Child poverty in North Macedonia: Towards a better understanding of its complexity and multidimensional nature

unicef for every child

FINANCE**THINK**
OUT OF THE BOX

Policy brief

This policy brief recommends institutionalizing the measurement of multidimensional child poverty and the inclusion of poverty measures in relevant strategic documents, prioritization of the policies and plans for reducing inequality and targeting the most vulnerable children, as well as reforms of the educational process in order to enable every child to attain an appropriate level of education.

PROBLEM

UNICEF (2008)[1] discovered that 32.4% of children lived below the threshold of poverty in 2005, experiencing vulnerability in various areas such as education, health and frequent use of child labor. According to the latest data from the State Statistical Office, child poverty in North Macedonia stood at 27.8% in 2019, while households with two parents and three or more children remain at particular risk of poverty (45.3%). Although declining, child poverty in North Macedonia is still high. Recent country reports show that poor and socially excluded children, who predominantly live in large households and in rural areas of underdeveloped regions, are at greater risk of remaining isolated, further vulnerable to limited access to education and health care services.

Amongst them, Roma children are even more vulnerable. However, the multidimensional nature of child poverty has not yet been explored in a rigorous way. Due to the differences in the experience and measurement of poverty among adults and children, and the lack of data for a better understanding of child poverty, the following question arises: What is the current situation concerning child poverty in different areas in North Macedonia?

[1] United Nations Children's Fund. (2008). Child Poverty Study.

OBJECTIVE

This brief aims to explain the multidimensionality of

child poverty against various demographic and geographical indicators, to present the first index of multidimensional child poverty in North Macedonia and to demonstrate its analytical and practical value.

METHODOLOGY

We use the Alkire- Foster method[2] in order to develop two indices for multidimensional child poverty by age groups (0-4 years and 5-17 years), using secondary data from the Multiple Indicator Cluster Survey (MICS) 2018/2019 for North Macedonia and for Roma Settlements in North Macedonia.[3] The Multidimensional Poverty Index reflects the incidence (percentage of poor children, H) and the intensity (average percentage of deprivation of the poor, A) of multidimensional child poverty and is expressed as a product of both (adjusted percentage of poor children, M). The method is flexible in designing indices, allowing for different variations of sets of indicators, thresholds and weights.[4] In addition, it allows data to be viewed by subgroups and dimensions. To detect the most common deprivations, as well as the most vulnerable groups of children in North Macedonia, we perform a detailed analysis of the indices, while in order to identify the most important risk factors for multidimensional child poverty in North Macedonia we use logit and tobit regression analyses.

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[2] See Alkire, S., & Foster, J. (2011). Counting and multidimensional poverty measurement. Journal of Public Economics, 95(7), 476–487.
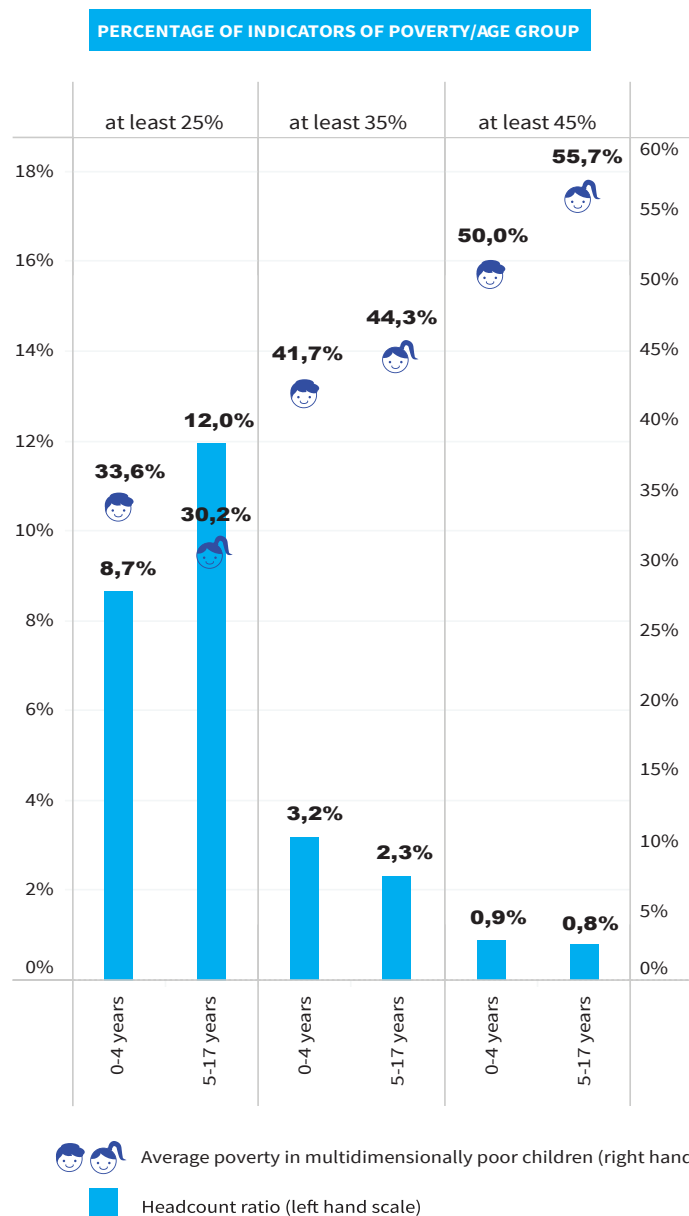
[3] МИКС 2018/2019 for North Macedonia and the Roma Settlement in North Macedonia covers various aspects of well-being including health, nutrition, access to water and sanitation, child development, education, child protection, access to information and more, making it suitable for proper analysis of child deprivation.

[4] In this brief, each indicator receives an equal weight. The initial poverty line is set at 25%, and we additionally check the stability of the results for different thresholds from 20% to 50%.

RESULTS - REPRESENTATION AND RISK FACTORS

Chart 1 shows the prevalence of poverty (H), the intensity of poverty (A) – i.e. the number of indicators in which the child is poor, the index of multidimensional child poverty (M) for each age group. The poverty line (k) is set to between 25% and 45% of indicators in which the child is poor, to be identified as multidimensionally poor. Significant differences between groups are observed as we increase the poverty line. Namely, for k≥25%, 11.96% of children aged 5 to 17 years and 8.67% of children aged 5 years are multidimensionally poor. For k≥35%, the older group lives in more intense poverty, but also has lower incidence of poverty, and the picture does not change for higher numbers of k. These differences indicate that many children in the younger group are poorer in fewer areas of deprivation (less than 25%), while more intense poverty occurs among older children.

Chart 1: Incidence (H) and poverty intensity (A) by age group for poverty line from 25% to 45%

**PERCENTAGE OF INDICATORS OF POVERTY/AGE GROUP**

Source: Calculations of the authors based on MICS 2018-2019.

Significant differences between rural and urban children can be observed when analyzing the censored percentage of poor children for each dimension within each subgroup (Chart 2).

The censored percentage of poor children refers to those children who are both multidimensionally poor and poor in a given dimension. Children up to 5 years of age living in rural areas have a uniform distribution of the censored percentage of poor by dimension, where seven dimensions have a censored percentage of poor children of between 3.4% and 5.5%. On the other hand, poverty amongst children under 5 years of age in urban areas predominantly arises from three dimensions: security, early childhood development and material situation. In older children, in addition to the dominant role of the security dimension, four dimensions (access to water and sanitation, health, housing and care and love) have a higher censored percentage of poor children in rural areas. On the other hand, the dimensions of education, care and love, security and material situation constitute the largest portion of child poverty in urban areas.

Chart 2: Censored percentage of poor children by size, age group and environment by k≥25%

0-4 years

urban — rural environment


5-17 years

urban — rural environment
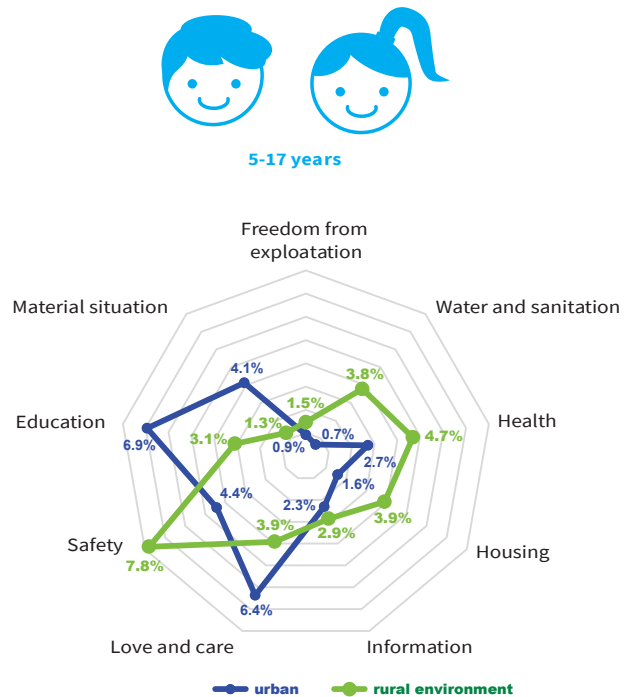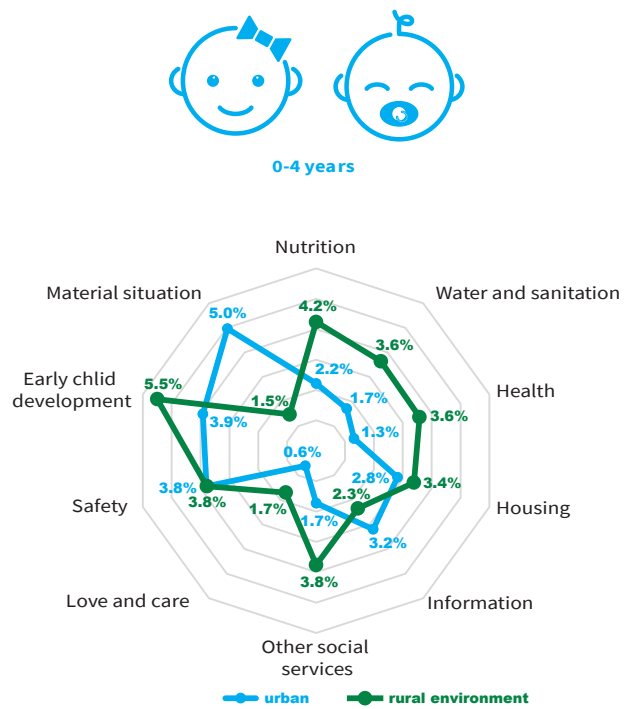
Note: Censored percentage of poor children - Percentage of children who are multidimensionally poor and at the same time poor in a given dimension.
Source: Authors' calculations based on MICS 2018-2019.

The analysis of the situation of children from various ethnicities reveals significant differences. Chart 3 shows that every third Roma child under the age of 5 is multidimensionally poor, on average poor in a third of the areas of deprivation.

Other ethnicities experience a lower but still significant prevalence of poverty, i.e one in five children is multidimensionally poor. The prevalence of ethnic Albanian children is close to that of the average population, while ethnic Macedonian children are the least poor.

Chart 3: Incidence (H), intensity (A) and multidimensional child poverty index (M) by age groups and ethnicity per k≥25%
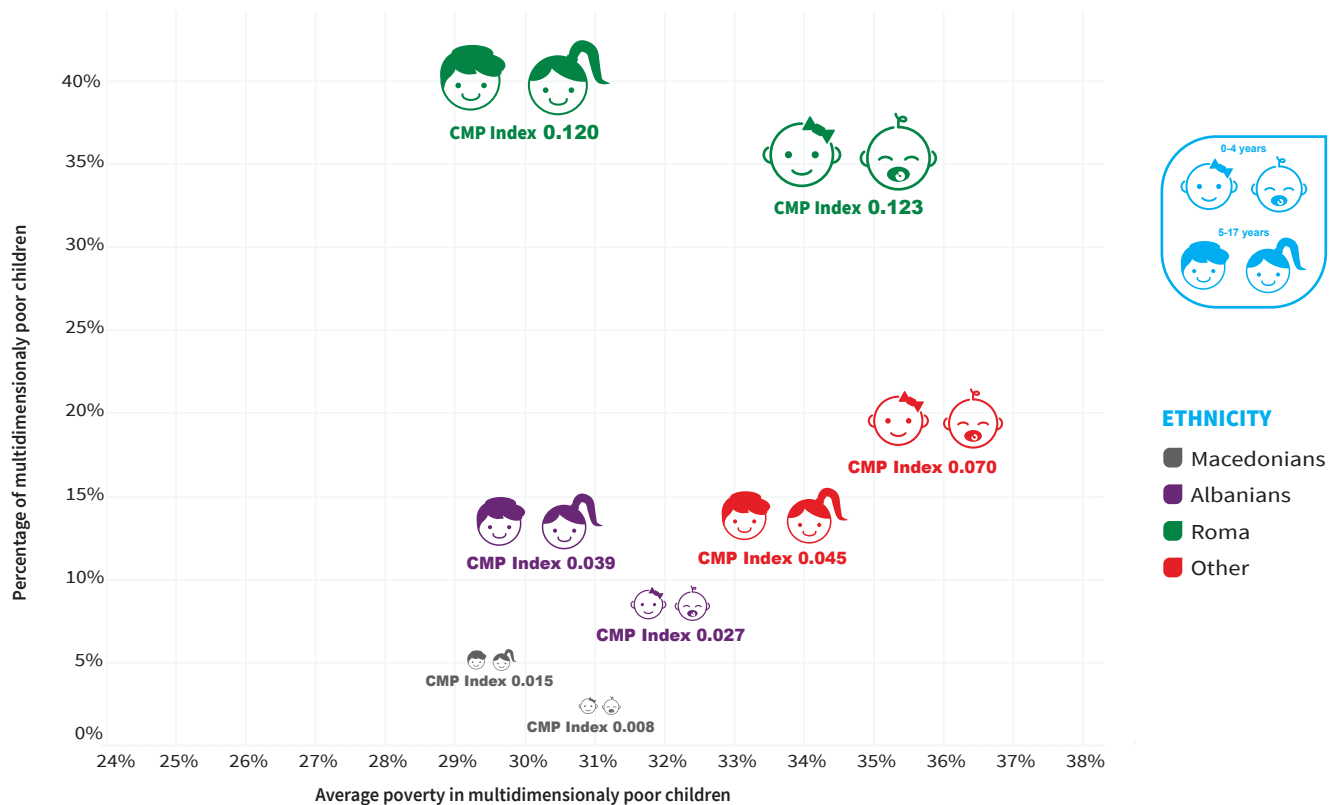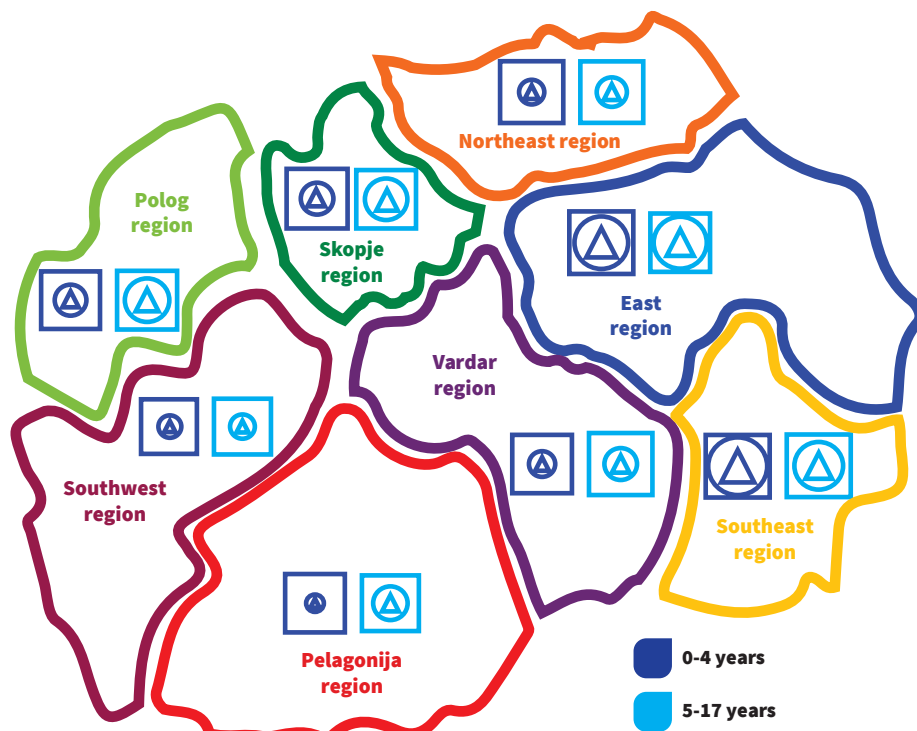

Note: The size of the figures indicates the size of the MDP Index.
Source: Authors' calculations based on MICS 2018-2019.

Chart 4 shows the prevalence of child poverty across regions in North Macedonia. Two regions have the highest incidence within the younger group of children. Namely, in the Southeast region every fourth child under the age of 5 is multidimensionally poor, and in the Eastern region every fifth child of the same age is poor in multiple dimensions. Poor children in the same two regions are vulnerable, on average, in 36% of the indicators. The Skopje and Polog regions are the next two regions with a high prevalence of poverty, 8.21% and 7.75%, respectively. Similar developments are also found in the older group of children. The Southeast and Eastern regions have the highest multidimensional poverty index, 5.89% and 6.08%, respectively, followed by the Polog and Skopje regions with 4.32% and 3.89%, respectively.

While the Southeast and East regions have a similar multidimensional poverty index, the Southeast region has a lower prevalence of poverty with a higher intensity of poverty compared to the East region.

Chart 4: Prevalence (H), intensity (A) and multidimensional poverty index (M) by age groups and regions for k≥25%

POVERTY MEASURES *

△ **Index of multidimensional child poverty (M)**

○ **Percentage of multidimensional poor children (H)**

□ **Average poverty in multidimensional children (A)**

Note: The size of the figures indicates the size of the percentages for each measure of poverty.

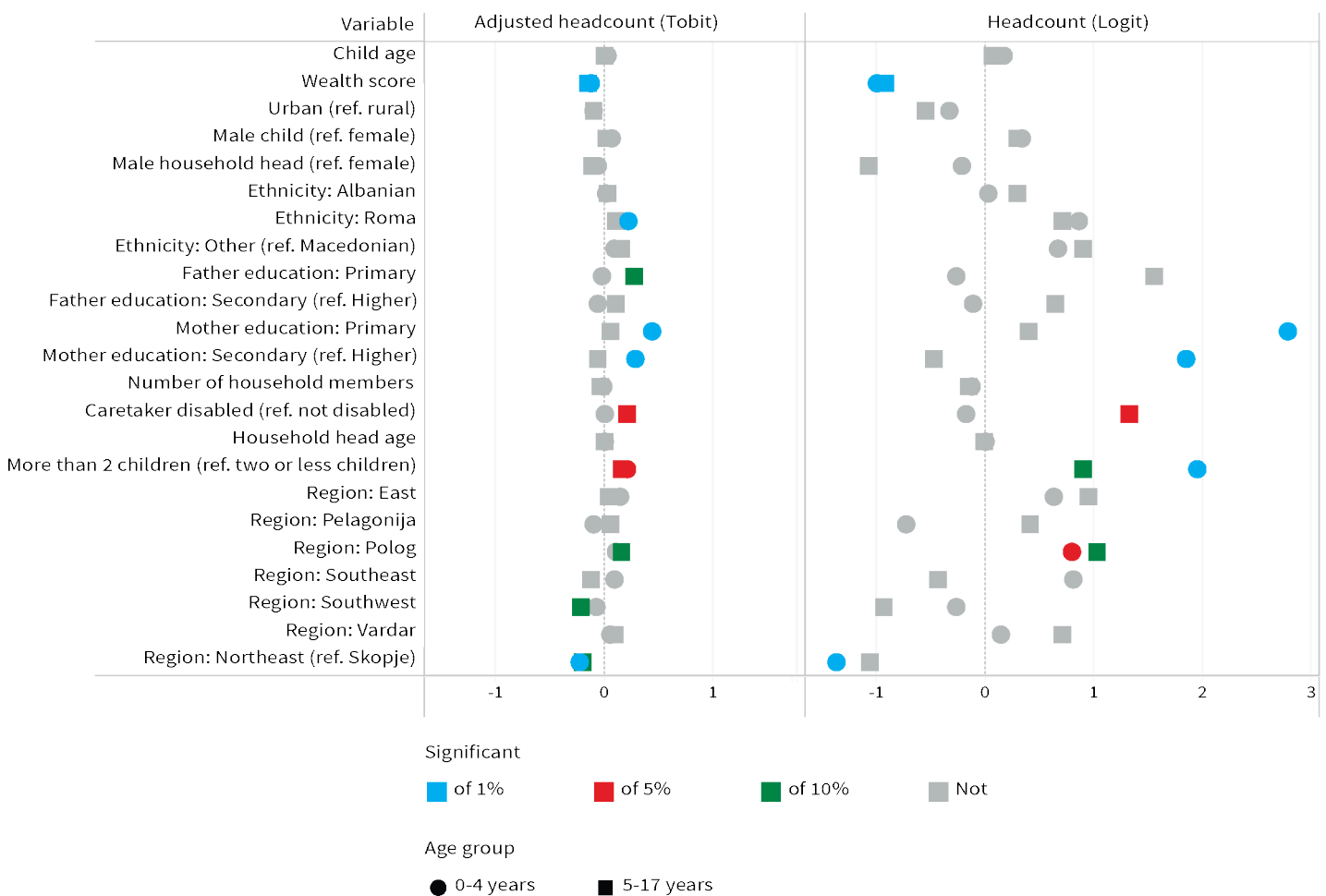Source: Authors' calculations based on MICS 2018-2019.

Chart 5 shows the coefficients of the regression analysis and their significance in order to discover the most important risk factors for multidimensional child poverty in North Macedonia. Younger Roma children are more likely to be multidimensionally poor.[5] The education of the mother is relevant to the group of 0-4 year olds, while the education of the father for the group of 5-17 year old children.

Irrespective of the age group, if the child lives in a household with more than two children or in a poorer household (with a lower wealth score), it is more likely to be multidimensionally deprived. Conversely, caregiver disability can be a significant drag towards poverty of the more senior children. The age and gender of children and parents play a limited role

in explaining multidimensional poverty. Finally, in terms of regional differences, children living in the Polog region are more likely to be poor, while those living in the Northeast region are less likely to be poor compared to the children in the Skopje region.

Chart 5: Logit and Tobit regressions of multidimensional poverty measures (for k≥25%)

Note: The reference groups for binary variables are in parentheses.

Source: Authors' calculations based on MICS 2018-2019.

[5] Please note that the ratios of the binary variable for the younger Roma children are significant in the model when the Index (M) is a dependent variable, while they are not significant in the model when the Percentage of poor children (H) is a dependent variable. Young Roma children are more likely to be intensely poor.

CONCLUSIONS AND RECOMMENDATIONS

There are significant differences in age groups. **11.96%** of children aged 5 to 17 years and **8.67%** of children aged 5 years are multidimensionally poor. At higher levels of intensity, younger children are more prone to poverty, while older children are exposed to more intense poverty i.e are poor against a higher number of the poverty indicators;

- In urban areas, the percentage of children who are multidimensionally poor and do not have adequate education is **6.9%** for the group of 5 to 17 year old. Those who are multidimensionally poor and face problems in terms of their material situation in the group of 0-4 year olds is almost **5%**. Child poverty in urban areas can be significantly reduced by tackling education and material deprivation, while in rural areas a wider approach is needed by targeting multiple dimensions;

- Roma children, irrespective of their age, are significantly vulnerable. At least one in three Roma children is multidimensionally poor;

- Four regions have a high prevalence of poverty: **Southeast, East, Skopje and Polog** regions, the first two of which have the highest prevalence regardless of the age of the children;

- **Education of children and their parents** is an important factor for getting out of poverty.

Based on the analysis, the following recommendations have been developed:

- Institutionalize the measuring of multidimensional child poverty;

- Explicitly include child poverty indicators in the National

- Poverty Reduction and Social Exclusion Strategy and other relevant thematic documents;

- Prioritize policies and plans to target inequality and target the most vulnerable children (such as Roma children);

- Design an integrated care system for each child (registration and monitoring);

- Reform the education system to enable every child to complete an appropriate level of education in order to reduce the intergenerational transmission of poverty.

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The research of Finance Think helps policymakers, policy advocates, opinion makers, journalists, and the public understand the issues affecting ordinary citizens.

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