

A t-value other than 0 shows that a certain variable is stronger in the cluster than in the overall sample, either in a positive or negative way, the sign of the t-value depending on the way how the z-scores were estimated. Higher the absolute value of t is, stronger the effect of a variable is in establishing dissimilarities between clusters.

An F-value > 1 shows that a certain variable has a higher variance in the cluster than in the overall sample. Accordingly, resulting clusters should always have variable is smaller in the cluster, which makes a cluster homogenous.

**Table A6. Descriptive data for the indicators used for identifying policy clusters, European Union, 2010**

Country	Family protection expenditure as % of GDP	Female employment rate (% , 15-64 years old)	Female part-time employment (% of total female employment)	Child care enrolment (children in formal childcare cared for at least 1 hour weekly, as % of those aged 0-2)
Belgium	2.2	56.5	42.3	36.0
Bulgaria	2.0	56.4	2.6	7.0
Czech Republic	1.4	56.3	9.9	2.0
Denmark	4.2	71.1	38.4	78.0
Germany	3.2	66.1	45.5	20.0
Estonia	2.3	60.6	14.5	21.0
Greece	1.8	48.1	10.4	8.0
Spain	1.5	52.3	23.2	38.0
France	2.6	59.7	30.1	43.0
Italy	1.4	46.1	29.0	22.0
Latvia	1.7	59.4	11.4	16.0
Lithuania	2.8	58.7	9.3	13.0
Luxembourg	4.0	57.2	36.0	36.0
Hungary	3.0	50.6	8.0	9.0
Malta	1.3	39.3	25.0	11.0
The Netherlands	1.3	69.3	76.5	50.0
Austria	3.1	66.4	43.8	9.0
Poland	0.8	53.0	11.5	2.0
Portugal	1.5	61.1	15.5	37.0
Romania	1.7	52.0	11.4	7.0
Slovenia	2.1	62.6	14.7	37.0
Slovakia	1.7	52.3	5.4	3.0
Finland	3.3	66.9	19.6	28.0
Sweden	3.2	70.3	40.4	51.0
United Kingdom	1.8	64.6	43.3	35.0
EU-27	2.7	58.2	31.4	28.0

Source: *EUROSTAT*.

Table A7. Validation of policy clusters: reporting F-values for each policy variable

Policy clusters	t-values					F-values				
	Family protection	Policy impact	Female empl.	Female part-time empl.	Childcare	Family protection	Policy impact	Female empl.	Female part-time empl.	Childcare
<b>Complex and effective intervention, employment focused (A):</b> DK, NL, SE	0.734	0.800	1.498	1.542	1.833	2.662	0.209	0.013	1.493	0.696
<b>Effective intervention, cash transfer focused (B):</b> BE, DE, FR, LU, AT, UK	0.651	0.650	0.435	0.881	0.266	0.748	0.194	0.318	0.113	0.445
<b>Cash transfer oriented (C):</b> EE, LT, HU, SI, FI	0.514	0.830	0.201	-0.655	-0.166	0.318	0.265	0.568	0.071	0.352
<b>Weak intervention I. (D):</b> BG, CZ, EL, LV, PL, RO, SK	-0.719	-0.970	-0.545	-0.898	-0.963	0.200	0.563	0.217	0.041	0.067
<b>Weak intervention II. (E):</b> ES, IT, MT, PT	-0.910	-0.919	-1.070	-0.087	0.118	0.016	0.114	1.349	0.104	0.461

Source: own estimations based on based on EU-SILC 2010 (version 01.03.2012); EUROSTAT. Data for Ireland and Cyprus are not available from the EU-SILC UDB.

Notes. Estimates based on Ward's linkage hierarchical clustering.

A *t*-value other than 0 shows that a certain variable is stronger in the cluster than in the overall sample, either in a positive or negative way, the sign of the *t*-value depending on the way how the *z*-scores were estimated. Higher the absolute value of *t* is, stronger the effect of a variable is in establishing dissimilarities between clusters.

An *F*-value > 1 shows that a certain variable has a higher variance in the cluster than in the overall sample. Accordingly, resulting clusters should always have variable is smaller in the cluster, which makes a cluster homogenous.

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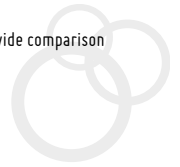
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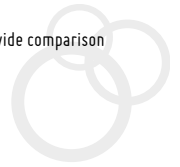
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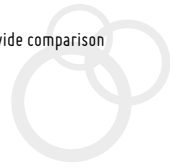
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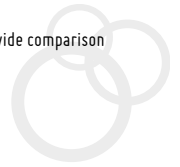
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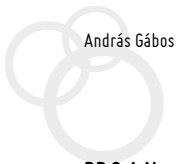
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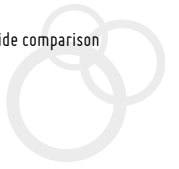
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## Information on the GINI project

### Aims

The core objective of GINI is to deliver important new answers to questions of great interest to European societies: What are the social, cultural and political impacts that increasing inequalities in income, wealth and education may have? For the answers, GINI combines an interdisciplinary analysis that draws on economics, sociology, political science and health studies, with improved methodologies, uniform measurement, wide country coverage, a clear policy dimension and broad dissemination.

Methodologically, GINI aims to:

- exploit differences between and within 29 countries in inequality levels and trends for understanding the impacts and teasing out implications for policy and institutions,
- elaborate on the effects of both individual distributional positions and aggregate inequalities, and
- allow for feedback from impacts to inequality in a two-way causality approach.

The project operates in a framework of policy-oriented debate and international comparisons across all EU countries (except Cyprus and Malta), the USA, Japan, Canada and Australia.

### Inequality Impacts and Analysis

Social impacts of inequality include educational access and achievement, individual employment opportunities and labour market behaviour, household joblessness, living standards and deprivation, family and household formation/breakdown, housing and intergenerational social mobility, individual health and life expectancy, and social cohesion versus polarisation. Underlying long-term trends, the economic cycle and the current financial and economic crisis will be incorporated. Politico-cultural impacts investigated are: Do increasing income/educational inequalities widen cultural and political 'distances', alienating people from politics, globalisation and European integration? Do they affect individuals' participation and general social trust? Is acceptance of inequality and policies of redistribution affected by inequality itself? What effects do political systems (coalitions/winner-takes-all) have? Finally, it focuses on costs and benefits of policies limiting income inequality and its efficiency for mitigating other inequalities (health, housing, education and opportunity), and addresses the question what contributions policy making itself may have made to the growth of inequalities.

### Support and Activities

The project receives EU research support to the amount of Euro 2.7 million. The work will result in four main reports and a final report, some 70 discussion papers and 29 country reports. The start of the project is 1 February 2010 for a three-year period. Detailed information can be found on the website.

[www.gini-research.org](http://www.gini-research.org)





**GINI** GROWING INEQUALITIES' IMPACTS

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