

CHILD POVERTY IN SERBIA

2019



 MICS

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ABBREVIATIONS

EA	enumeration area
ECD	early child development
EU	European Union
EUROSTAT	Statistical Office of the European Union
EU-SILC	EU Survey on Income and Living Conditions
HH	household
MICS	Multiple Indicator Cluster Survey
NUTS	nomenclature of territorial units for statistics
OECD	Organisation for Economic Co-operation and Development
SIPRU	Social Inclusion and Poverty Reduction Unit, The Government of the Republic of Serbia
SORS	Statistical Office of the Republic of Serbia
UNICEF	United Nations Children's Fund

INTRODUCTION

General framework

The 2019 Multiple Indicator Cluster Survey (MICS) is the sixth to be conducted in Serbia. The United Nations Children's Fund (UNICEF) completed MICS 6 in cooperation with the Statistical Office of the Republic of Serbia (SORS), which provided expert technical support, while financial support was provided by UNICEF, the Instrument for Pre-accession Assistance (IPA) of the European Union, the Government of the Republic of Serbia and the United Nations Population Fund (UNFPA). Two surveys were conducted: one standard, representative at the national level; and another, representative of the population in Roma settlements, with the aim to close the data gap for this vulnerable population group.

In order to utilize the full potential of the surveys, UNICEF Serbia is conducting further analysis in selected thematic areas to develop studies using the available data collected in MICS surveys conducted in Serbia since 2005 and other relevant data sources. The aim of the task is to develop in-depth analyses in selected areas, based on 2019 MICS data and previous MICS datasets. One of the areas to be covered is poverty/equity among children in Serbia. Where relevant, this analysis will be expanded to include the Survey of Income and Living Conditions (EU-SILC), which uses the standard EUROSTAT measures, and relative monetary poverty, with the ability to disaggregate data by age, regions, type of settlement, etc. The analyses will have an equity focus and provide a comparative analysis between the status of poor children and other children as well as among various categories of children (urban/rural, boys/girls, etc.).

Purpose of poverty/equity analysis

The purpose of this study is to gain greater insight into child poverty in Serbia. In addition to supplementing the recent 2019 MICS Report prepared by UNICEF and the Statistical Office of the Republic of Serbia, presenting the position of women and children in Serbia in different aspects, this study intends to provide a comparison between two dimensions of poverty: monetary and non-monetary. Moreover, most of the studies tackling poverty in Serbia are focused on the population as a whole, so this study will complement other reports by focusing on children.

Child poverty is a multidimensional phenomenon, and there are multiple methods of measurement based on various aspects, whether focused on income or consumption, absolute or relative, etc. One such division focuses on monetary poverty vs. non-monetary poverty (deprivation). This study focuses on non-monetary poverty, using data from the 2019 MICS.¹ However, in order to create a more thorough view of child poverty in Serbia, monetary poverty will be analysed as well. As MICS does not contain sufficient information for efficient measurement of monetary poverty, we use EU-SILC data for this purpose. The most poverty-stricken children are identified through the wealth index calculated in the MICS and then compared at a meta level to the group of poorest children identified by the EU-SILC approach using equivalised disposable income, which is the basis for calculating the at-risk-of-poverty indicator.²

Context

Although extreme poverty has been steadily declining over the last 25 years, as stated by the World Bank,³ the COVID-19 pandemic brought the threat of a new rise in global poverty. This reminds us that poverty is still a major global threat and there are global risks that can reintroduce this problem at a larger scale in middle-income or even high-income countries. Poverty means insecurity

¹ We use data from two surveys: the 2019 Serbia MICS representative at the national level, and the 2019 Serbia Roma Settlements MICS, representative at the level of Roma settlements in Serbia.

² At-risk-of-poverty rate is one of key indicators, together with material deprivation and joblessness, used by EUROSTAT to assess level of social inclusion in one country. This indicator measures relative poverty as it defines a person as poor if she/he has income below 60 per cent of median income per equivalent adult in their respective surroundings.

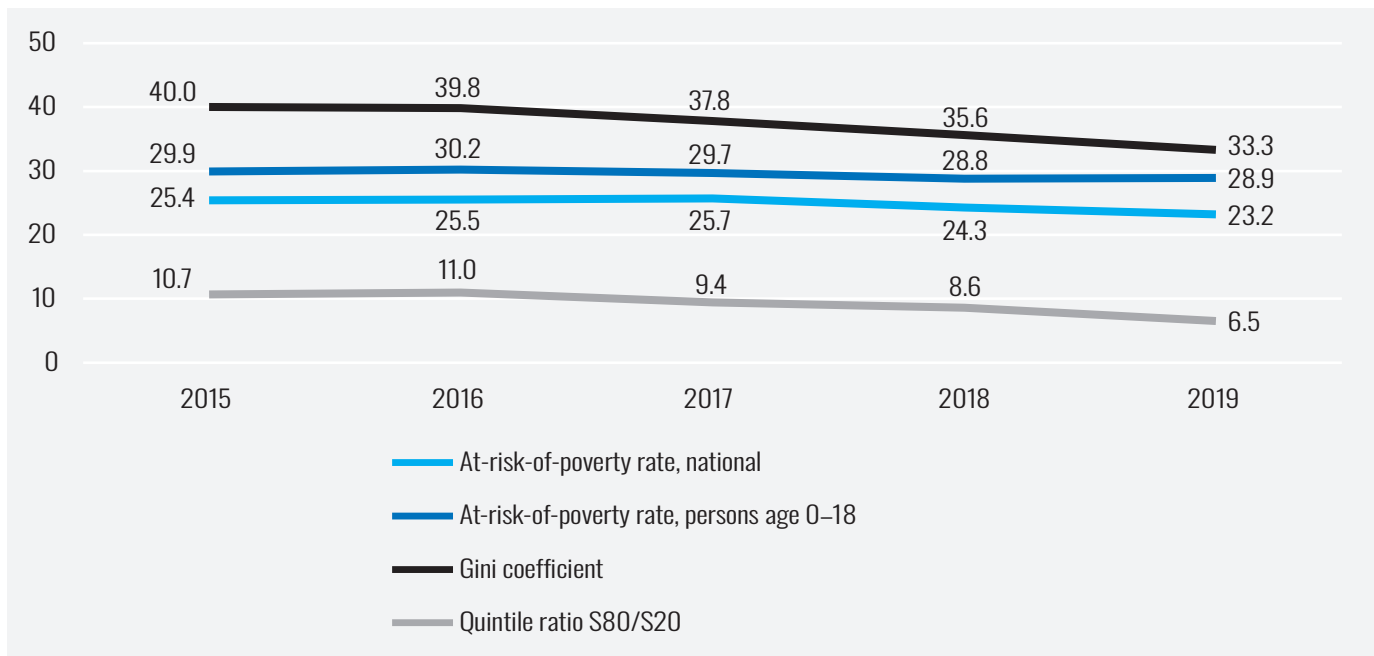
³ <https://www.worldbank.org/en/news/feature/2020/10/07/global-action-urgently-needed-to-halt-historic-threats-to-poverty-reduction>

and risk, which vary in different societal contexts and at different points of the life trajectory. Children remain a constant of poverty by being most exposed to its threat. This is because poverty affects so many aspects important for child development. Poverty can jeopardize health and nutrition, ruin families, cause migration and displacement or lead to child labour or exploitation. Children living in poverty often lack protection from violence and abuse and find it difficult to get support for recovery from harm caused by poverty.

UNICEF stresses that children experience poverty differently than adults. More specifically, child poverty is “deprivation of the material, spiritual and emotional resources needed [for children] to survive, develop and thrive, leaving them unable to enjoy their rights, achieve their full potential or participate as full and equal members of society” (UNICEF, 2005). As stated by Kurukulasuriya and Engilbertsdóttir (2012), the impact of poverty on children is more direct than on adults, as children are more vulnerable to both the immediate and long-term effects of deprivation. They also have a lower capacity to improve their situation and protect their rights.

In this report we refer to the pre-COVID-19 period in Serbia, between the fifth and sixth MICS studies. After emerging from blocked post-socialist transformation and wars in the region during the 1990s, Serbia has been undergoing social reforms and economic transition at an inconsistent pace and with limited success. Yet, between the last two MICS conducted (the fifth in 2014 and sixth in 2019), the Serbian economy showed many signs of recovery: fiscal stabilization, increase in foreign direct investments, rise of employment rates, higher average salary, etc. These were certainly some of the reasons for the decrease in relative poverty and inequality in Serbia in this period.

Figure 1. Relative poverty and inequality indicators, Serbia 2015–2019



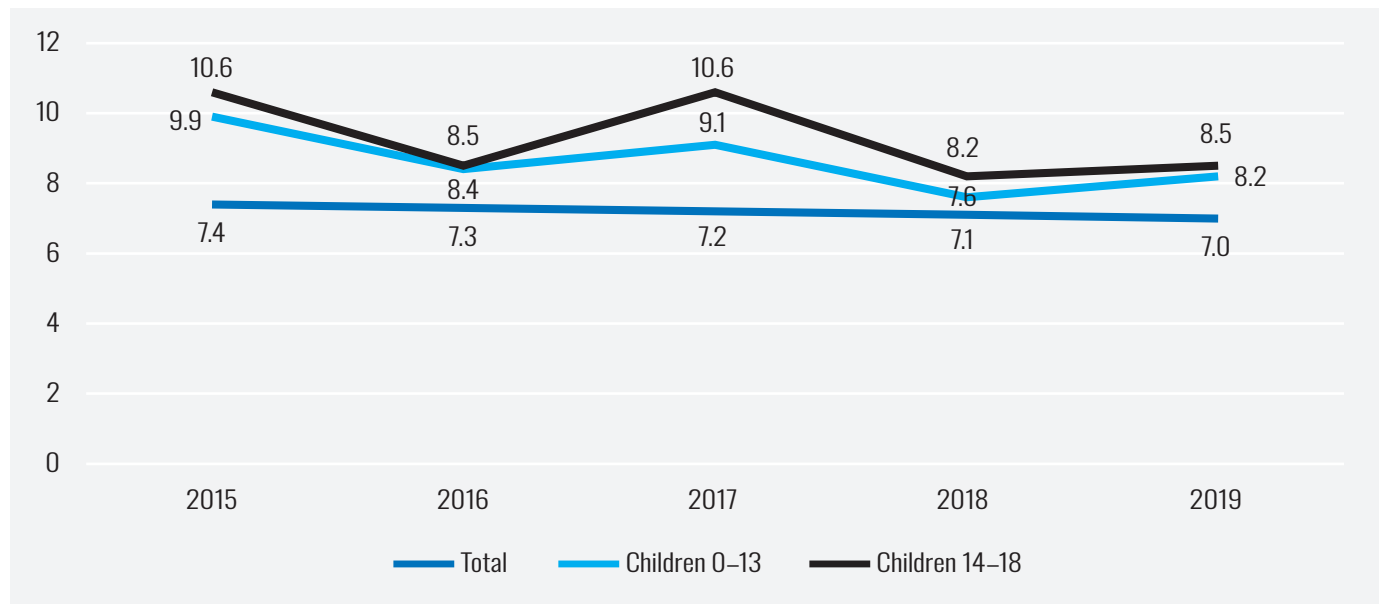
Source: SORS, 2015–2019⁴

While inequality indicators started decreasing after 2016, relative poverty at the national level began to decrease after 2017. The relative poverty of children (persons aged 0–18) remained stable throughout this period. This finding leads to the conclusion that children in Serbia have not enjoyed the benefits of economic progress as much as adults have.

⁴ <https://www.stat.gov.rs/sr-Latn/oblasti/potrosnja-prihodi-i-uslovi-zivota/prihodi-i-uslovi-zivota>

The same conclusion can be drawn from the data about absolute poverty in Serbia.⁵

Figure 2. Absolute poverty rates, 2015–2019



Source: SIPRU, 2021⁶

Here, the poverty rate among children shows more variation over the years but remains higher than the overall poverty rate in Serbia. This confirms the finding that child poverty is more persistent than overall poverty during the slow economic progress in Serbia.

⁵ Absolute poverty in Serbia has been based on consumption and calculated from the Household Budget Survey conducted by SORS.

⁶ <http://socijalnoukljucivanje.gov.rs/rs/socijalno-ukljucivanje-u-rs/statistika-siromastva/apsolutno-siromastvo/>

METHODOLOGY

Analysis of child poverty in three steps.

1. The first step begins with research questions: What is the ecosystem of child poverty, its characteristics and outcomes? To answer these questions we analyse child poverty based on MICS data. The objective is to construct a poverty profile for children in Serbia; to present its territorial and social determinants, describe its structural characteristics, and assess outcomes manifested in different MICS indicators: nutrition, health, child labour, child marriage and education.
2. The second step poses the question: How different is poverty among Roma children in Serbia when compared with the national sample? We use the same analytical matrix as in the first step to investigate poverty among Roma children and compare it with the national sample.
3. The research question for the third step is: How different is child poverty if analysed as a financial phenomenon? Here we construct a profile of child poverty based on EU-SILC methodology and use equivalised disposable income as an indicator. EU-SILC microdata from the same year as MICS 6 (2019) will be analysed by applying a similar matrix as in the previous two steps: analysing determinants and characteristics of child poverty. Unfortunately, EU-SILC data do not contain indicators of poverty outcomes as defined in the first step above.

Wealth index and equivalised disposable family income

The wealth index in the MICS is an assets-based measurement and considers the possession of specific items by a household and its members, rather than income as measured in EU-SILC. The wealth index is a composite indicator of wealth. It consists of the ownership of different assets, dwelling characteristics, water and sanitation, and other characteristics related to the household's wealth, to generate weights (factor scores) for each of the household items. In MICS studies, poverty and living standard are assessed using the wealth index quintiles. The necessity of this specific approach lies in the fact that the MICS is conducted in more than 50 countries, thus a unique methodology had to be developed that would be applicable for each country and its specificities. The specificities for each country are mainly determined by using additional country-specific items for calculation of the wealth index. The components of the wealth index applied in the 2019 MICS in Serbia are a bit different than in 2014. Here is the list of 2019 wealth index components:

- ▲ Source of drinking water, location of water source and having enough water when needed;
- ▲ Type and location of sanitation facility, sharing of sanitation facilities or using a public one;
- ▲ Main material of dwelling floor, roof and exterior walls;
- ▲ Location of cooking device, major type of stove, heating device and source of light and type of fuel/energy source used for cooking, heating and lighting;
- ▲ Presence in the household of electricity, a television, radio, fixed phone, mobile phone, refrigerator, wardrobe, bed, iron, hairdryer, water heater, vacuum cleaner, freezer, electric stove, personal washing machine, dryer, dishwasher, microwave, cable TV/TotalTV, PC/laptop or tablet, internet connection, air conditioner, video surveillance, shower or bath;
- ▲ Presence in the household of a watch, bicycle, motorcycle/scooter, car, truck or van, motor boat;
- ▲ Possession of a bank account;
- ▲ Ownership of another dwelling, land ownership;
- ▲ A servant living in the household.

For the Roma sample, instead of motor boat and a servant living in the household:

- ▲ Ownership of the primary dwelling;
- ▲ Number of persons per bedroom;
- ▲ Ownership of livestock, cattle, milk cows or bulls, goats, sheep, chickens, other poultry, pigs and bees.

For the purposes of this study, all persons/children living in households within the first quintile of the wealth index are considered the poorest, while the persons from the other four quintiles are considered 'other'. As the quintiles split the total investigated sample into five equal parts, the share of households treated as the poorest is 20 per cent. For the Roma sample this threshold is set at 60 per cent: the lowest three quintiles of the wealth index are considered the poorest. However, as the households differ in number of children, this does not necessarily mean that the share of poorest children will also be 20 per cent and 60 per cent, respectively. If children from the MICS samples tend to live in poorer households, there might be more than 20/60 per cent of them. If their households are better off, there will be less than 20 per cent or 60 per cent of them.

Table 1. Distribution of children aged 0–17 in the wealth index quintiles, national and Roma samples, MICS 2019

Wealth index quintile	% of children from national sample	% of children from Roma sample
Poorest	16.7	23.2
Second	18.8	22.4
Middle	19.7	20.2
Fourth	21.2	18.2
Richest	23.5	16.1

One of the reasons for the higher incidence of poverty among Roma children than in the national sample is that on the national level better-off families tend to have more children, while among Roma poorer families have more children. The average number of children in families from the poorest quintile of the national sample is 0.31 and in the families from the richest quintile it is 0.67. Inversely, in the Roma sample the average number of children in the families from the poorest quintile is 1.99, while in the top wealth quintile it is 1.48.

Another point here with regard to the analysis of child poverty primarily through the wealth index is that in order to check if the bottom wealth quintile in the national sample and lower three quintiles in the Roma sample really distinguish between worse-off and better-off children (or the division line should be set at another point), we conducted a brief descriptive analysis of internal validity of the indicators. We compared wealth index deciles and wealth index quintiles in a few variables that indirectly measure the economic position of the households.⁷ These are the following variables:

1. ST3\$1 (if anyone from the household ever received financial social assistance)
2. HC20A (if the household has income from a job salary)
3. HC20F (if the household has income from social benefits: financial social assistance, child allowance, etc.)
4. HC20H (if the household has no source of income)
5. MD8 (if, in the past year, the household has been unable to pay utility bills on time due to financial difficulties)
6. MD14 (if the household can afford to keep its home adequately warm).

⁷ The results of this analysis are presented in Annex 1.

The national sample showed (Tables 1 and 2 in Annex 1) that it is the lowest decile that is most distinct from the other nine deciles in all six tested indicators. However, conducting further analysis by comparing a single decile to the others would produce a lot of statistical insignificance due to the small subsample size (there are only 392 cases in the first decile). Therefore, it is helpful that the analysis showed that the bottom quintile is also significantly different from other quintiles for all tested indicators except absence of an income in the household.⁸ Children from the lowest quintile of the wealth index live in households that receive social financial assistance significantly more often than others, have income from a job less often, have more problems paying utility bills and more problems providing adequate heating in their homes.

The above picture is not so coherent in the Roma sample (Tables 3 and 4 in Annex 1). There, a statistically significant difference appears between the sixth and seventh decile in some indicators and between the seventh and eighth decile in others. This makes the use of quintiles as distinction points more difficult because sometimes the statistically significant difference is between the third and fourth quintile and sometimes between the fourth and fifth quintile. Under these circumstances there are two reasons to split the Roma sample into the lowest 60 per cent and others regarding the wealth index. Once again the issue of small subsample appears (if the top quintile were compared with the other four, there would be only 532 cases in that subsample). The other reason to compare the lowest three quintiles with others is that this is how this analysis was done in the main national report and also in the child poverty report published during MICS 5 (2014).

The other main indicator used in this report — ‘equivalised disposable income’ — is the total income of a household, after tax and other deductions, that is available for spending or saving, divided by the number of household members converted into equalized adults; household members are equalized or made equivalent by weighting each according to their age, using the modified OECD equivalence scale.

Equivalised disposable income is calculated in three steps:

1. All monetary income received from any source by each member of a household is combined. These include income from work, investment and social benefits, plus any other household income. Taxes and social contributions that have been paid are deducted from this sum.
2. In order to reflect differences in household size and composition, the total (net) household income is divided by the number of ‘equivalent adults’, using a standard (equivalence) scale: the modified OECD scale. This scale gives weights to all members of the household (and then adds these up to arrive at the equivalised household size):
 - ▲ 1 to the first adult;
 - ▲ 0.5 to the second and each subsequent person aged 14 and over;
 - ▲ 0.3 to each child aged under 14.
3. The resulting figure is called the equivalised disposable income and is attributed equally to each member of the household.⁹

In order to bring the analysis of monetary poverty closer to the methodology used for assessment of poverty based on MICS data, with EU-SILC data we do not use an at-risk-of-poverty indicator, but the lowest 20 per cent of equivalised disposable income. We compare children from households within the lowest income quintile to children from other families in Serbia.

Finally, in the report, the term ‘child’ refers to all children 0–17 years old, although we do not have all the indicators for all children of this age, but rather for specific age groups. The MICS focuses on children under 5 and women 15–49 years old, so the different age groups will be analysed for different aspects.

⁸ This indicator is non-discriminative because more than 98 per cent of households in each decile have at least one source of income.

⁹ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Equivalised_disposable_income

The samples

As stated in the main MICS 2019 report for Serbia, a nationally representative sample was designed to provide estimates for progress against a large number of situational indicators for children and women at the national level, for urban and other¹⁰ areas, and four regions: Belgrade, Vojvodina, Sumadija and Western Serbia, and Southern and Eastern Serbia. The urban and other areas within each region were identified as the main sampling strata and the households sample was selected in two stages. Within each stratum, a specified number of census enumeration areas (EAs) were selected systematically with probability proportional to size. After a household listing was carried out within the selected EAs, the listed households were divided into households with and without children under 5, and a separate systematic sample of households was selected for each group, with an oversampling strategy of households with children under 5. At the national level a total of 8,101 households were selected: 2,425 households with children and 5,676 households without children. The 2019 Serbia MICS sample is not self-weighting. For reporting results, sample weights were used.

The Serbia Roma settlements sample was designed to provide estimates for a large number of situational indicators of children and women in Roma settlements, at the national level and for urban and other areas. The urban and other areas within the four regions were identified as the main sampling strata, and the sample was selected in two stages. The primary sampling units (PSUs) selected at the first stage were the census EAs which had at least 20 Roma households each. Within each stratum, a specified number of EAs were selected systematically with probability proportional to size. After a household listing was carried out within the selected EAs, a systematic sample of households was selected in each sample EA. A total of 1,934 Roma households were selected in Roma settlements: 1,196 with children 0–17 years old and 738 without children. The 2019 Serbia Roma settlements MICS sample is not self-weighting. For reporting of the results, sample weights were used.

The analysis in this report is based on national and Roma subsamples of households with children 0–17 years old. For specific indicators measured through the separate questionnaires for children, the analysis is based on subsamples of children 0–4 and 5–17 years old. In the former case, all children aged 0–4 years living in the households from the ‘main’ sample were selected, while in the latter, one child from sampled households was selected. Such a procedure provided on one hand a national subsample of 1,967 eligible children and a Roma subsample of 1,096 eligible children 0–4 years old, and on the other hand a national subsample of 1,824 and Roma subsample of 1,010 eligible children 5–17 years old. However, one important note should be made here. The major indicator for analysis of child poverty (the wealth index) is calculated at the level of the household. Also, most of the variables that we use for explanation of drivers of child poverty and description of its characteristics are also calculated at the level of the household (e.g., area of residence, occupation, education, ethnicity and activity status of the household head, number of household members and number of children in the household, material deprivation indicators, housing deprivation indicators, etc.). Therefore, indicator values are valid for ALL children in the household and not only those eligible for the questionnaires designed for 0–4 and 5–17 year-old children. For this reason, most of the statistics presented in this report are calculated for the sample of ALL children in selected households and for ALL households that gave answers to relevant questions. Consequently, the number of valid households in the national sample is 2,662 and the number of children aged 0–17 is 4,741. In the Roma sample, there are 1,196 households and 3,270 children aged 0–17 valid for analysis of child poverty through most of the indicators.

For the EU-SILC survey, a two-stage stratified, rotational panel sample design is used. The sampling frame is based on census data, where units of selection in the first stage are census EAs, while in the second stage units of selection are households. Census units are stratified according to type of settlement (urban/rural) and statistical region (NUTS2 level). In the first stage, within each stratum, a specified number of census EAs were selected systematically with probability proportional to size. In the second stage a simple random selection of households is implemented. In the harmonized data sets for year 2019 there are data for 5,130 households and 13,733 individuals presented. In the households with children there were 2,776 children 0–17 years old, creating the subsample for our analysis.

¹⁰ Official statistics in Serbia do not include a specific definition for rural settlements. Instead, an ‘administrative-legal’ criterion is applied that designates settlements as either ‘Urban’ or ‘Other’. Urban settlements are recognized as such by an act of the local self-government, with all other settlements falling into the category of ‘Other’.

DETERMINANTS, CHARACTERISTICS AND OUTCOMES OF CHILD POVERTY IN SERBIA: MICS 2019, NATIONAL SAMPLE

The first important finding is that in the national sample there is 16.7 per cent of poor children 0–17 years old.¹¹ These are children from households (HH) falling into the lowest quintile of the composite index of wealth. No significant difference was found between different age categories in this regard: children 0–4, 5–14 and 15–17 years had an equal chance of falling into the bottom quintile of the wealth index in Serbia in 2019 (see Table 2). Also, there is no difference between girls and boys regarding poverty. For this reason, we proceed with analysing the impact of other tentative determinants of poverty.

Determinants of child poverty — national sample

In this chapter we present the impact of tentative determinants on child poverty. We search for significant differences in the poverty rate between various regions, areas (urban and other), varying mother's education, ethnicity and activity of the HH head, size of HH and number of children in HH. After this bivariate analysis we move on to a multivariate analysis where the impact of interaction between the above-mentioned variables on child poverty in Serbia is analysed.

Table 2. Social determinants of child poverty

Percentage of poor children aged 0–17 within different social categories, Serbia, 2019

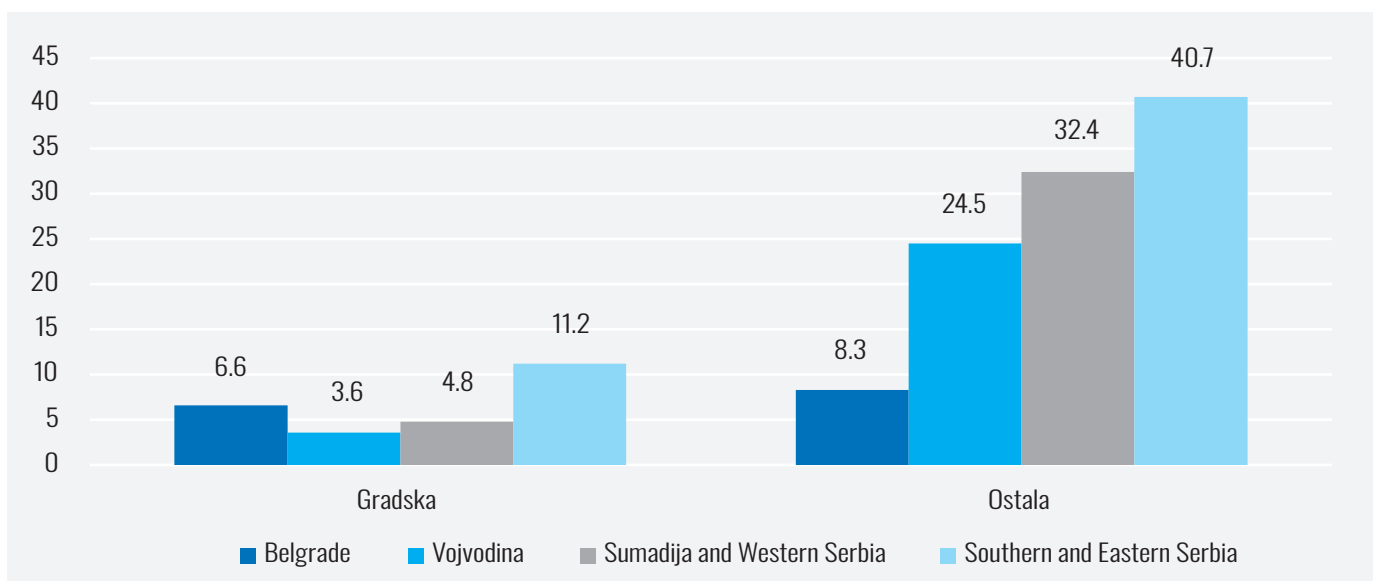
		Other	Poorest 20%
Total		83.3	16.7
Area	Urban	93.6	6.4
	Other	70.5	29.5
Region	Belgrade	93.0	7.0
	Vojvodina	87.1	12.9
	Sumadija and Western Serbia	79.8	20.2
	Southern and Eastern Serbia	74.4	25.6
Ethnicity of household head	Serbian	88.4	11.6
	Hungarian	81.9	18.1
	Bosnian	56.4	43.6
	Roma	13.2	86.8
	Other/Does not want to declare	93.1	6.9
Mother's education	Primary or none	41.1	58.9
	Secondary	86.5	13.5
	Higher	97.5	2.5
Activity status of household head	Employed	86.1	13.9
	Unemployed	65.0	35.0
	Inactive	79.9	20.1

¹¹ This is just slightly less than the 17 per cent of poor children in the 2014 MICS national sample (UNICEF, 2015).

		Other	Poorest 20%
Size of household	Single parent HH	85.5	14.5
	3–4 members	90.1	9.9
	5+ members	79.7	20.3
Sum of children 0–17	1.00	86.2	13.8
	2.00	87.7	12.3
	3+	73.5	26.5
Child 3 age categories	0–4	82.4	17.6
	5–14	83.9	16.1
	15–17	82.6	17.4
Child 2 age categories	0–4	82.4	17.6
	5–17	83.7	16.3
Sex	Male	83.4	16.6
	Female	83.2	16.8

Child poverty significantly varies across categories of all selected variables except age and sex. However, not all of the selected determinants are equally impactful on child poverty. The impact of area of residence is very strong with 6.4 per cent of urban children being poor, while this figure is 29.5 per cent for children living in rural families. The difference among the regions¹² is also important: Belgrade children face poverty much less frequently than children from Sumadija and Western Serbia and Southern and Eastern Serbia. Children from the region of Vojvodina are somewhere between these two groups. As these are, to certain extent, two overlapping geographic and social determinants,¹³ we also checked for interaction between area and region variables. The results show that area is more important than region. Specifically, urban parts of all four regions do not differ in child poverty, while among ‘other’, non-urban areas it is only the Belgrade region settlements that induce significantly less child poverty than non-urban areas from other NUTS2 regions (see Table 1 in Annex 2).

Figure 3. Share of children aged 0–17 from the lowest 20 per cent of families on wealth index, according to region and area of residence, in per cent

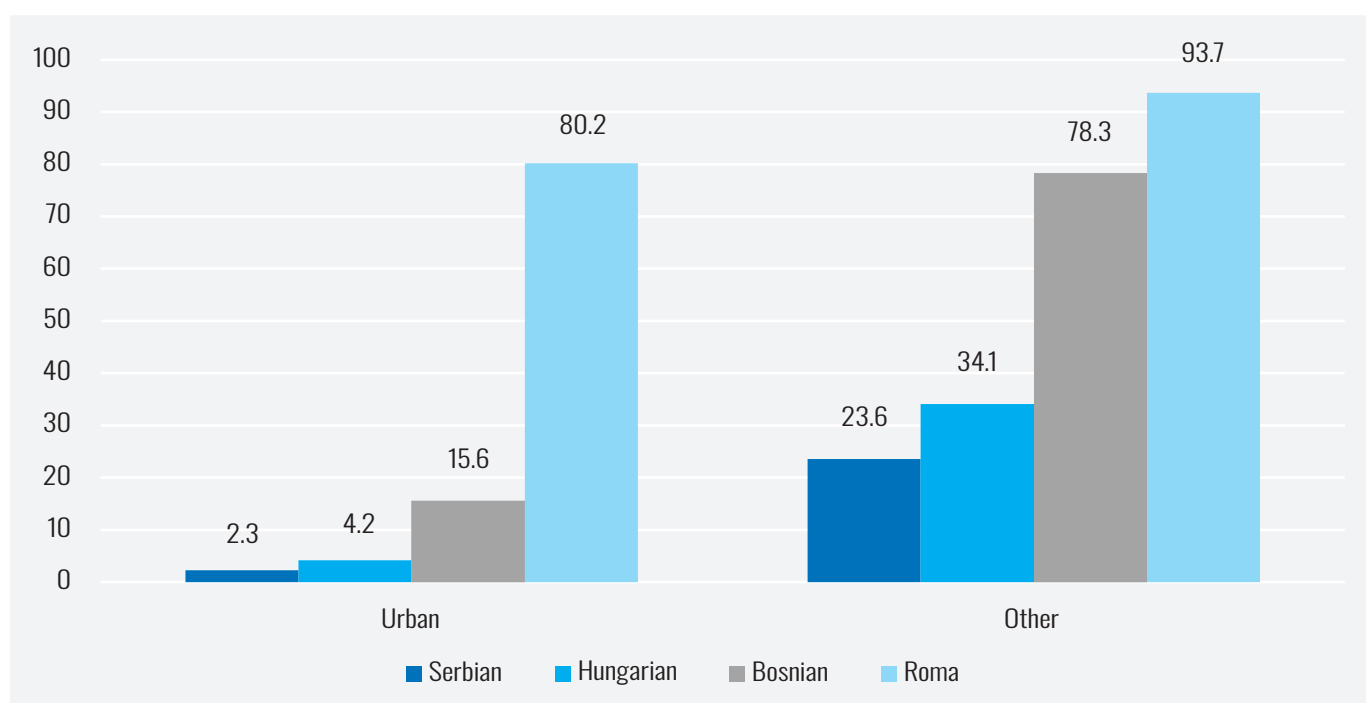


¹² Here the official NUTS2 classification in Serbia is applied.

¹³ 73% of children from households with children in Belgrade region live in urban settlements, while this share in the region of Western Serbia and Sumadija is 40.4%.

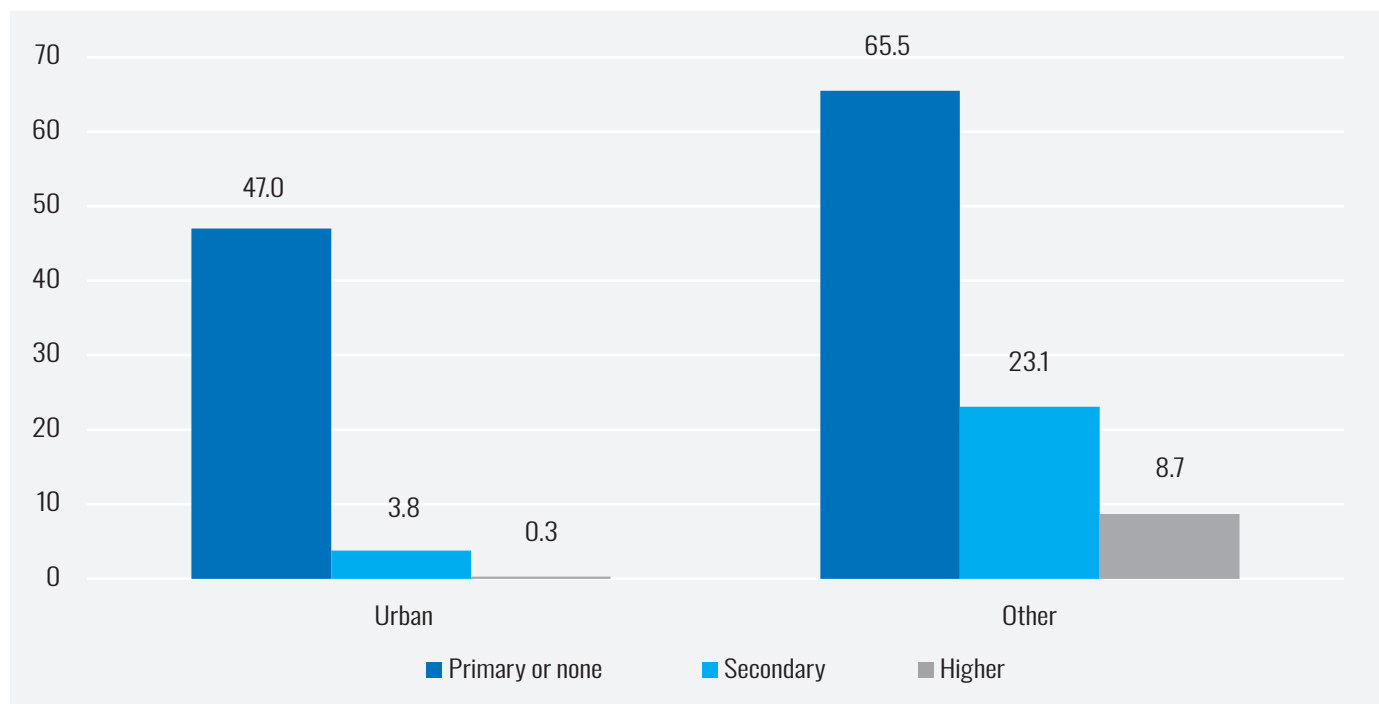
The next important determinant of child poverty is the ethnicity of the HH head. Here children from Roma HHs face significantly higher poverty than other ethnic groups that appear in sufficiently large numbers in the sample (Serbs, Hungarians and Bosniaks). This variable interacts with the area of residence as well (see Table 2 in Annex 2). In urban areas it is children from Roma HHs that are significantly poorer, but in non-urban (other) areas they are joined by Bosniak children. Non-urban children from these two minority groups are significantly poorer than children from Serbian families, and children from Roma families are also poorer than those from Hungarian families.

Figure 4. Share of children aged 0–17 from the lowest 20 per cent of families on wealth index, according to ethnicity of household head and area of residence, in per cent



Another strong impact on child poverty comes from the mother's level of education. The three levels of education — primary (or none), secondary and tertiary — are distinct regarding child poverty. Children whose mothers have tertiary education live in a family from the poorest quintile in 2.5 per cent of cases. Those whose mothers have completed secondary school are poor in 13.5 per cent of cases, while this figure is much higher among those of low educated or uneducated mothers — 58.9 per cent. A mother's education is such a strong determinant of a child's poverty that the three levels mentioned above are clearly distinguished both in urban and other areas, but the poverty of children is more pronounced in non-urban areas (see Table 3 in Annex 2). Among urban children whose mothers are highly educated, poverty is almost non-existent, while among non-urban children of such mothers the share is 8.7 per cent. The impact of urban level is most obvious among mothers with a secondary education: if they live in urban areas, poverty among their children is 3.8 per cent, but if they live in non-urban areas, where their possibilities for employment and income generation are much smaller, poverty among their children is as much as 23.1 per cent.

Figure 5. Share of children aged 0–17 from the lowest 20 per cent of families on wealth index, according to region and mother’s education level, in per cent



A mother’s level of education is a significantly strong determinant both in HHs where the head is of Serbian ethnicity and in those where the head belongs to an ethnic minority (Hungarian, Bosniak or Roma) (see Table 3 in Annex 2). Better educated mothers live with less poor children, but child poverty among mothers with primary or no education is less pronounced if the head of HH is of Serbian origin: 42.6 per cent compared with 71.7 per cent if the head of HH belongs to an ethnic minority.

Impact of employment status of the HH head on child poverty is expected. In the 2019 MICS in Serbia, it is recognized in a significantly smaller share of poor children in HHs whose head is employed than in those where heads are unemployed or inactive. It is interesting, though, that this difference is not recognized in urban areas where child poverty is small, but in non-urban areas (see Table 1 in Annex 1). There the difference in poverty is significant between children whose HH heads are unemployed and children whose HH heads are employed. Children from non-urban areas whose HH heads are economically inactive are somewhere between these two categories.

HH composition¹⁴ showed some impact on child poverty, meaning that children from HHs with 5 or more members show higher poverty incidence than children from HHs with 3–4 members (but not significantly higher than children from single-parent HHs). The picture is similar concerning the number of children in the family, where HHs having 3 or more children are significantly poorer than others.

¹⁴ Here we constructed a new variable distinguishing single-parent HHs, HHs with 3–4 members and HHs with 5 and more members.

Characteristics of child poverty — national sample

In this chapter we describe child poverty in Serbia in more detail. Poverty is a multidimensional phenomenon. Besides financial aspects, it appears also in material deprivation, housing deprivation and living conditions. The following pages present how children living in HHs from the lowest wealth index quintile differ from the rest in structure of income sources, in receiving child allowance, school support and external financial support, as well as in available assets, housing and environmental conditions.

Financial aspects

Table 3. Various income characteristics of child poverty

Percentage of difference in categories within poor and not poor children aged 0–17, Serbia, 2019

		Others	Poorest 20%	Total
Total		100.0	100.0	100.0
Received assistance through Financial Social Assistance — FSA	Yes	5.0	29.9	9.2
	No	95.0	70.1	90.8
Any household member own bank account	Yes	97.4	64.7	92.0
	No	2.6	35.3	8.0
Salary from job	No salary	11.7	33.1	15.3
	Salary	88.3	66.9	84.7
Income from self-employment	No income	73.9	78.6	74.7
	Income from self-employment	26.1	21.4	25.3
Property income	No income	95.9	95.0	95.8
	Property income	4.1	5.0	4.2
Pension	No pension	60.7	65.9	61.5
	Pension	39.3	34.1	38.5
Unemployment benefits	No benefits	99.2	99.7	99.3
	Unemployment benefits	0.8	0.3	0.7
Social benefits	No benefits	81.0	55.4	76.7
	Social benefits	19.0	44.6	23.3
Activity status of household head	Employed	68.9	55.6	66.6
	Unemployed	3.7	9.9	4.7
	Inactive	27.5	34.5	28.6

Earlier we stressed that the activity status of HH head is one of the determinants of child poverty. An additional description of this characteristic shows that children from the lowest quintile do not differ significantly from other children in their HH's head being inactive. However, poorer children live more often in HHs whose heads are unemployed, while better-off children live more often in HHs whose heads are employed. As a consequence, income from employment is more frequent in HHs of better-off children. However, this difference is not recognized in income coming from self-employment, but in salary from a job. This means, on one hand, that income from self-employment is generally low in Serbia and on the other that having a good salary from a job with an employer makes an important difference between lower quintile HHs and others. This is additionally confirmed by the finding that children from the poorest 20 per cent of HHs and children from other HHs do not differ significantly in their HHs' having income from a pension, which leaves salary from a job as the single main financial distinguisher between the poorest and other HHs. Related to this is the finding that poorer children live more often in HHs whose heads are unemployed, while better-off children live more often in HHs whose heads are employed.

Inversely related to the above conclusion about the importance of salary from a job is the finding that HHs of the poorest children receive financial social assistance much more frequently than HHs of other children (six times more frequently). They also receive social benefits more often. The two groups do not differ in their HHs' receiving income from property or in the form of unemployment benefits, one of the reasons being that both of these are very rare.

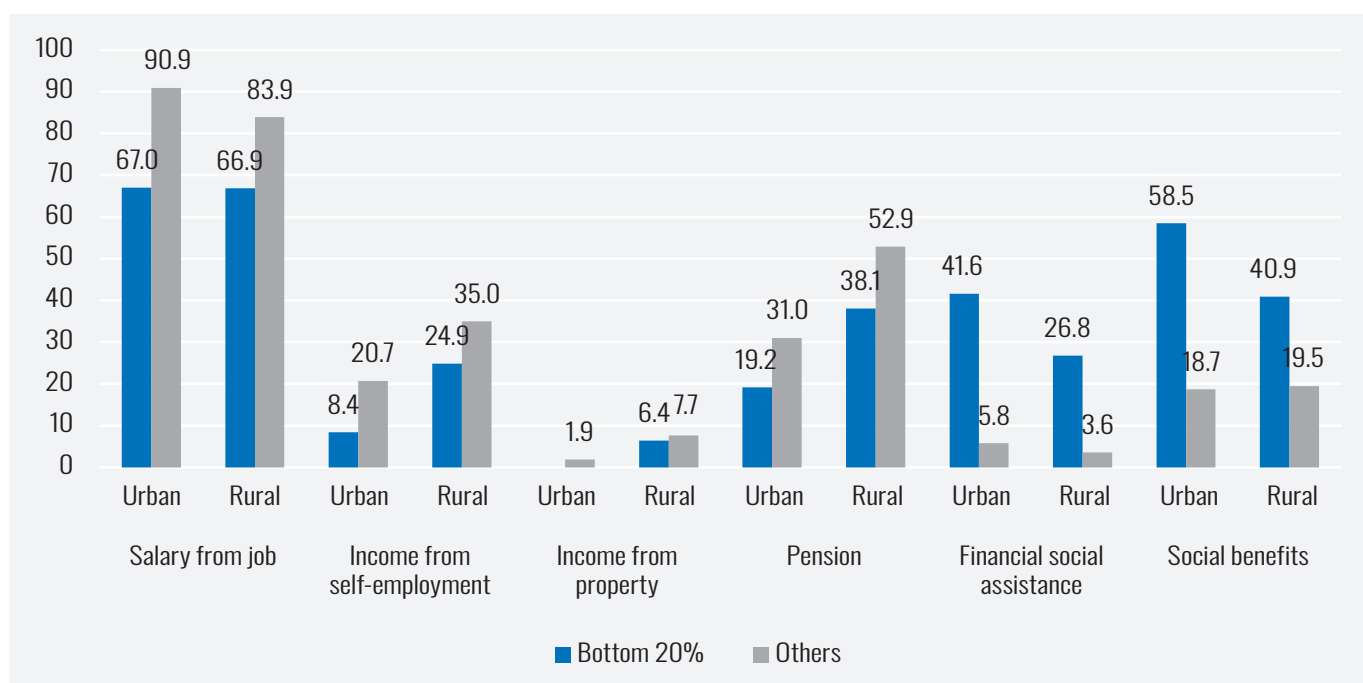
Another characteristic of more affluent HHs with children is that some of their members have a bank account — this is valid for 97.4 per cent of children living in these HHs, while this figure for children from the poorest HHs is 64.7 per cent.

An earlier finding is that area of residence (urban/other) is a very important determinant of child poverty. Here we describe the aforementioned indicators in urban and other areas. Firstly, it is important that children from the poorest 20 per cent of HHs in other (rural) areas do not differ significantly from children from other HHs with regard to inactivity and employment of their HH heads, but they do differ with regard to unemployment. Ten per cent of children from the bottom quintile HHs in rural areas are in HHs whose HH head is unemployed, while in the upper four quintiles the share of children whose HH heads are unemployed is 3 per cent. This turns out to be the most important difference in activity status of HH head with regard to area of residence, as in urban areas the poorest and other children do not differ in HH head's activity status in a statistically significant way.

However, when it comes to a salary from a job as the HH's income source, children from the bottom 20 per cent wealth index HHs both in urban and other areas live with a HH head who receives income from a salary much more rarely than other children. In urban areas, in the lowest quintile, 67 per cent of children's HH head receives a salary from a job, while this figure is 90.9 per cent among children from other HHs. In rural areas, 18.7 per cent of children from the lowest quintile HHs have a HH head who receives a salary from their job, and among other children 58.5 per cent live with such a HH head.

Inversely to the above, financial social assistance is an important source of income for the bottom 20 per cent of HHs — much more than for other HHs, both in urban and other areas. It is present in the bottom 20 per cent of HHs in urban areas in 41.6 per cent cases and in other HHs in 5.8 per cent of cases. In rural areas, 26.8 per cent of children from the bottom quintile HHs enjoy this social transfer, while this figure among other rural HHs is 3.6 per cent. The same stands for receiving social benefits: it is more frequent among poorer children both in urban and rural areas.

Figure 6. Shares of children aged 0–17 from the bottom 20 per cent wealth index and other HHs whose HHs have income from different sources, urban and rural, in per cent



Disaggregation by area of residence reveals three more findings that were not obvious when describing the income structure of the whole sample. Namely, there is statistically significant difference between children from the bottom 20 per cent wealth index HHs and other children when it comes to income from pension, property and self-employment. Income from self-employment and property gives an advantage to children from better-off HHs in urban areas, while income from pension gives advantage to children from better-off HHs in rural areas. Such relative importance of a pension confirms its significance for welfare of rural HHs.

The next important issue regarding financial aspects of child poverty is child allowance (CA). We present the difference between the poorest 20 per cent and other children in the share of children who received CA and reasons for not submitting or not renewing a CA application.

Table 4. Child allowance (CA)

Percentage of children aged 0–18 years for whom households received CA, percentage of children for whom households received CA for at least 12 months, and the percentage distribution of children by main reason for household non-submission or renewal of an application for CA in the past 12 months, Serbia, 2019

	Total	Poorest 20%	Others
Percentage of children for whom households received CA [1][A]	30.8	57.5	25.9
Percentage of children for whom households received CA, for at least 12 months [2][B]	23.7	43.2	20.1
Number of children aged 0–18 years	3,223	499	2,724
Percentage distribution of children for whom an application for CA was not submitted or renewed in the past 12 months according to the main reason for non-submission or renewal			
Did not need any	28.5	14.0	29.9
Did not know how to apply	1.5	2.7	1.4
Complicated administrative procedure	3.9	7.0	3.6
Expensive administrative procedure	0.6	1.9	0.5
Know that they do not meet the conditions	47.3	35.8	48.4
Were told they do not meet the conditions	16.9	32.7	15.4
Other	0.5	1.9	0.4
Missing	0.7	4.0	0.4
Total	100	100	100
Number of children aged 0–18 years for whom an application for CA was not submitted by the household in the past 12 months	2,121	189	1,933

[1] MICS indicator EQ.S2 — Children for whom households received child allowance

[2] MICS indicator EQ.S3 — Children for whom households received child allowance for at least 12 months

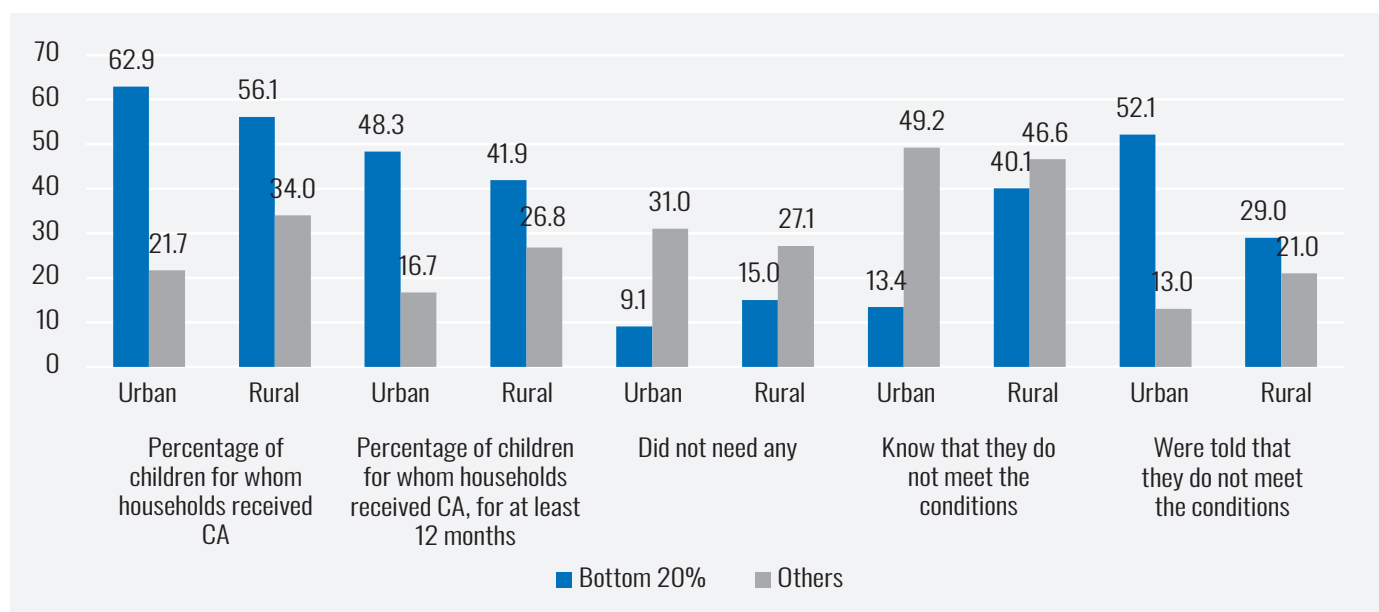
[A] Children for whom the household received CA are those for whom an application was submitted or renewed in the past 12 months, and for whom the application was approved.

[B] Children for whom the household received CA for at least 12 months are those for whom an application was submitted or renewed in the past 12 months, for whom the household receives CA and has been doing so for more than 12 months.

The share of children whose HHs received CA, either recently or in the last 12 months, was more than double among the children from the poorest quintile than among other children. This form of cash benefit provided under the social welfare and child protection system is obviously very important for the poorest HHs. Consequently, among them half as many said they did not apply for CA because they did not need it than among the better-off HHs. They rather mentioned other reasons (much more than HHs from the other four quintiles), like expensive administrative procedure, complicated administrative procedure and, most notably, that they were told they did not meet the conditions (in numbers similar to those from the MICS 5 report on child poverty — UNICEF, 2015: 98). The fact that one third of children who live in 20 per cent of the poorest HHs do not benefit from CA and lack this support because their parents were told that they did not meet conditions points to a well-known fact that monetary social assistance measures in Serbia are well targeted but narrow in scope.

We arrive at some interesting conclusions when we introduce the area of residence as an intervening description variable. As stated earlier, a low wealth index score is more frequent in rural areas. As a result, not only do rural HHs with children receive CA, or received it in the last two months, more frequently than urban HHs with children, but in rural areas the difference between children from the lowest wealth index quintile and others is smaller than in urban areas. However, the issue in which urban and rural HHs do not differ significantly is the main reason for those who did not apply for CA: because they knew they did not meet the conditions for it. However, while in urban areas this is valid significantly more for HHs above the lowest wealth index quintile, in rural areas both the lowest quintile and the others choose this answer frequently. On the other hand, the poorest 20 per cent of HHs in urban areas more frequently state that they were told they did not meet the conditions than upper quintiles. In rural areas, again there is no difference in this regard between the poorest HHs and others.

Figure 7. CA beneficiaries and reasons for not receiving a CA among those who did not apply, by region of residence, in per cent



Note: Bolded values are based on 25–49 cases.

The next characteristic of child poverty noted under financial aspects is school-related support.

Table 5. Coverage of school support programmes: Members aged 5–17 in households with children

Percentage of children and young people aged 5–17 years in households with children who are currently attending primary education or higher who received support for school tuition and other school-related support during the 2019/20 school year, Serbia, 2019

	Education related financial or material support			No school support	Number of household members aged 5–17 years currently attending primary education or higher
	Subsidy (kindergarten), scholarship or school tuition	Other school-related support	Subsidy (kindergarten), scholarship, school tuition or other school-related support [1]		
Total	2.1	10.3	11.9	88.1	14,803
poorest quintile	1.4	18.0	18.8	81.2	2,471
and others	2.3	8.8	10.5	89.5	12,332

[1] MICS indicator EQ.6 — Support for school-related support

As the total share of children who received a kindergarten subsidy, school tuition or scholarship is very low, the difference between children from the poorest quintile and other children is not statistically significant. However, there are significantly more children from the bottom wealth index quintile than other children who receive other school-related support, which makes scores on MICS indicator EQ.6 significantly different in favour of the poorest children.

Finally, we also wanted to see if respondents from the poorest 20 per cent of HHs are more aware and more frequently use external economic support (MICS indicator EQ.2.4).

Table 6. Awareness and use of external economic support by area of residence

Percentage of household questionnaire respondents from households with children who are aware of and report having received external economic support, Serbia, 2019

Area			Percentage of household questionnaire respondents who:		Number of households	
			are aware of economic assistance programmes	are aware of and report household having ever received assistance/ external economic support		
Area	Urban	Total		100.0	53.0	8,182
	Other	Total		99.7	75.9	6,621
Area	Urban	Poorest quintile and others	Poorest 20%	100.0	88.8	520
			Others	100.0	50.6	7,662
	Other	Poorest quintile and others	Poorest 20%	100.0	82.5	1,951
			Others	99.6	73.2	4,670

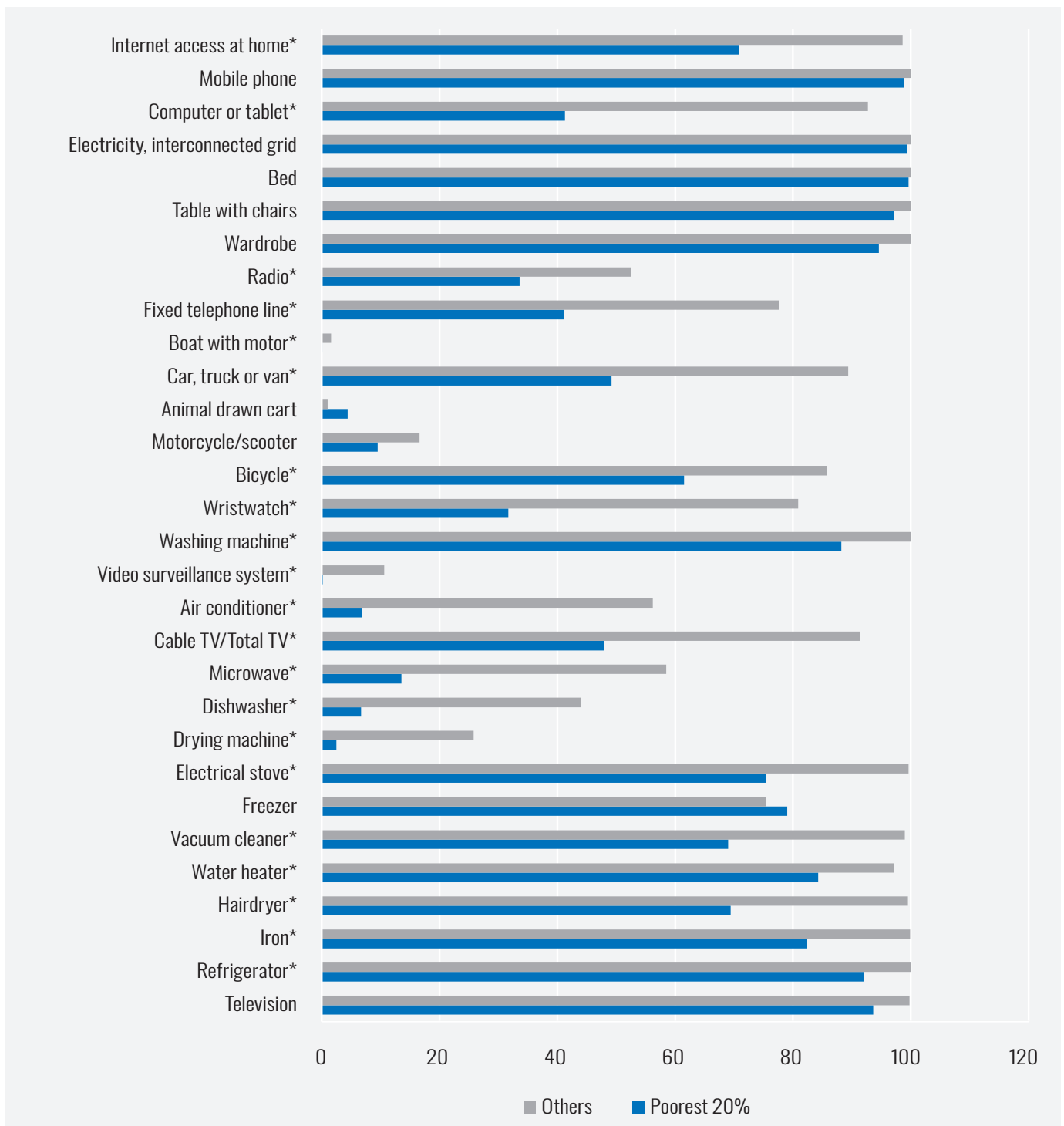
All HHs are aware of economic assistance programmes. However, there is a significant difference in the share of those receiving one between the lowest wealth index quintile and others. The fact that this difference is produced more by the gap between urban HHs shows once again that poverty issues are spread more widely in rural areas than urban (in rural areas the gap between the lowest 20 per cent and other HHs is not statistically significant).

Assets ownership

The Wealth Index, which we use as the main indicator of poverty in this report, already includes many indicators based on assets owned by a HH or its members. However, it is also useful to describe which individual assets are (un)available to children in the poorest and other HHs. Here we present the share of 0–17-year-old children from HHs with children who have various assets at their disposal.

The first conclusion from Figure 8 is that most of the items are less available to children from the lowest wealth quintile than to other children. It is really the basic HH assets that are equally available to the poorest children, like a wardrobe, bed, table with chairs, TV and electricity. Even the mobile telephone could be considered a basic asset given its dispersion around the globe. There are some peculiarities. Although a lot of poorer HHs have a refrigerator, it is significantly less than among non-poor HHs, where it is available in 100 per cent of HHs. On the other hand, the poorest 20 per cent and other HHs do not differ significantly in owning a freezer. Supposedly, this is because most of the richer HHs tend to buy fresh food and many poorer HHs buy food at cheaper prices and keep it in a freezer. Mobile telephones can provide access to the internet and thus compensate to some extent for the gap in having computers and access to the internet. However, this prevents digital inclusion of the poorest children, which became obvious with online classes during the COVID-19 pandemic. Finally, the fact that so many poorer HHs lack an electrical stove, although all of them have electricity in the HH, points to the fact that they are turning to cheaper energy, which in Serbia is usually wood.

Figure 8. Shares of children aged 0–17 from the lowest wealth index quintile and other children having household and personal assets available, in percentages



Note: * denotes statistically significant difference.

When disaggregating by area of residence (urban/rural) we noticed only three deviations from the picture presented in Figure 8. First, in urban areas there is no statistically significant difference between the poorest and other HHs in owning a water heater. Second, a statistically significant difference in owning an animal-drawn cart comes from the fact that 0.4 per cent of better-off HHs in urban areas own one compared with 0 among the poorest 20 per cent! Third, there is a statistically significant difference in owning a freezer in rural areas: 83.3 per cent of poorest quintile HHs own one, while this figure among other HHs is 94.2 per cent. Finally, to add to the earlier mentioned issue of digital inclusion of poor children, it is worth noting that even in rural areas children from families that are above the bottom 20 per cent have good prospects in this regard. Here, 93.8 per cent of them have a computer or tablet available and 98.2 per cent have access to the internet.

Housing and environment

Housing conditions are usually one of the most obvious aspects of poverty and, at the same time, very important for the health and development of children. One of the indicators of housing conditions is ownership of a housing unit: a circumstance that can affect the overall financial situation of the HH, stability and security of living conditions. Another indicator is quality of housing: a set of sub-indicators that show if a HH is living safe from moisture, darkness, rot, etc.

There is yet another, more general aspect of housing conditions related to the immediate environment in which children are living. In MICS it is presented through questions about the problems related to where the HH lives: too much noise from the outside, air or water pollution in the local area, and crime, violence and vandalism.

Table 7. Housing characteristics

Percentage distribution of children aged 0–17 by selected housing characteristics, Serbia, 2019

		Total	Poorest quintile and others	
			Poorest 20%	Others
Total		100.0	100.0	100.0
Household owns the dwelling	Own	92.2	91.0	92.4
	Rent	7.8	9.0	7.6
Dwelling problem: Leaking roof	Yes	14.0	35.3	9.8
	No	86.0	64.7	90.2
Dwelling problem: Dampness	Yes	23.4	50.8	18.0
	No	76.6	49.2	82.0
Dwelling problem: Rot	Yes	14.5	43.1	8.8
	No	85.5	56.9	91.2
Dwelling too dark	Yes	10.3	16.4	9.1
	No	89.7	83.6	90.9
Dwelling has shower unit or bathtub	Yes	96.9	82.4	99.8
	No	3.1	17.6	0.2
Household replace furniture when worn out or damaged	Yes	66.6	30.4	73.8
	No	33.4	69.6	26.2
HH deprived of indoor flush toilet and indoor shower or bathtub	No	97.1	82.9	100.0
	Yes	2.9	17.1	0.0

		Total	Poorest quintile and others	
			Poorest 20%	Others
HH has leaking roof or damp walls, floor or foundation or rotten window frames or floor	No	69.7	37.5	76.2
	Yes	30.3	62.5	23.8
Problems in place: Noise	Yes	17.3	12.0	18.4
	No	82.7	88.0	81.6
Problems in place: Environment	Yes	31.1	21.8	32.9
	No	68.9	78.2	67.1
Problems in place: Crime	Yes	11.1	4.9	12.3
	No	88.9	95.1	87.7

Children aged 0–17 years from the bottom 20 per cent wealth index HHs do not differ from other children regarding ownership of the housing unit: 91 per cent of the former and 92.4 per cent of the latter own their housing unit. With such a large percentage of ownership there is no significant difference in urban and rural areas, either. However, other indicators show a significant difference in the way that the poorest children suffer much worse quality of housing, while other children suffer more from environmental risks (pollution and crime/violence).

In order to synthesize indicators of housing quality, we calculated two composite indicators in accordance with SILC methodology:

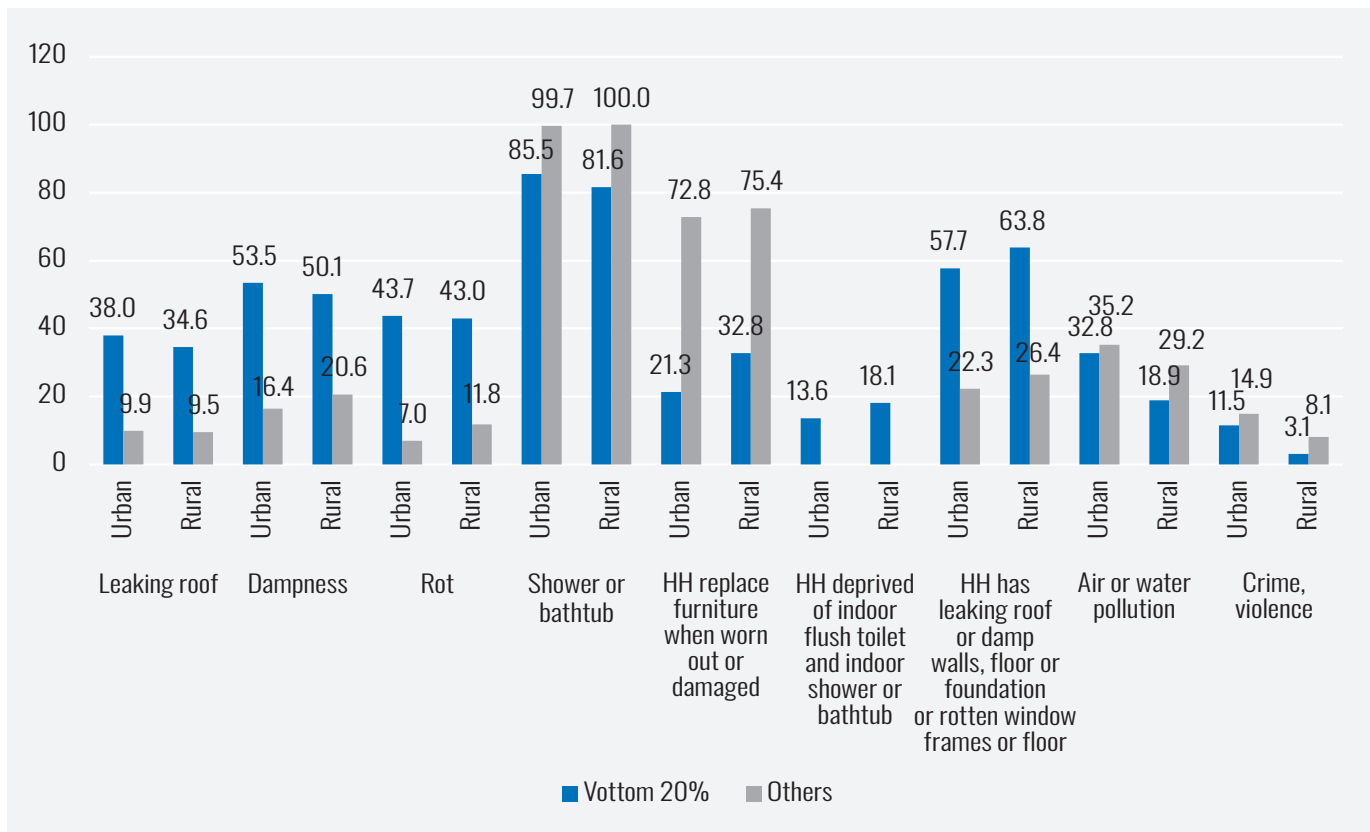
1. HHs that are deprived of indoor flush toilet and indoor shower or bathtub.
2. HHs that have at least one of the following problems:
 - ▲ leaking roof;
 - ▲ damp walls, floor or foundation;
 - ▲ rotted window frames or floor.

The only housing quality indicator in which the poorest children do not differ from other children is the dwelling being too dark (which is another SILC indicator of housing deprivation). In all other indicators, including the two composite indicators mentioned above, children from the poorest 20 per cent of HHs stand worse than other children.

On the other hand, outer noise is the only housing environment indicator for which the poorest and other children live in similar conditions. Concerning air or water pollution and crime, violence and vandalism in local areas, better-off HHs suffer from worse living conditions than the poorest ones. This is not a surprise, knowing that poverty incidence is much higher in rural areas where pollution and crime are usually much less than in urban areas.

There are other notable differences between urban and rural areas regarding child housing deprivation from the poorest 20 per cent of HHs. Namely, a leaking roof, dampness, rot and replacement of furniture are problems for the poorest but not for other children, both in rural and urban areas. Having a shower or bath in the dwelling or having a flush toilet in the dwelling are not issues of difference between the two groups of children in urban areas. They are definitely a matter of inequality in rural areas. On the other hand, when it comes to indicators of housing environment, there is no statistically significant difference between the children from the poorest 20 per cent of HHs and other children either in urban or rural areas. Consequently, we can say that all children in rural areas live in less polluted and more crime/violence-safe environments, and children from urban areas suffer from these environmental problems more regardless of their wealth status.

Figure 9. Shares of children aged 0–17 from the bottom 20 per cent wealth index and other HHs, whose HHs suffer from specific housing and environmental deprivation issues, urban and rural, in per cent



Outcomes of child poverty — national sample

When we discuss child poverty, it is useful to approach it as a process that a child encounters at different development challenges. Family poverty affects a child's development and inclusion in society at different stages: administrative registration, nutrition, education, achievements. Some of the outcomes of child poverty that create obstacles to prosperous development are malnutrition, school dropout, early marriage and child labour.

In this chapter we see how children in the lowest wealth index quintile families differ from other children in regard to several aspects of poverty outcomes. We analyse birth registration, nutrition, child discipline, child economic activity and child labour, as well as child marriage, in order to see if the poorest children face more obstacles than other children.

Birth registration

Birth registration is not an issue when discussing child poverty in Serbia. The share of children 2–4 years old whose births have been registered with civil authorities is 99.9 per cent, both in urban and rural areas (see Table 1 in Annex 4). Not all of the children from the sample have birth certificates issued, but the share of those who do not have one is very small: 0.8 per cent in urban areas and 1.6 per cent in rural areas.

Nutrition

Eight MICS indicators are analysed here in order to see if children under age 5 from the bottom wealth index quintile are more underweight, stunted, wasted or overweight than other children. Statistically significant differences have been noted in two indicators: [3] moderate and severe stunting and [6] severe wasting. However, while a higher proportion of the poorest children are stunted (9.6 per cent of them, compared with 4.4 per cent among other children), it is other children that have a higher proportion of severe wasting than the poorest ones. It should be emphasized, though, that regarding the latter, we speak about 0 per cent of the poorest children and 0.65 per cent of other children being severely wasted. In conclusion we can say that poverty affects the growth of children and produces an increase in stunting.

Table 8. Nutritional status of children

Percentage of poor and other children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Serbia, 2019

		Weight for age		Height for age				Weight for height		
		Underweight		Stunted				Wasted		Overweight
		Per cent below		Per cent below				Per cent below		Per cent above
		-2 SD [1]	-3 SD [2]	-2 SD [3]	-3 SD [4]	-2 SD [5]	-3 SD [6]	+2 SD [7]	+3 SD [8]	
Total		1.0	0.2	5.4	1.9	2.6	0.5	10.9	2.5	
Bottom quintile of wealth index	Poorest 20%	1.5	0.0	9.6	0.6	2.6	0.0	8.9	1.2	
	Others	0.9	0.2	4.4	2.2	2.6	0.6	11.5	2.8	
Wealth index quintile	Poorest	1.5	0.0	9.6	0.6	2.6	0.0	8.9	1.2	
	Second	0.5	0.0	4.2	0.3	1.4	0.3	7.3	3.0	
	Middle	1.0	1.0	5.2	2.9	2.4	0.7	10.8	4.7	
	Fourth	0.2	0.0	4.9	2.6	4.5	1.0	13.0	1.9	
	Richest	2.1	0.0	3.0	2.6	1.6	0.4	13.8	1.9	

[1] MICS indicator TC.44a — Underweight prevalence (moderate and severe)

[2] MICS indicator TC.44b — Underweight prevalence (severe)

[3] MICS indicator TC.45a — Stunting prevalence (moderate and severe); SDG indicator 2.2.1

[4] MICS indicator TC.45b — Stunting prevalence (severe)

[5] MICS indicator TC.46a — Wasting prevalence (moderate and severe); SDG indicator 2.2.2

[6] MICS indicator TC.46b — Wasting prevalence (severe)

[7] MICS indicator TC.47a — Overweight prevalence (moderate and severe); SDG indicator 2.2.2

[8] MICS indicator TC.47b — Overweight prevalence (severe)

Note: Denominators for weight for age, height for age, and weight for height may be different.

Children are excluded from one or more of the anthropometric indicators when their weights and heights have not been measured or are implausible (flagged), or their age is not available, whichever applicable.

Another important finding here is that statistically significant differences between two groups of children regarding both of the indicators presented above (stunting and severe wasting) are actually pronounced among urban children and not among rural children (see Table 2 in Annex 4). In rural areas there is no significant difference between children from the poorest 20 per cent of families and other children for any of the presented indicators. In urban areas, two more issues appear: better-off children are more overweight and severely overweight than the poorest 20 per cent of children.

Child discipline

In regard to the disciplining of children, we analyse mothers' attitudes towards physical discipline and use of violent discipline methods in real life. Mothers of children from lowest wealth index quintile HHs do not differ significantly from mothers of other children regarding attitude towards physical discipline. However, when disaggregated by area of residence, it turns out that in urban areas all mothers have similar attitudes, but in rural areas mothers from the lowest wealth index quintile are less prone to physical punishment than mothers from other HHs: 5.7 per cent of the former and 12.4 per cent of the latter believe that physical punishment is needed to bring up, raise or educate a child properly.

When it comes to real life, even this small difference disappears. Children aged 1–14 years from the lowest wealth index quintile HHs are disciplined in the same way as children from other HHs, regardless of area of residence. Violent discipline is used on more than 40 per cent of children.

Table 9. Child discipline by area

Percentage of poor and other children aged 1–14 years by child disciplining methods experienced during the last one month, Serbia, 2019

			Percentage of children aged 1–14 years who experienced:				Number of children aged 1–14 years		
			Only non-violent discipline	Psychological aggression	Physical punishment			Any violent discipline method [1]	
					Any	Severe [A]			
Area	Urban	Total	47.9	42.5	19.7	0.5	46.8	2,115	
	Other	Total	52.0	36.2	19.2	0.9	41.2	1,407	
Area	Urban	Bottom quintile of wealth index	Poorest 20%	46.7	42.6	23.7	0.0	45.5	113
			Others	48.0	42.5	19.5	0.5	46.9	2,002
	Other	Bottom quintile of wealth index	Poorest 20%	53.8	32.5	20.6	1.1	37.7	428
			Others	51.2	37.8	18.5	0.8	42.7	979

[1] MICS indicator PR.2 — Violent discipline; SDG 16.2.1

[A] Severe physical punishment includes: 1) Hit or slapped on the face, head or ears, or 2) Beat up, that is, hit repeatedly as hard as one is able.

[B] Children aged 1 year are excluded, as functional difficulties are only collected for ages 2–14 years.

Education and development

Education is considered one of the main social mechanisms and policy areas for overcoming social inequality and poverty. Access to educational institutions and completion of educational levels are of great importance for the development of all children. This report compares access of children from the poorest 20 per cent of HHs and other children to preschool institutions, elementary schools and secondary schools, as well as transition from preschool to elementary education.

Table 10. Early childhood education

Percentage of poor and other children aged 36–59 months who are attending early childhood education, Serbia, 2019

		Percentage of children aged 36–59 months attending early childhood education [1]	Number of children aged 36–59 months
Total		60.6	746
Bottom quintile of wealth index	Poorest 20%	10.5	124
	Others	70.5	623
Wealth index quintile	Poorest	10.5	124
	Second	48.0	124
	Middle	67.4	117
	Fourth	76.7	159
	Richest	80.2	222

[1] MICS indicator LN.1 — Attendance to early childhood education

The above data show that preschool attendance sharply increases with the score on the wealth index. The share of children from the lowest wealth quintile is seven times smaller than the share of the richest 20 per cent of children. There are not enough sample units in the bottom wealth quintile in urban areas to make a reliable conclusion about this disparity, but in rural areas the share of the poorest 20 per cent of children who attend preschool is 11.8 per cent and among other rural children 61.4 per cent (see Table 3 in Annex 4). On the other hand, the share of children attending preschool is much smaller in rural areas than in urban areas. All in all, this means that institutional poverty (lack of preschool institutions) in rural areas is mixed with HH poverty and affects inclusion of rural children in early education, keeping them in a very vulnerable position.

Up to this moment, we have seen that children from the lowest wealth quintile are lagging behind other children in a component of physical development (stunting) and access to preschool education. In order to check if the two groups of children are following education tracks with different capacities, we present the achievement of the poorest and other children in four domains of child development: literacy–numeracy, physical, social–emotional and learning. As a part of this aspect of analysis we also present the scores of the two groups of children on the early child development (ECD) index.

Table 11. Early child development index

Percentage of poor and other children aged 3–4 years who are developmentally on track in literacy–numeracy, physical, social–emotional and learning domains, and the early child development index score, Serbia, 2019

		Percentage of children aged 3–4 years who are developmentally on track for indicated domains				Early child development index score [1]	Number of children aged 3–4 years
		Literacy–numeracy	Physical	Social–emotional	Learning		
Total		35.1	99.8	96.9	100.0	97.2	746
Bottom quintile of wealth index	Poorest 20%	18.2	100.0	98.9	100.0	99.5	124
	Others	38.4	99.8	96.5	100.0	96.7	623
Wealth index quintile	Poorest	18.2	100.0	98.9	100.0	99.5	124
	Second	37.2	99.5	95.6	100.0	95.6	124
	Middle	33.0	100.0	96.6	100.0	96.6	117
	Fourth	34.4	100.0	95.9	100.0	96.8	159
	Richest	44.8	99.6	97.4	100.0	97.3	222

[1] MICS indicator TC.53 — Early child development index: SDG Indicator 4.2.1

There are tiny but statistically significant differences between the poorest 20 per cent and other children in physical domain and in ECD index score, where the poorest children score better than other children. The biggest disparity is in literacy–numeracy, where children from the upper four quintiles score better than the poorest children. The same conclusions about early child development are valid for rural children, and probably for urban children, too (see Table 4 in Annex 4), but a small number of sample units from urban lowest 20 per cent prevent a final conclusion. Apparently, families from the upper four quintiles start working with their children earlier and develop skills that help them progress through the education system. In other domains all children score similarly.

The next level in education is a preparatory preschool programme (PPP), which is mandatory in Serbia for children at the age of 5.5. It can be organized in kindergartens or in schools, both in public and private institutions.

Table 12. Preschool Preparation Programme (PPP) attendance

Percentage of poor and other children of PPP age [A] attending/having attended PPP, and the percent distribution of children attending/having attended PPP by type of facility, Serbia, 2019

		Percentage of children attending/having attended PPP [1]	Number of children of PPP age [A]	Percent distribution of children attending/having attended PPP according to type of facility [B]			Total
				Public facility	Private facility	School [2]	
Total		93.1	157	87.4	2.7	9.8	100.0
Bottom quintile of wealth index	Poorest 20%	(82.1)	(25)	(79.0)	(0.0)	(21.0)	100.0
	Others	95.2	133	88.8	3.2	8.0	100.0
Wealth index quintile	Poorest	82.1	25	79.0	0.0	21.0	100.0
	Second	98.3	30	81.9	0.0	18.1	100.0
	Middle	97.6	23	89.5	0.0	10.5	100.0
	Fourth	92.8	47	93.4	1.4	5.2	100.0
	Richest	94.0	33	88.4	11.0	0.6	100.0

[1] MICS indicator LN.S1 — Preschool Preparation Programme (PPP) attendance rate

[2] MICS indicator LN.S2 — Percentage of children attending/having attended PPP in school facility

[A] Children of PPP age are those children that have turned 5 before 1 March 2019 as per the national legislation defining PPP enrolment age.

[B] The category 'Other facility' is not shown because no cases were found.

() Figures that are based on 25–49 unweighted cases.

There is a small but statistically significant difference in PPP attendance rates between children from the poorest 20 per cent of HHs and other children. The difference with regard to type of facility is not statistically significant. There are not enough sample cases to test for correlation between area of residence and poverty as factors of PPP attendance.

The next level in education is the mandatory eight grades of elementary education. Most of the schools are public, but children can attend private schools, as well — almost exclusively in urban settlements. Here we tested for differences between the poorest and other children with regard to MICS indicator LN.4 (percentage of children of primary school entry age entering Grade 1). No statistically significant difference was found between the two groups of children. However, when disaggregated by area of residence, the share of rural¹⁵ children entering Grade 1 among the lowest wealth quintile was 88.6 per cent¹⁶ and among other children 99.4 per cent. This means that exclusion of the poorest children from education, especially in rural areas, remains a problem.

The above conclusion is confirmed through another MICS indicator: school readiness (LN.3).

Table 13. School readiness

Percentage of children attending first grade of primary school who attended preschool the previous year, Serbia, 2019

		Percentage of children attending first grade who attended preschool in previous year [1]	Number of children attending first grade of primary school
Total		96.4	172
Bottom quintile of wealth index	Poorest 20%	89.0	30
	Others	97.9	142
Wealth index quintile	Poorest	89.0	30
	Second	98.9	32
	Middle	100.0	31
	Fourth	100.0	37
	Richest	93.9	43

[1] MICS indicator LN.3 — School readiness

There is a small but significant difference between the poorest children and others in school readiness. Disaggregation by area of residence shows that this difference is generated in rural areas. There, first grade children from the lowest wealth quintile attended PPP in the previous year in 84.4 per cent of cases, while other rural children did so in 99.2 per cent of cases.

A similar result arises from an analysis of secondary education attendance. Here, we tested for the difference between the poorest and other children on two more MICS indicators: net attendance ratio (adjusted) and out of school rate.

¹⁵ The difference could not be analysed in urban areas due to the small number of sample units in the lowest urban wealth quintile.

¹⁶ Measured in 28 unweighted cases.

Table 14: Secondary school attendance and out-of-school youth

Percentage of poor and other children of secondary school age attending secondary school or higher (adjusted net attendance ratio), percentage attending primary school, and percentage out of school, Serbia, 2019

		Net attendance ratio (adjusted) [1]	Percentage of children:		Number of children of secondary school age
			Attending primary school	Out of school [2][A]	
Total		94.1	2.1	3.8	696
Bottom quintile of wealth index	Poorest 20%	78.6	3.9	17.5	120
	Others	97.3	1.7	1.0	576
Wealth index quintile	Poorest	78.6	3.9	17.5	120
	Second	99.3	0.4	0.3	136
	Middle	92.1	4.5	3.4	152
	Fourth	100.0	0.0	0.0	134
	Richest	98.2	1.8	0.0	154

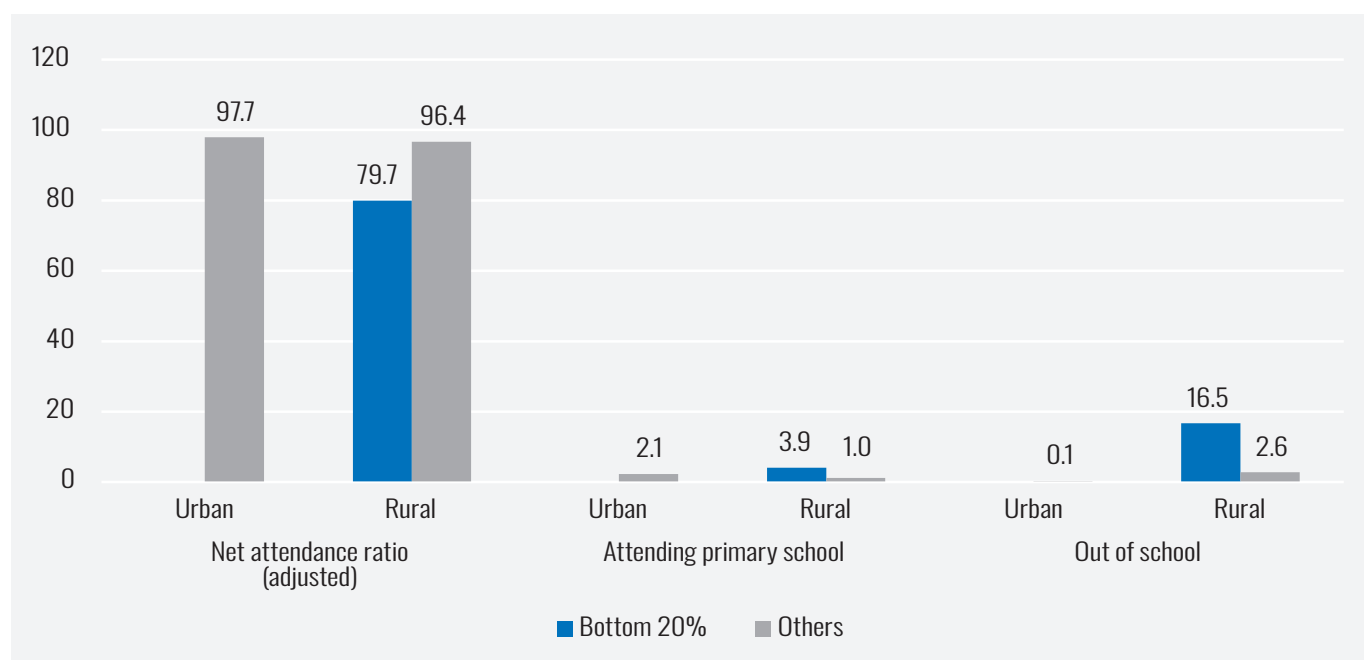
[1] MICS indicator LN.S5b — Secondary school net attendance ratio (adjusted)

[2] MICS indicator LN.S6b — Out-of-school rate for youth of secondary school age

[A] The percentage of upper secondary school-aged children out of school are those who are not attending primary, secondary or higher education. Children who have completed upper secondary school are excluded.

At this level of education, disparity between children from the poorest 20 per cent of HHs and other children is growing. Some of the poorest children still attend primary school, but the problem is in giving up education; the difference between two groups of children in being out of school is statistically significant — 17.5 per cent against 1 per cent. These disparities are noticeable both in rural and urban areas, to a similar extent.

Figure 10. Percentage of poor and other children of secondary school age attending secondary school or higher (adjusted net attendance ratio), percentage attending primary school, and percentage out of school, urban and rural, in per cent



Note: All values for urban bottom 20% are set to 0 because the number of sample cases is less than 25.

As stated earlier, 11.4 per cent of rural children from the poorest wealth quintile did not enter primary school; the rise to 16.5 per cent of them being out of secondary school at an appropriate age is not a big additional step in exclusion from the education process. This means that the critical dropout from the education system happens earlier in rural children's lives: at the level of preschool and elementary education.

Economic activities of children and child labour

The only economic activity indicator that shows a significant difference between children from the bottom wealth quintile and other children is economic activity of children aged 15–17 years who worked less than 43 hours in the past week: 47.5 per cent of children from the poorest quintile and 28.2 per cent of other children worked below the child labour threshold. As a consequence, in the synthetic presentation (Table 15), the poorest 20 per cent and other children differ significantly only in conducting economic activities below the age-specific threshold. The poorest and other children take part in child labour in similar percentages: 12.2 per cent of the former and 9 per cent of the latter.

Table 15. Child labour

Percentage of poor and other children aged 5–17 years by involvement in economic activities or household chores during the last week and percentage engaged in child labour during the previous week, Serbia, 2019

	Children involved in economic activities for a total number of hours during last week:		Children involved in household chores for a total number of hours during last week:		Total child labour [1][A]	Number of children aged 5–17 years	
	Below the age-specific threshold	At or above the age-specific threshold	Below the age-specific threshold	At or above the age-specific threshold			
Total	14.5	9.1	58.3	0.6	9.5	2,655	
Bottom quintile of wealth index	Poorest 20%	25.7	12.2	54.7	0.0	12.2	405
	Others	12.5	8.6	59.0	0.7	9.0	2,250
Wealth index quintile	Poorest	25.7	12.2	54.7	0.0	12.2	405
	Second	21.4	14.7	52.1	1.0	15.4	480
	Middle	12.8	7.5	59.1	0.9	8.4	552
	Fourth	7.6	5.3	59.3	0.8	5.3	546
	Richest	9.9	7.8	63.6	0.2	7.9	672

[1] MICS indicator PR.3 — Child labour; SDG indicator 8.7.1

[A] The definition of child labour used for SDG reporting does not include hazardous working conditions. This is a change from the previously defined MICS 6 indicator.

It is worth noting that the difference between the poorest 20 per cent and other children in performing economic activities below the threshold is generated from urban areas. In rural areas all children become engaged in economic activities with very similar frequency. However, they also become engaged in child labour almost three times more than urban children (14.9 per cent compared with 5.8 per cent among urban children).

As the definition of child labour used in MICS 6 is different from the older one by excluding hazardous working conditions in order to fit SDG reporting, we stress that there is no significant difference between children from the poorest 20 per cent of HHs and other children in conducting hazardous work: 6.7 per cent of the former and 1.9 per cent of the latter perform hazardous work tasks (2.6 per cent overall).

Child marriage

By UNICEF's definition, "child marriage refers to any formal marriage or informal union between a child under the age of 18 and an adult or another child."¹⁷ The number of child marriages has continued to decrease worldwide, but the practice is still widespread, and therefore its eradication has been set as one of the United Nations Sustainable Development Goals.

Child marriage is much more prevalent among girls than among boys, as a result of gender inequality combined with patriarchal values and poverty. Child marriage robs girls of their childhood and threatens their lives and health. Girls who marry before 18 are more likely to experience domestic violence and less likely to remain in school. They have worse economic and health outcomes than their unmarried peers, which are eventually passed down to their own children, further straining a country's capacity to provide quality health and education services¹⁸.

Using MICS 6 data, we applied three indicators to analyse child marriage prevalence among women from the poorest 20 per cent of HHs and other women in Serbia: [1] PR.4a — Child marriage (before age 15); [2] PR.4b — Child marriage (before age 18); [3] PR.5 — Young women aged 15–19 years currently married or in union.

Table 16. Child marriage

Percentage of women aged 15–49 years who first married or entered a marital union before their 15th birthday, percentages of women aged 20–49 who first married or entered a marital union before their 15th and 18th birthdays, and percentage of women aged 15–19 years currently married or in union, Serbia, 2019

		Women aged 15–49 years		Women aged 20–49 years		Women aged 15–19 years		
		Percentage married before age 15	Number of women aged 15–49 years	Percentage married before age 15 [1]	Percentage married before age 18 [2]	Number of women aged 20–49 years	Percentage currently married/in union [3]	Number of women aged 15–19 years
Total		1.3	3,740	1.2	5.5	3,356	3.8	384
Bottom quintile of wealth index	Poorest 20%	5.1	490	6.2	22.6	417	12.7	72
	Others	0.8	3,250	0.5	3.1	2,939	1.7	311
Wealth index quintile	Poorest	5.1	490	6.2	22.6	417	12.7	72
	Second	2.9	686	2.3	9.0	600	4.4	85
	Middle	0.6	804	0.0	1.8	730	2.3	74
	Fourth	0.0	847	0.0	1.6	774	0.0	73
	Richest	0.0	914	0.0	0.7	835	0.0	79

[1] MICS indicator PR.4a — Child marriage (before age 15); SDG 5.3.1

[2] MICS indicator PR.4b — Child marriage (before age 18); SDG 5.3.1

[3] MICS indicator PR.5 — Young women aged 15–19 years currently married or in union

Data from the table above show that child marriage is persistent in Serbia. The percentage of women 15–49 years old¹⁹ who were married before age 15 is small (1.3 per cent); however, from the poverty point of view it is much higher among women from the poorest 20 per cent of HHs (5.1 per cent) than among other women (0.8 per cent). However, the problem of early marriage grows in the second MICS indicator analysed here (PR.4b). Namely, the percentage of women aged 20–49 who married before **age 18** is 5.5 per cent and is more than seven times higher among the poorest 20 per cent of women than among other women. Finally, it looks like the poverty gap in early marriages remains stable: MICS indicator PR.5 shows that the percentage of currently married/in union women among all women 15–19 years old is 3.8 per cent, but the poverty gap ratio is still more than 7 (the percentage is 12.7 per cent in the lowest wealth quintile and 1.7 per cent among other young women).

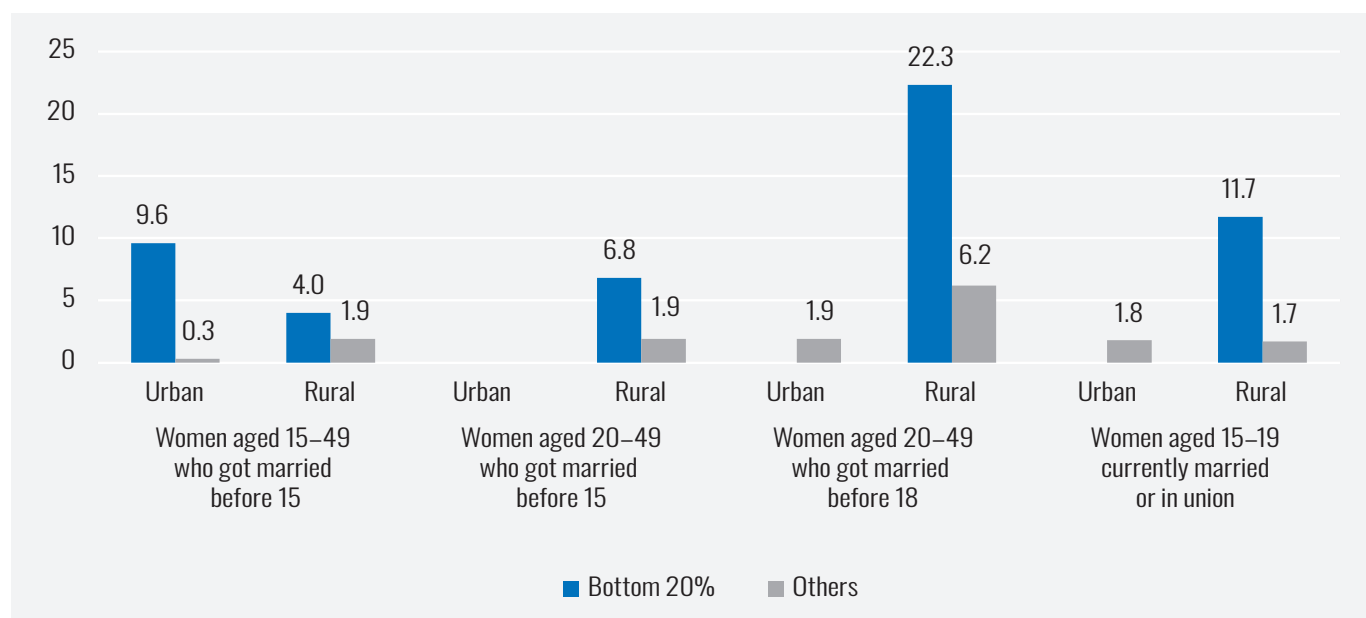
¹⁷ <https://www.unicef.org/protection/child-marriage>

¹⁸ Ibid.

¹⁹ We are using this indicator and not indicator MICS PR.4a because there are more cases and the disparity proved significant. If there were more women aged 20–49 from the bottom wealth quintile, this parity would be valid for this indicator too.

When we look at the impact of area of residence on correlation between poverty and child marriage, we can see that the gap is generated more by trends in urban than in rural areas. Namely, the number of sample cases for urban women aged 20–49 from the lowest wealth quintile is too small for reliable conclusions, but the indicator based on women aged 15–49 shows that the poverty gap in child marriage is much bigger in urban than in rural areas (see Table 5 in Annex 4). This is additionally confirmed by the finding that the poverty gap on this indicator is not statistically significant in rural areas. This is the same with the indicators PR.4a and PR.5. On the other hand, early marriage before 18 among rural women aged 20–49 from the bottom wealth quintile was more frequent than among other rural women.

Figure 11. Percentage of women aged 15–49 years who first married or entered a marital union before their 15th birthday, percentages of women aged 20–49 who first married or entered a marital union before their 15th and 18th birthdays, and percentage of women aged 15–19 years currently married or in union, urban and rural, Serbia, 2019



Note: All values for urban bottom 20%, except for the first presented indicator, are set to 0 because the number of sample cases is less than 25.

DETERMINANTS, CHARACTERISTICS AND OUTCOMES OF CHILD POVERTY IN SERBIA: MICS 2019, ROMA SAMPLE

Determinants of child poverty — Roma sample

The share of poor children in the Roma sample is much larger than in the national sample: 65.7 per cent. As was the case in the national sample, there is no difference between different age categories (0–4, 5–14 and 15–17) with regard to poverty. Also, the share of poor children is the same among girls and boys. However, some significant differences are noted regarding other determinants presented here.

Table 17. Social determinants of child poverty

Percentage of poor children aged 0–17 within different social categories, Serbia Roma settlements, 2019

		Others	Poorest 60%
Total		34.3	65.7
Area	Urban	40.7	59.3
	Other	20.0	80.0
Region	Belgrade	38.1	61.9
	Vojvodina	20.8	79.2
	Sumadija and Western Serbia	47.6	52.4
	Southern and Eastern Serbia	35.9	64.1
Education of household head	None	19.8	80.2
	Primary	31.4	68.6
	Secondary or higher	61.3	38.7
Activity status of household head	Employed	34.2	65.8
	Unemployed	26.3	73.7
	Inactive	36.3	63.7
Size of household	Single parent HH	12.5	87.5
	3–4 members	30.9	69.1
	5+ members	35.3	64.7
Sum of children 0–17	1.00	49.6	50.4
	2.00	46.5	53.5
	3+	30.5	69.5
Child 3 age categories	0–4	33.4	66.6
	5–14	35.6	64.4
	15–17	31.4	68.6
Child 2 age categories	0–4	33.4	66.6
	5–17	34.7	65.3
Sex	Male	32.7	67.3
	Female	35.9	64.1

Area of residence is an important determinant of child poverty among Roma. However, it is not as impactful as in the national sample: here the share of poorest children from the lowest three urban wealth quintiles is 59.3 per cent and among rural Roma children it is 80 per cent. There are considerable regional disparities also, but they look different than in national samples. While in the national sample child poverty was most prevalent in Southern and Eastern Serbia and least prevalent in Belgrade, here concentration of the poorest children is highest in Vojvodina (79.2 per cent) and lowest in Sumadija and Western Serbia (52.4 per cent). It is also worth mentioning that other regions — Belgrade and Southern and Eastern Serbia — are not significantly different from Sumadija and Western Serbia, which means that poverty of Roma children from Vojvodina is exceptional.

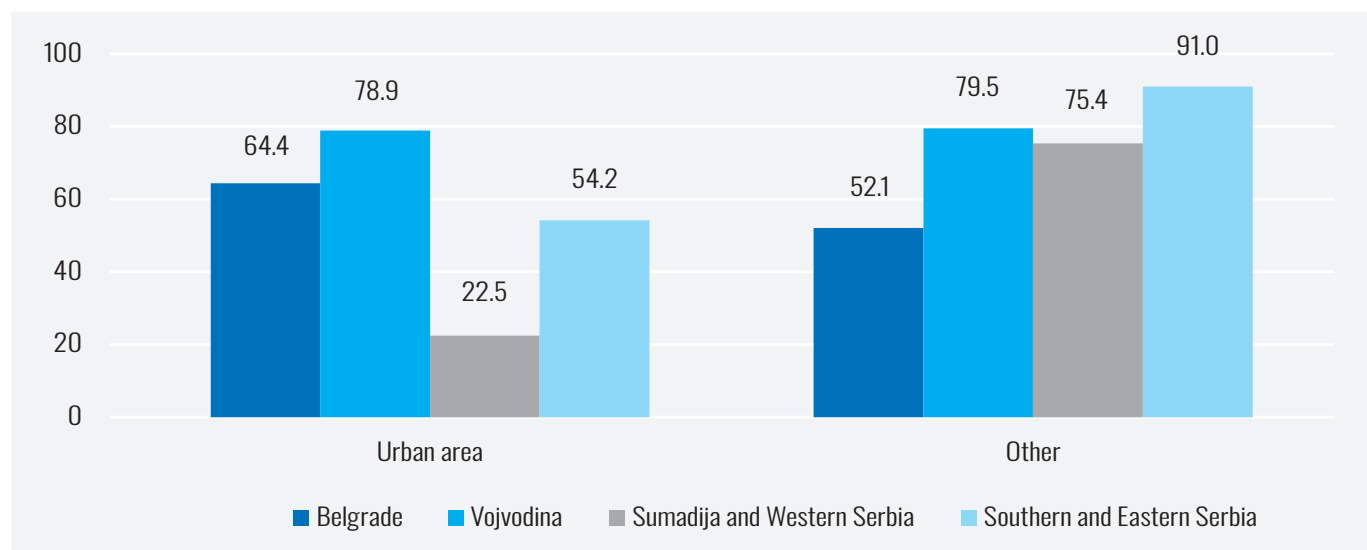
The highest disparity in poverty prevalence, concerning the variables selected for analysis of poverty determinants, comes with the level of education of the HH head. The share of children from the lowest three wealth deciles among the HHs whose head has no education is more than double that among HHs whose head has secondary education. Children from HHs whose head has a primary education are not significantly different from those whose HH heads have no education.

Activity status of HH head has no impact on poverty prevalence among Roma children.

The family type impacts poverty in the way that the share of the poorest children (from the lowest 60 per cent wealth index HHs) is highest among single-parent families, and somewhat lower among families with three or more members. A larger family does not necessarily mean higher child poverty, unless it is larger because of the number of children living in it. Namely, child poverty prevalence is significantly higher in HHs with three or more children than in those with one or two children.

The interaction between NUTS2 regions and area of residence (urban/rural) brings some new findings.

Figure 12. Share of Roma children aged 0–17 from the lowest 60 per cent of families on the wealth index, according to region and area of residence, in per cent



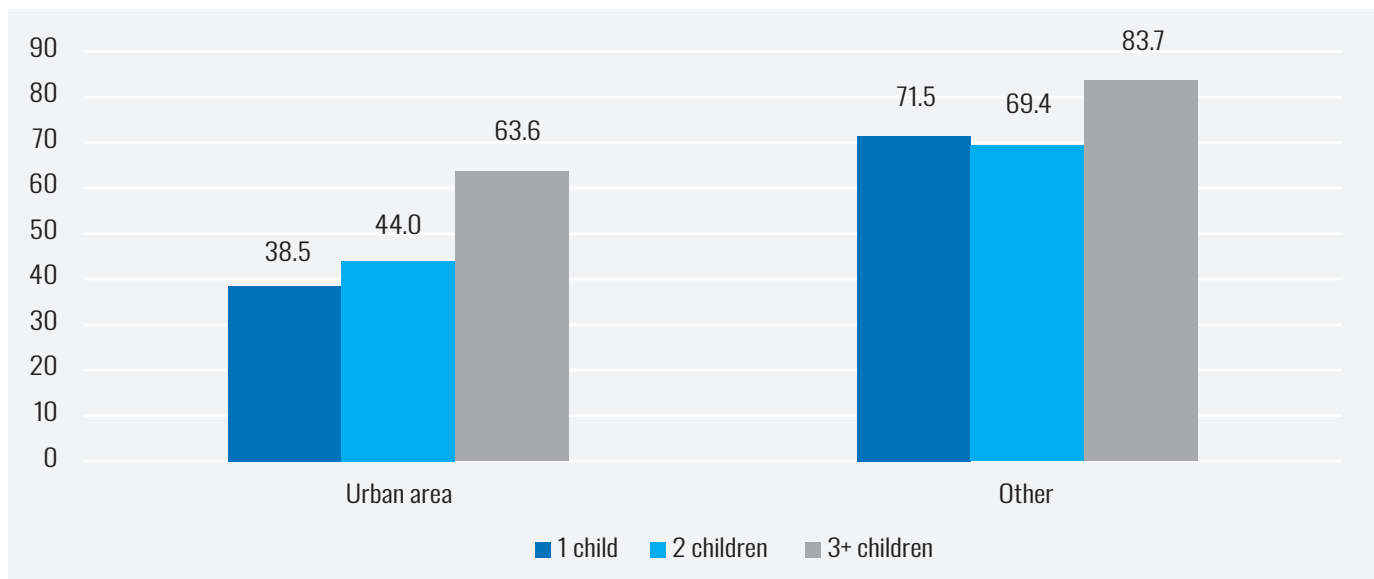
There are two major conclusions here. First, there is no significant difference between regions concerning poverty of rural Roma children. Second, in urban settlements, Roma children from Sumadija and Western Serbia are much less poor than children from any other region. In addition, Roma children from Southern and Eastern Serbian cities are also significantly less poor than their counterparts from Vojvodina.

The interaction between area of residence and level of education of the HH head does not bring new findings. Roma children from urban and rural HHs whose head has secondary education have a lower chance of falling to the bottom 60 per cent on the wealth index.

The same holds for the type of HH. As in the overall Roma sample, both in urban and rural HHs from the bottom three wealth quintiles there are more children from single-parent HHs than among HHs with three or more members.

Finally, the interaction between area of residence and number of children in Roma HHs has an effect.

Figure 13. Share of Roma children aged 0–17 from the lowest 60 per cent of families on the wealth index, according to region and number of children in HH, in per cent



Rural areas do not show significant differences in child poverty prevalence with regard to the number of children in Roma HHs. It is urban settlements in which children from Roma HHs with three or more children fall to the bottom 60 per cent on the wealth index significantly more frequently than other Roma children.

Characteristics of child poverty — Roma sample

Similar to the national sample, here we present how much Roma children living in HHs from the lowest three wealth index quintiles differed from the rest of the children in terms of structure of income sources, receiving child allowance, school support and external financial support, as well as in available assets, housing and environmental conditions.

Income sources

Table 18. Different income characteristics of child poverty, Roma sample

Percentage of difference in categories within poor and not poor children, Serbia Roma settlements, 2019

		Others	Poorest 60%	Total
Total		100.0	100.0	100.0
Received assistance through Financial Social Assistance — FSA	Yes	53.7	75.9	68.3
	No	46.3	24.1	31.7
Any household member own bank account	Yes	76.5	50.0	59.1
	No	23.5	50.0	40.9
Salary from job	No salary	33.7	40.3	38.1
	Salary	66.3	59.7	61.9
Income from self-employment	No income	70.0	73.9	72.6
	Income from self-employment	30.0	26.1	27.4
Property income	No income	99.5	99.9	99.8
	Property income	0.5	0.1	0.2
Pension	No pension	81.9	95.2	90.6
	Pension	18.1	4.8	9.4
Unemployment benefits	No benefits	99.2	99.8	99.6
	Unemployment benefits	0.8	0.2	0.4
Social benefits	No benefits	23.5	14.0	17.3
	Social benefits	76.5	86.0	82.7
Activity status of household head	Employed	59.0	59.1	59.0
	Unemployed	6.2	9.1	8.1
	Inactive	34.8	31.9	32.9

Of the variables listed in Table 18, there are four in which Roma children from the lowest three wealth quintiles and other Roma children differ. One is financial social assistance (FSA): the poorest 60 per cent of Roma HHs receive FSA more often than others, at 75.9 per cent and 53.7 per cent, respectively. They also receive FSA a bit more often than any form of social benefits (FSA, CA, etc.): 86 per cent of them compared with 76.5 per cent of not poor HHs. A pension is the next source of income that makes a difference, but this time it is better-off HHs that receive this more often than the poorest ones. Among children from the poorest 60 per cent of Roma HHs there are 4.8 per cent who live in HHs with a pension, while this percentage among the upper two wealth quintiles HHs is 18.1 per cent. Finally, the percentage of Roma children aged 0–17 years who belong to HHs from the lowest three wealth quintiles who have a member owning a bank account is 50 per cent, while this figure for Roma children from other HHs is 76.5 per cent. Salary from a job, income from self-employment or property do not make a difference between the poorest and other Roma children. Also, child poverty in the Roma population is not distributed in correlation with the activity status of the HH head. Children fall into the bottom three wealth quintiles regardless of their HH heads being employed, unemployed or inactive.

Due to the higher poverty prevalence among the Roma population than among the general population and higher average number of children in Roma HHs, child allowance is a very important source of income for Roma families. This is confirmed by MICS 6 data as well.

Table 19. Child allowance (CA)

Percentage of children aged 0–18 years for whom households received CA, percentage of children for whom households received CA for at least 12 months and the percent distribution of children by main reason for household non-submission or renewal of an application for CA in the past 12 months, Serbia Roma settlements, 2019

	Total	Najsiromašnjih 60%	Others
Percentage of children for whom households received CA [1][A]	76.6	76.5	76.8
Percentage of children for whom households received CA, for at least 12 months [2][B]	69.2	68.9	69.9
Number of children aged 0 to 18 years	3,324	2,198	1,126
Percent distribution of children for whom an application for CA was not submitted or renewed in the past 12 months according to the main reason for non-submission or renewal			
Did not need any	3.0	1.2	6.3
Did not know how to apply*	5.7	8.3	0.9
Complicated administrative procedure	7.4	7.8	6.6
Expensive administrative procedure	3.7	4.2	2.7
Know that they do not meet the conditions*	34.9	28.9	45.9
Were told they do not meet the conditions	37.4	40	32.6
Other	6.2	7.1	4.5
Missing	1.7	2.4	6.0
Total	100	100	100
Number of children aged 0–18 years for whom an application for CA was not submitted by the household in the past 12 months	583	376	206

[1] MICS indicator EQ.S2 — Children for whom households received child allowance

[2] MICS indicator EQ.S3 — Children for whom households received child allowance for at least 12 months

[A] Children for whom the household received CA are those for whom an application was submitted or renewed in the past 12 months, and for whom the application was approved.

[B] Children for whom the household received CA for at least 12 months are those for whom an application was submitted or renewed in the past 12 months, for whom the household receives CA and has been doing so for more than 12 months.

* Statistically significant difference

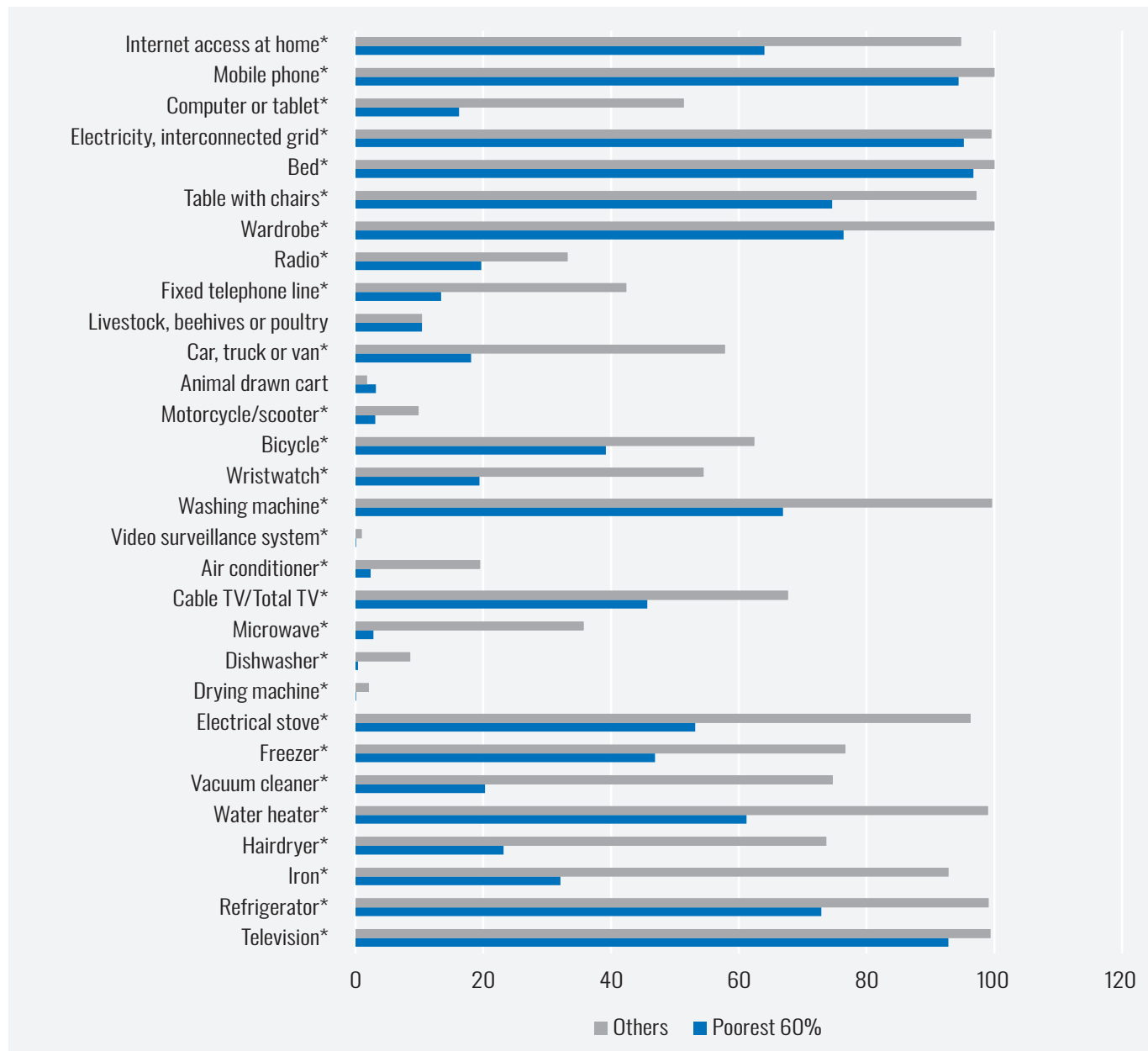
Roma children from the poorest 60 per cent of HHs and other Roma children receive CA in equally large proportions (around 76.5 per cent). The poverty gap between these two groups of children is visible when the HH answers they know that they do not meet the conditions for CA. The share of children whose HH representatives know they do not meet these conditions is 28.9 per cent among the poorest 60 per cent of HHs and 45.9 per cent among other HHs. We interpret this as better financial viability of HHs from the upper two wealth quintiles.

School-related support falls under financial aspects of child poverty. There is no significant difference between the poorest and other Roma children in any of the indicators measured. An extremely small number of Roma children receive a kindergarten subsidy, school tuition or scholarship (1.2 per cent). What they receive more are other measures of support related to school (books, school equipment, meals, etc.). Among Roma children aged 5–17 years, 26.1 per cent receive some kind of school-related support (MICS indicator EQ.6).

When asked if they were aware of external economic assistance and if they had ever received external assistance, 100 per cent of HHs with children replied they were aware and 94.2 per cent replied they had received some external economic support, with no difference between the poorest 60 per cent and others.

Assets ownership

Figure 14. Shares of Roma children aged 0–17 from the lowest three wealth index quintiles and other Roma children having household and personal assets available, in per cent



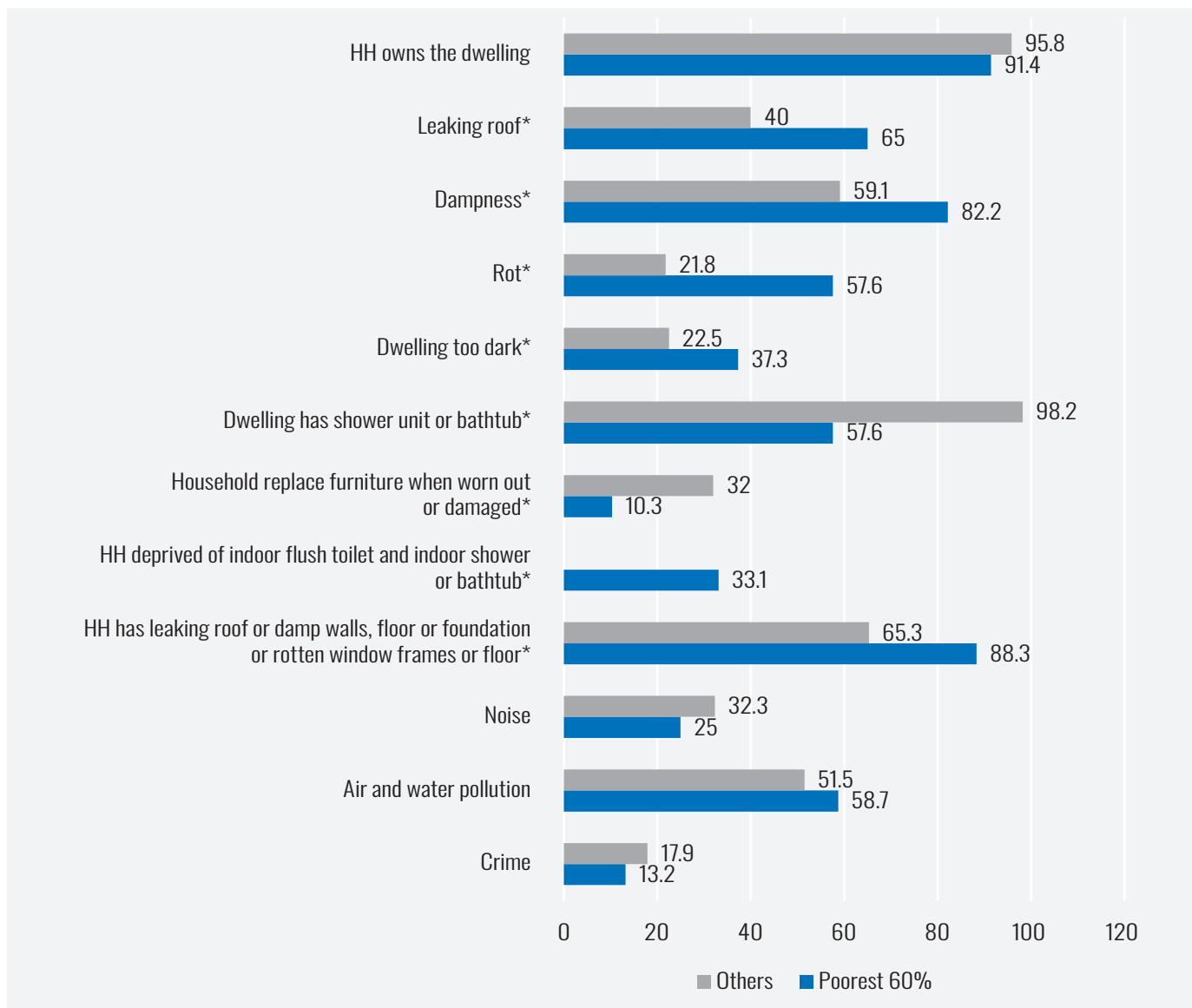
Note: * denotes statistically significant difference.

Material deprivation of Roma children from the poorest 60 per cent of HHs is critical. There are only two items on the list which they possess equally as better-off Roma HHs. These are livestock, owned by 10.4 per cent of HHs, and an animal-drawn cart, owned by 2.7 per cent of HHs. Another note here is that access to electrical power is actually 100 per cent in both groups, because the poorest 60 per cent of HHs have access to off-grid electricity if not connected to the network.

Housing and environment

When analysing this aspect of poverty, we should keep in mind that the MICS Roma sample has been conducted in Roma settlements, which means that all HHs live in similar environments and urban conditions. If conditions deprive a community, they usually are in Roma settlements in Serbia. Affluence of Roma HHs is crucial for improvement of housing quality.

Figure 15. Shares of Roma children aged 0–17 from the lowest three wealth index quintiles and other Roma children whose HHs suffer from specific housing and environmental deprivation issues, in per cent



Note: * denotes statistically significant difference.

The first important conclusion is that a large majority of Roma HHs own their dwellings. This percentage is the same as in the national sample. Next, when it comes to characteristics of the settlement, in things HHs cannot easily change themselves, there is no significant difference between the poorest and better-off HHs: they equally suffer from crime, pollution and noise in their environment — pollution being the biggest threat.

In all other elements of housing quality, Roma children from the lowest three wealth quintiles suffer deprivation more than other Roma children.

Outcomes of child poverty — Roma sample

So far, we see that Roma children generally live in unfavourable social and economic conditions, in families with low education and high unemployment, and under huge material and housing deprivation. It is expected that such circumstances induce negative outcomes reflected in Roma children's nutrition, education participation and attainment, child labour and early marriage. These aspects of child poverty are analysed in the following pages.

Birth registration

Birth registration of Roma children under 5 years old is not as big an issue in Serbia as decades ago. As many as 98.5 per cent of births have been registered, which is almost as high a percentage as in the national sample.

Nutrition

Table 20. Nutritional status of Roma children

Percentage of poor and other children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Serbia Roma settlements, 2019

		Weight for age		Height for age		Weight for height			
		Underweight		Stunted		Wasted		Overweight	
		Per cent below		Per cent below		Per cent below		Per cent above	
		-2 SD [1]	-3 SD [2]	-2 SD [3]	-3 SD [4]	-2 SD [5]	-3 SD [6]	+2 SD [7]	+3 SD [8]
Total		6.5	0.8	16.9	4.7	2.8	0.6	6.9	2.8
Wealth index	Poorest 60%	7.7	1.1	18.6	6.3	2.8	0.8	7.3	2.5
	Richest 40%	4.0	0.0	12.9	1.3	2.7	0.2	5.9	3.5
Wealth index quintile	Poorest	6.3	1.4	22.3	4.6	1.1	0.7	3.3	2.0
	Second	9.8	1.4	15.5	5.4	1.5	0.0	7.9	0.8
	Middle	7.5	0.6	17.1	9.3	6.8	1.8	12.0	5.2
	Fourth	5.8	0.0	13.7	1.1	1.8	0.5	2.5	1.8
	Richest	1.8	0.0	12.0	1.4	3.8	0.0	10.2	5.6

[1] MICS indicator TC.44a — Underweight prevalence (moderate and severe)

[2] MICS indicator TC.44b — Underweight prevalence (severe)

[3] MICS indicator TC.45a — Stunting prevalence (moderate and severe); SDG indicator 2.2.1

[4] MICS indicator TC.45b — Stunting prevalence (severe)

[5] MICS indicator TC.46a — Wasting prevalence (moderate and severe); SDG indicator 2.2.2

[6] MICS indicator TC.46b — Wasting prevalence (severe)

[7] MICS indicator TC.47a — Overweight prevalence (moderate and severe); SDG indicator 2.2.2

[8] MICS indicator TC.47b — Overweight prevalence (severe)

Note: Denominators for weight for age, height for age, and weight for height may be different.

Children are excluded from one or more of the anthropometric indicators when their weights and heights have not been measured or are implausible (flagged), or their age is not available, whichever applicable.

The nutrition situation of children from the Roma sample is different from that of children from the national sample. Namely, Roma children from the poorest three wealth quintiles HHs score less than other Roma children on two MICS indicators of severe malnutrition. The first is severe underweight prevalence (MICS indicator TC.44b), where better-off Roma children score 0 and the poorest children 1.1. However, severe stunting (MICS indicator TC.45b) affects 6.3 per cent of children from the lowest three wealth quintiles, while

this figure for other Roma children is 1.3 per cent. Stunting prevalence is the greatest nutrition issue for Roma children in general, whereas in the national sample it is overweight. Moderate and severe stunting prevalence in the Roma sample is 16.9 per cent and in the national sample it is 5.4 per cent.

Discipline

In the Roma sample, 8.2 per cent of mothers/caregivers believe that a child needs to be physically punished, and there is no significant difference between mothers from the poorest 60 per cent of HHs and other mothers in this regard. This is a similar percentage as in the national sample.

As in the national sample, in the Roma sample any difference between the poorest 60 per cent and other HHs disappears when it comes to practice of child disciplining, as presented in Table 21.

Table 21. Child discipline, Roma sample

Percentage of children aged 1–14 years by child disciplining methods experienced during the last one month, Serbia Roma settlements, 2019

		Percentage of children aged 1–14 years who experienced:				Number of children aged 1–14 years
		Only non-violent discipline	Psychological aggression	Physical punishment		
				Any	Severe [A]	
Total		26.9	62.3	40.2	1.7	2,459
Wealth index quintile	Poorest	23.6	65.9	43.4	2.7	588
	Second	25.5	61.0	41.1	0.2	523
	Middle	30.2	58.8	36.1	2.7	514
	Fourth	21.8	68.6	43.5	1.3	457
	Richest	35.7	55.8	35.4	1.4	378
Wealth index	Poorest 60%	26.3	62.1	40.4	1.9	1,624
	Richest 40%	28.1	62.8	39.8	1.3	835

[1] MICS indicator PR.2 — Violent discipline: SDG 16.2.1

[A] Severe physical punishment includes: 1) Hit or slapped on the face, head or ears; or 2) Beat up, that is, hit repeatedly as hard as one is able.

A final remark to be made here is that the prevalence of violent discipline (MICS indicator PR.2) is much higher among Roma children than among children in Serbia in general (close to 70 per cent compared with a bit over 40 per cent in the national sample). The poorest and other Roma children are violently disciplined equally often.

Education and development

Education participation and achievement is one of the most persistent problems in the development of children from the Roma community. When analysing the national sample, we found that the poorest children start lagging behind already at an early age and are most excluded until secondary school age.

Roma children aged 36–59 months attend preschool education much more rarely than children of the same age in Serbia in general. While in Serbia 60.6 per cent of these children go to kindergartens, in the Roma population that share is only 7.4 per cent. From the point of view of our analysis, it is important to stress that there is no statistically significant difference between Roma children from the poorest three wealth quintiles and other Roma children.

A somewhat higher malnutrition and much smaller participation in preschool education is reflected in scores of Roma children in child development domains.

Table 22. Early child development index, Roma sample

Percentage of poor and other children aged 3–4 years who are developmentally on track in literacy–numeracy, physical, social–emotional, and learning domains, and the early child development index score, Serbia Roma settlements, 2019

		Percentage of children aged 3–4 years who are developmentally on track for indicated domains				Early child development index score [1]	Number of children aged 3–4 years
		Literacy–numeracy	Physical	Social–emotional	Learning		
Total		12.8	99.6	88.5	99.2	89.2	420
Wealth index	Poorest 60%	11.3	99.7	87.2	99.2	88.1	276
	Richest 40%	15.6	99.3	91.0	99.3	91.4	144
Wealth index quintile	Poorest	7.8	99.2	83.8	98.1	84.5	100
	Second	11.9	100.0	91.8	99.6	92.2	97
	Middle	15.1	100.0	85.8	100.0	87.8	79
	Fourth	11.2	98.7	92.5	98.7	93.2	81
	Richest	21.2	100.0	89.0	100.0	89.0	63

[1] MICS indicator TC.53 — Early child development index; SDG Indicator 4.2.1

Roma children score a bit worse in the social–emotional domain of development than children in Serbia in general (88.5 per cent compared with 96.9 per cent, respectively). This difference is greater in the literacy–numeracy domain. Namely, 35.1 per cent of children in Serbia in general are on track in this regard, while among Roma children this figure is only 12.8 per cent. Cumulatively this produces a difference in the ECD index score, too: Roma children score 89.2, while children from national sample score 97.2. Finally, this lagging behind of Roma children is evenly distributed over the two analysed groups — the poorest 60 per cent and upper two quintiles — and this is valid for all analysed domains of child development.

The preschool preparation programme (PPP) attendance rate (MICS indicator LN.S1) among Roma children in Serbia is 76.8 per cent. The poorest and other Roma children do not differ significantly in attending this mandatory programme.

The percentage of children of primary school entry age entering Grade 1 (net intake rate — MICS indicator LN.4) is low, at 85.4 per cent. This is another education indicator in which all Roma children lag behind other children in Serbia equally, regardless of the wealth index score of their HH. This is additionally confirmed by one more indicator, LN.3 — school readiness. Only 80 per cent of children from the Roma sample who attend first grade of elementary school attended preschool in the previous year. Again, there is no difference in this regard between the poorest and better-off children.

Inequality between Roma children from the poorest 60 per cent of HHs and other Roma children appears at the level of secondary education. Poorer children have lower attendance rates.

Table 23. Secondary school attendance and out-of-school youth, Roma sample

Percentage of poor and other children of secondary school age attending secondary school or higher (adjusted net attendance ratio), percentage attending primary school, and percentage out of school, Serbia Roma settlements, 2019

	Net attendance ratio (adjusted) [1]	Percentage of children:		Number of children of secondary school age
		Attending primary school	Out of school [2][A]	
Total	28.4	14.6	57.1	588
Bottom 3 quintiles of wealth index	Poorest 60%	23.0	15.5	393
	Others	39.2	12.8	196
Wealth index quintile	Poorest	12.7	20.5	143
	Second	26.5	9.2	124
	Middle	31.2	15.9	126
	Fourth	28.7	13.0	112
	Richest	53.2	12.6	84

[1] MICS indicator LN.S5b — Secondary school net attendance ratio (adjusted)

[2] MICS indicator LN.S6b — Out-of-school rate for youth of secondary school age

[A] The percentage of children of upper secondary school age out of school are those who are not attending primary, secondary or higher education. Children who have completed upper secondary school are excluded.

At the secondary education level the adjusted net attendance ratio (MICS indicator LN.S5b) of all Roma children is more than three times lower than children of this age in Serbia in general (28.1 per cent and 98.1 per cent, respectively). The poorest Roma children lag behind even more by having an attendance ratio of 23 per cent (as compared to 39.2 per cent among other Roma children).

Economic activity and child labour

Our initial expectation was that child labour usually goes hand in hand with lower school attendance. This is why we expected that the child labour rate would be higher in the Roma sample than in the national sample. However, MICS data show that total child labour (MICS indicator PR.3) is more common among children in Serbia in general (9.5 per cent) than among Roma children in Serbia (5.4 per cent), who have much lower school attendance rate.²⁰

Table 24. Child labour, Roma sample

Percentage of children aged 5–17 years by involvement in economic activities or household chores during the last week and percentage engaged in child labour during the previous week, Serbia Roma settlements, 2019

		Children involved in economic activities for a total number of hours during last week:		Children involved in household chores for a total number of hours during last week:		Total child labour [1] [A]	Number of children aged 5–17 years
		Below the age-specific threshold	At or above the age-specific threshold	Below the age-specific threshold	At or above the age-specific threshold		
		Total	7.5	4.5	45.8		
Wealth index quintile	Poorest	9.5	3.6	45.5	1.4	5.0	485
	Second	5.2	7.4	45.2	1.7	9.1	446
	Middle	10.8	1.0	52.0	0.0	1.0	422
	Fourth	6.2	4.8	42.6	0.0	4.8	380
	Richest	4.9	6.2	42.5	0.9	7.1	322

²⁰ It is important to stress here that MICS questionnaire does not ask explicitly about waste collection, which is source of income for many Roma families in sub-standard settlements. Consequently, this economic activity can be registered only if the respondent chooses 'other' as an answer.

		Children involved in economic activities for a total number of hours during last week:		Children involved in household chores for a total number of hours during last week:		Total child labour [1] [A]	Number of children aged 5–17 years
		Below the age-specific threshold	At or above the age-specific threshold	Below the age-specific threshold	At or above the age-specific threshold		
Wealth index	Poorest 60%	8.5	4.0	47.4	1.1	5.1	1,354
	Richest 40%	5.6	5.4	42.5	0.4	5.9	702

[1] MICS indicator PR.3 — Child labour; SDG indicator 8.7.1

[A] The definition of child labour used for SDG reporting does not include hazardous working conditions. This is a change from the previously defined MICS 6 indicator.

Increased risk of child labour among Roma children lies in the component that is missing from the applied SDG definition of hazardous working conditions. Namely, 4.9 per cent of Roma children conduct hazardous work, and this figure among children in Serbia in general is 2.6 per cent. There is no significant difference between the poorest 60 per cent and other children in this regard.

Child marriage

As stated earlier, we applied three MICS indicators to analyse child marriage prevalence among women from the poorest 20 per cent of HHs and other women in Serbia: [1] PR.4a — Child marriage (before age 15); [2] PR.4b — Child marriage (before age 18); [3] PR.5 — Young women aged 15–19 years currently married or in union.

Table 25. Child marriage, Roma sample

Percentage of women aged 15–49 years who first married or entered a marital union before their 15th birthday, percentages of women aged 20–49 who first married or entered a marital union before their 15th and 18th birthdays, and percentage of women aged 15–19 years currently married or in union, Serbia Roma settlements, 2019

		Women aged 15–49 years		Women aged 20–49 years		Women aged 15–19 years		
		Percentage married before age 15	Number of women aged 15–49 years	Percentage married before age 15 [1]	Percentage married before age 18 [2]	Number of women aged 20–49 years	Percentage currently married/in union [3]	Number of women aged 15–19 years
Total		15.8	1,790	15.9	55.8	1,461	34.1	329
Wealth index quintile	Poorest	22.3	327	15.3	72.5	244	40.7	82
	Second	19.6	357	20.6	63.3	289	37.0	69
	Middle	16.7	357	22.5	61.9	290	29.7	67
	Fourth	10.9	373	10.1	47.0	317	29.6	56
	Richest	10.4	377	10.8	36.6	321	30.8	56
Wealth index	Poorest 60%	19.5	1,041	19.7	65.5	823	36.2	218
	Richest 40%	10.7	749	10.5	41.8	637	30.2	112

[1] MICS indicator PR.4a — Child marriage (before age 15); SDG 5.3.1

[2] MICS indicator PR.4b — Child marriage (before age 18); SDG 5.3.1

[3] MICS indicator PR.5 — Young women aged 15–19 years currently married or in union

Table 25 presents devastating findings. The occurrence of child marriage in the Roma population is almost 10 times higher than in the general population in Serbia. The percentage of married before age 15 is 15.9 per cent among Roma women aged 20–49 years and 1.2 per cent in the general population of women of the same age. The percentage of married before age 18 is 55.8 per cent among Roma women of age 20–49 years and 5.5 per cent in the general population of women of the same age. Finally, the percentage of currently married or in union among 15–19 years old girls from the Roma sample is 34.1 per cent, while in the national sample this figure is 3.8 per cent.

There is an interesting finding related to the correlation between poverty and child marriage in Roma population. In the two indicators related to women who are now 20–49 years old there is significant difference between the women from the three lowest wealth quintiles and two highest quintiles in the sense that child marriage was more frequent among the poorest Roma women than other Roma women. However, there is no such difference related to poverty when we observe Roma girls that are now 15–19 years old, which might mean that efforts to eradicate child marriage are finally succeeding.

DETERMINANTS AND CHARACTERISTICS OF CHILD POVERTY IN SERBIA BASED ON EU-SILC 2019 SAMPLE

We turn our attention to another aspect of child poverty: monetary poverty. We use equivalised disposable HH income as the main poverty indicator and consider as 'poor' those children belonging to the bottom 20 per cent of HHs (and not those falling below poverty line, which is HHs with less than 60 per cent of median income in the country). In this manner we are closer to MICS methodology, designating as poor those children living in HHs from the bottom quintile of the wealth index. Another important note is that in this part of the analysis we are not able to conduct a separate analysis of the Roma subsample because the EU-SILC survey does not take into account the nationality of respondents.

The spectrum of indicators to be analysed is different in EU-SILC as well. There are no indicators of outcomes of child poverty as we described them in previous chapters. We can use a few presenting determinants of child poverty and its characteristics for the other two groups of indicators.

Determinants of child poverty — EU-SILC sample

Here we first stress that the share of children falling to the bottom equivalised disposable income quintile is 25.2 per cent. Next, we wish to emphasise that, like MICS 6 data, in the EU-SILC 2019 sample there is no statistically significant difference in poverty prevalence among boys and girls nor among different age categories.

The other three determinants that we are going to explore in further analysis are in the region of residence, the type of settlement of residence and education of parents. However, two of the three are operationalized in different ways than in MICS methodology. Namely, EU-SILC data are available for NUTS1 regions and not for NUTS2, which means that we can compare child poverty between North Serbia (Belgrade and Vojvodina) and South Serbia (Sumadija and Western Serbia + Southern and Eastern Serbia). Nevertheless, this is still an impactful division comprising different levels of economic development, urbanization, infrastructural and administrative capacity, etc., so we expect significant findings here. The second difference is related to parent education. In MICS data we used the variable 'mother's education', but in EU-SILC data it is not available. Instead we use the variable 'higher education level between father and mother'. In both surveys the education scale is set with three categories: primary or none, secondary, and higher.²¹ Types of settlement are classified the same as in MICS data: urban and other.

Child poverty is significantly higher in South Serbia (31.9 per cent) than in North Serbia (19 per cent), but the difference is even greater between the types of settlements, where poverty is more than double in rural settlements (37 per cent) than in urban settlements (18.1 per cent). Both trends were present in MICS 6 data, but poverty of rural children and children from southern regions was even more pronounced in MICS research.

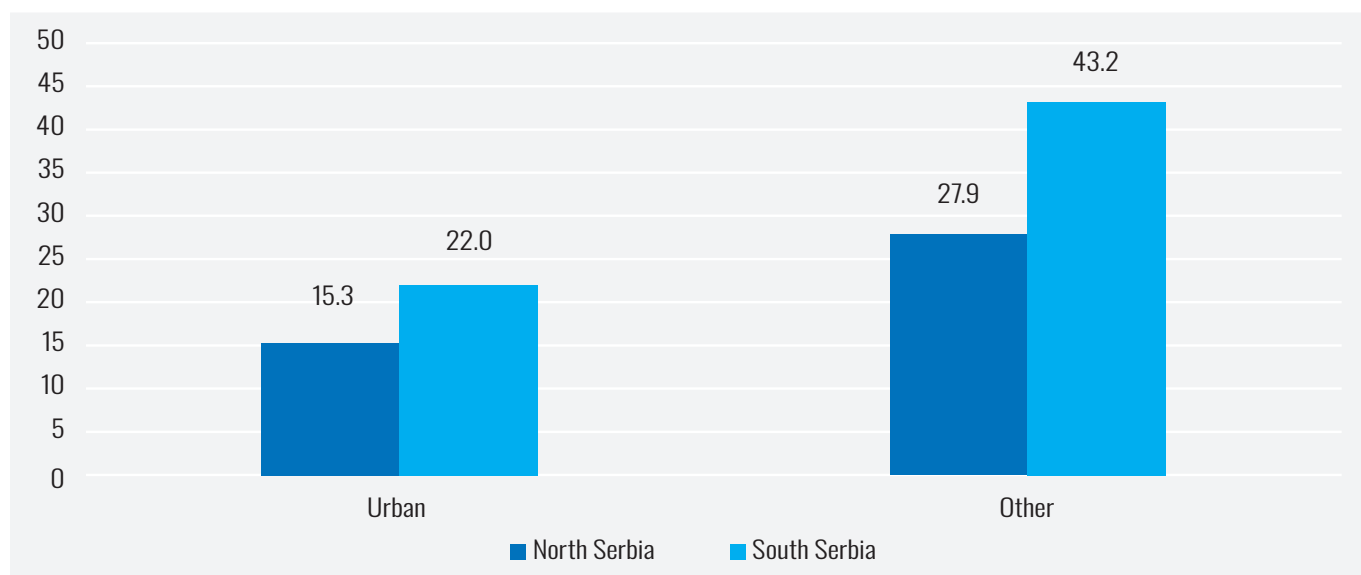
The level of parent education is the strongest of the selected determinants here. While 90.8 per cent of poor children are among those whose parents have at maximum primary education or no education at all, the share among children in which at least one parent has a higher education is only 4.1 per cent.

²¹ In EU-SILC originally presented on ISCED scale.

Table 26. Social determinants of child poverty**Percentage of the poorest children within different social categories, EU-SILC, Serbia, 2019**

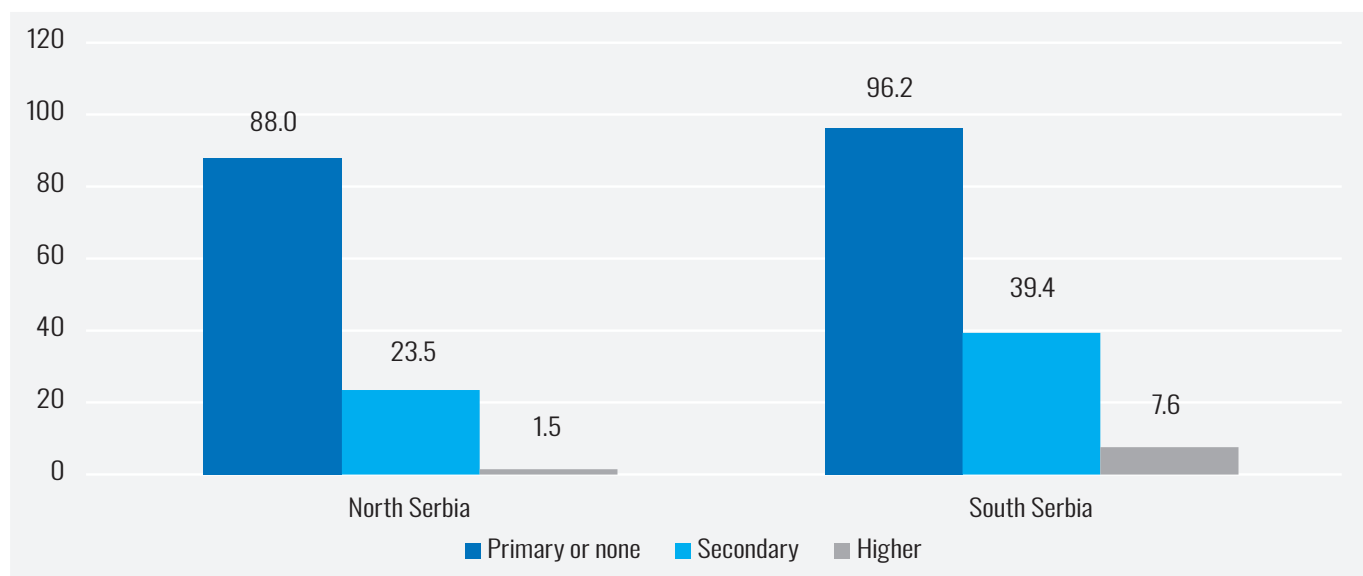
		Others	Poorest 20%
Total		74.8	25.2
NUTS1 regions	Serbia North	81.0	19.0
	Serbia South	68.1	31.9
Settlement type	Urban	81.9	18.1
	Other	63.0	37.0
Child 3 age categories	0–4	78.6	21.4
	5–14	73.4	26.6
	15–17	72.9	27.1
Higher level of education between father and mother	Primary or none	9.2	90.8
	Secondary	68.3	31.7
	Higher	95.9	4.1
Sex	Male	74.7	25.3
	Female	74.9	25.1

The strength of the rural/urban child poverty gap becomes even clearer when we compare this division in the two statistical regions. There is no statistically significant difference between poverty prevalence in urban settlements in North Serbia and South Serbia. Regions as a determinant have impact only on poverty of rural children, where children from southern rural settlements have much higher poverty prevalence than children from northern rural settlements (Figure 16).

Figure 16. Share of children aged 0–17 from the lowest 20 per cent of families on equivalised disposable family income, according to region and type of settlement of the residence, in per cent

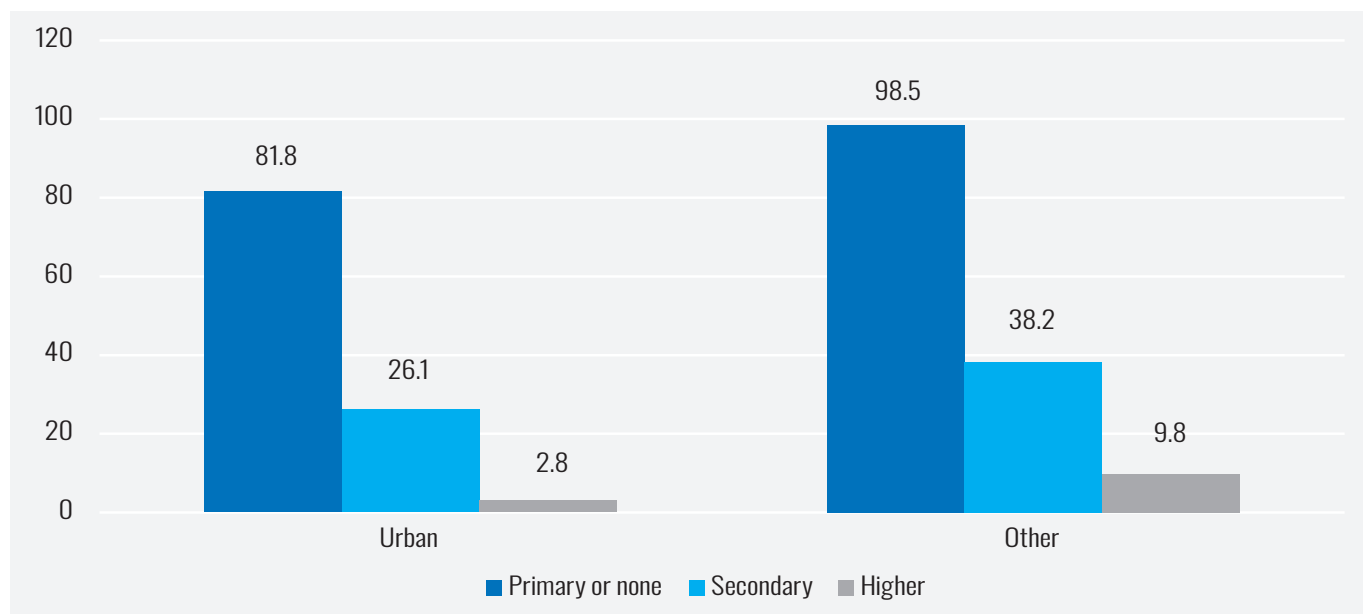
The impact of higher levels of parent education contributes significantly to an explanation for child poverty generation in Serbia. Low education attainment of parents is a very strong determinant of child poverty both in northern and southern settlements. Secondary and higher parent education helps protect children from poverty more in North Serbia than in South Serbia (Figure 17).

Figure 17. Share of children aged 0–17 from the lowest 20 per cent of families on equivalised disposable family income according to region of residence and higher education level between father and mother, in per cent



Finally, the type of settlement also holds some determinative power in the explanation of child poverty. In interaction with the type of settlement it is shown that both the lowest and the highest educational attainment of parents do not differ significantly between urban and rural settlements in their impact on child poverty. On the other hand, the share of children in families from the poorest income quintile is higher in rural than in urban settlements: 38.2 per cent and 26.1 per cent, respectively (Figure 18).

Figure 18. Share of children aged 0–17 from the lowest 20 per cent of families on equivalised disposable family income, according to type of settlement and higher education level between father and mother, in per cent



We conclude from the above presented findings that level of parent education is an extremely strong determinant of child monetary poverty. The type of settlement impacts and differentiates the level of parent secondary education and region, adding more clarification by showing that the main gap is present in southern rural settlements. In other words, being a child of low-level educated parents from rural settlements in South Serbia means almost unavoidable monetary poverty. In general terms, this is the same conclusion based on the analysis of wealth index-based poverty in MICS 6.

Characteristics of child poverty — EU-SILC sample

In this chapter we use those indicators from EU-SILC that match our selection for MICS data analysis. We utilized the two indicators of financial position: child allowance²² (CA) and financial social assistance²³ (FSA). Also, we noted 14 indicators related to quality of housing that are the same or very similar to those in MICS 6.

Financial social transfers

Financial social transfers are much more a characteristic of families of the poorest children. HHs from the lowest income quintile receive CA more than three times more frequently than other HHs. The difference between the poorest and other HHs is even greater with regard to FSA. These two means of social assistance represent an important source of income for the poorest HHs with children.

Table 27. Financial social transfers and child poverty

Percentage of children from HHs receiving child allowance and financial social assistance beneficiaries within poorest and other children, EU-SILC, Serbia, 2019

		Other	Poorest 20%	Total
Total		100.0	100.0	100.0
Child allowance in 2018	Yes	13.2	46.7	21.7
	No	86.8	53.3	78.3
Financial social assistance in 2018	Yes	1.1	18.8	5.6
	No	98.9	81.2	94.4

When these benefits for the poorest HHs are marked in urban and rural settlements separately, it is noted that there is no statistically significant difference. HHs in which poor children live in cities and villages receive financial social transfers equally frequently. Due to more relaxed criteria for CA, this type of social assistance is more frequent than FSA (Figure 19).

The more statistically significant difference is between different levels of parent education.²⁴ The share of beneficiaries of both CA and FSA decreases as parent education level increases. It is interesting, though, that the difference in share of CA and FSA beneficiaries is not as large among HHs with the lowest educational attainment as among HHs with secondary and higher education (Figure 20). Such a finding is expected considering that low income is related to low educational attainment.

²² The question in the EU-SILC questionnaire was: 'Did your household receive CA or an increased CA in 2018?'

²³ The question in the EU-SILC questionnaire was: 'Did your household receive FSA in 2018?'

²⁴ For all CA values and for FSA between secondary and higher education interval boundaries overlap at the second decimal.

Figure 19. Share of children aged 0–17 from the lowest 20 per cent of families on equivalised disposable family income whose families had received CA or FSA in 2018, according to type of settlement, in per cent

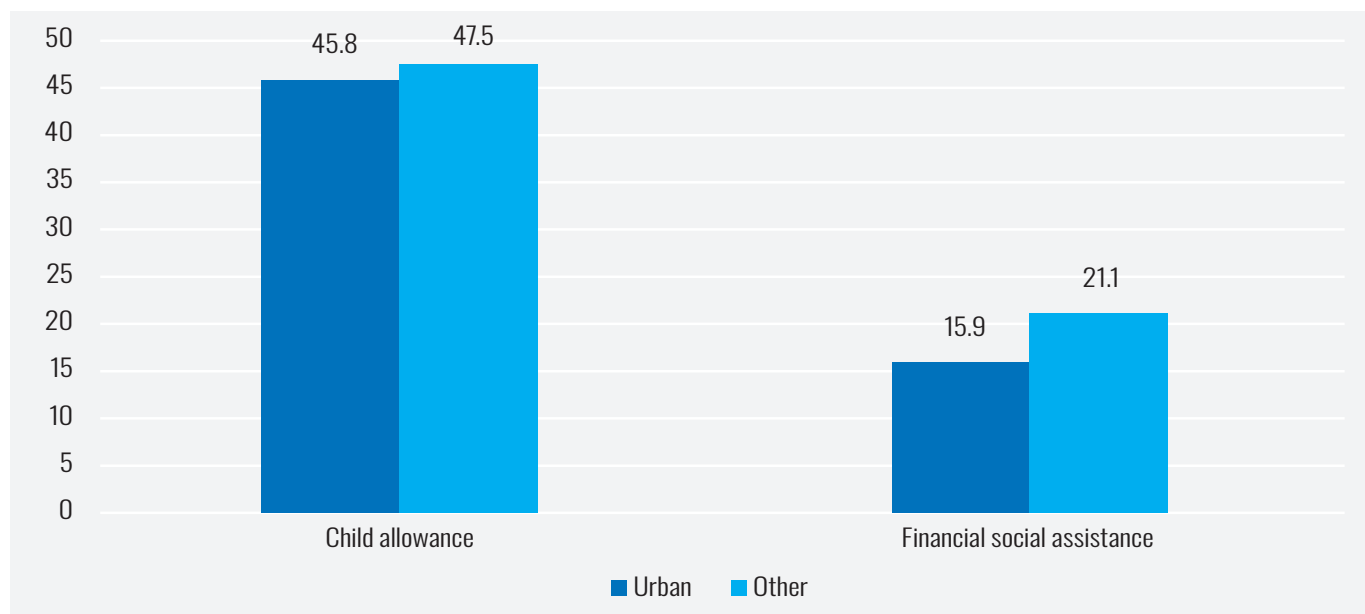
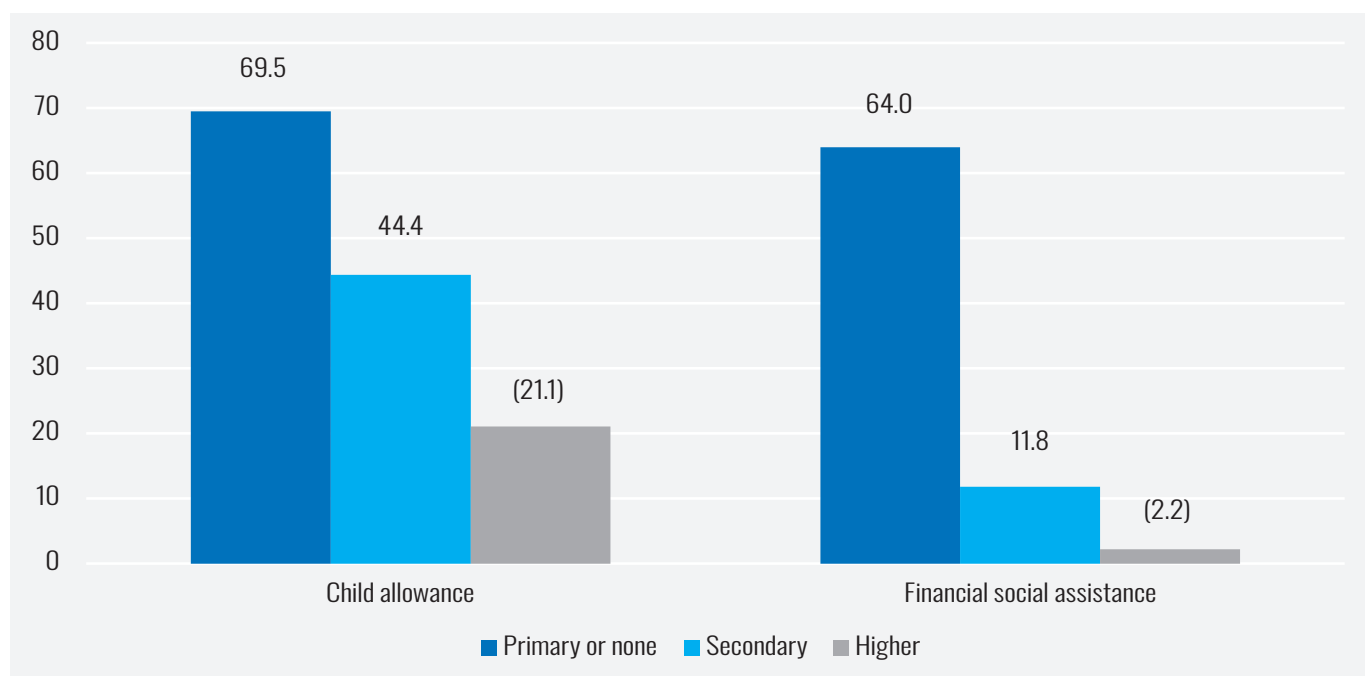


Figure 20. Share of children aged 0–17 from the lowest 20 per cent of families on equivalised disposable family income whose families received CA or FSA in 2018, according to the higher education level between father and mother, in per cent



Note: () Figures are based on 25–49 unweighted cases.

Housing and environment

This set of indicators represents the quality of housing conditions for children from the lowest income quintile HHs and other children. We describe differences in ownership of a housing unit and some of the dwelling's equipment, but also some characteristics of the wider housing environment.

Table 28. Housing quality characteristics and child poverty

Percentage of children from households with various housing characteristics within poorest and other children, EU-SILC, Serbia, 2019

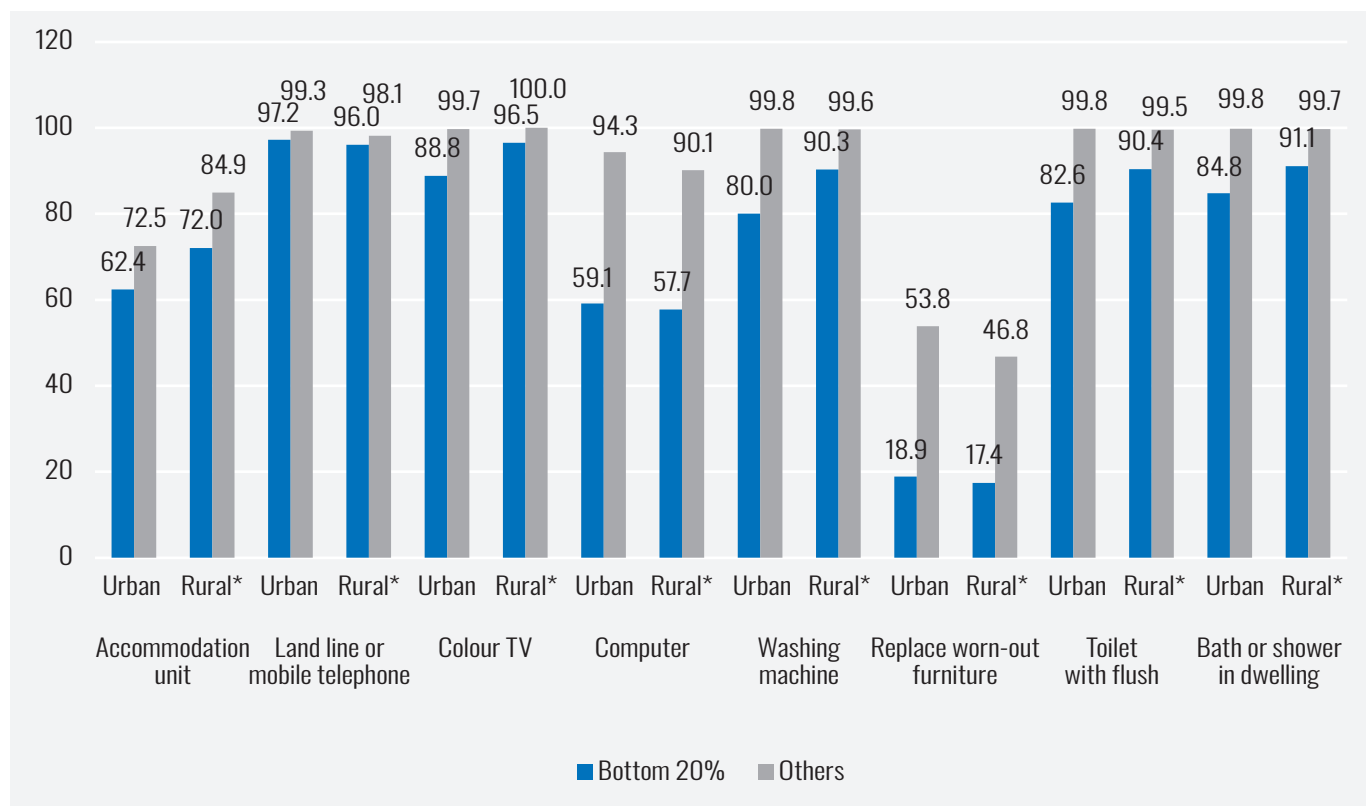
		Other	Poorest 20%	Total
Total		100.0	100.0	100.0
Ownership of the accommodation unit	Owner	76.5	67.7	74.3
	Tenant/subtenant	6.9	4.4	6.3
	Free accommodation	16.7	27.9	19.5
Landline or mobile telephone	Yes	98.9	96.5	98.3
	No	1.1	3.5	1.7
Do you have a colour TV?	Yes	99.8	93.1	98.1
	No	0.2	6.9	1.9
Do you have a computer?	Yes	93.0	58.3	84.2
	No	7.0	41.7	15.8
Do you have a washing machine?	Yes	99.8	85.7	96.2
	No	0.2	14.3	3.8
Replacing worn-out furniture	Yes	51.6	18.0	43.1
	No	48.4	82.0	56.9
Toilet with flush	Yes	99.7	86.9	96.5
	No	0.3	13.1	3.5
Bath or shower in dwelling	Yes	99.8	88.3	96.9
	No	0.2	11.7	3.1
Leaking roof, damp walls/floor/foundation, or rot in window frames or floor	Yes	11.8	30.3	16.5
	No	88.2	69.7	83.5
Problems with the dwelling: too dark, not enough light	Yes	5.0	18.7	8.4
	No	95.0	81.3	91.6
Noise from neighbours or from the street	Yes	12.0	7.9	11.0
	No	88.0	92.1	89.0
Pollution, grime or other environment problems	Yes	14.1	12.3	13.6
	No	85.9	87.7	86.4
Crime, violence or vandalism in the area	Yes	11.5	10.4	11.2
	No	88.5	89.6	88.8

The most important finding in Table 28 is that the poorest quintile of HHs with children do not differ significantly from other HHs in ownership of dwelling. There is just one more item in which the two groups do not differ: all of them have a landline or mobile telephone. All other housing quality characteristics show that children from the poorest 20 per cent of HHs live in worse situations than other children. More frequently they lack a flush toilet and a bathroom in the dwelling, do not have a colour TV, computer or washing machine, and cannot afford to replace worn-out furniture. In addition, dwellings in which the poorest children live are more frequently too dark and have problems with a leaking roof, damp walls or rotted window frames.

For the wider housing environment of children, which is presented as noise, pollution and crime and violence in the neighbourhood, there is no statistically significant difference between the poorest and other children.

A comparison of urban and rural children brings more detail to the picture presented above (Figure 21).

Figure 21. Shares of children aged 0–17 from the bottom 20 per cent and other HHs on equivalised disposable family income, whose HHs own certain housing items, urban and rural, in per cent

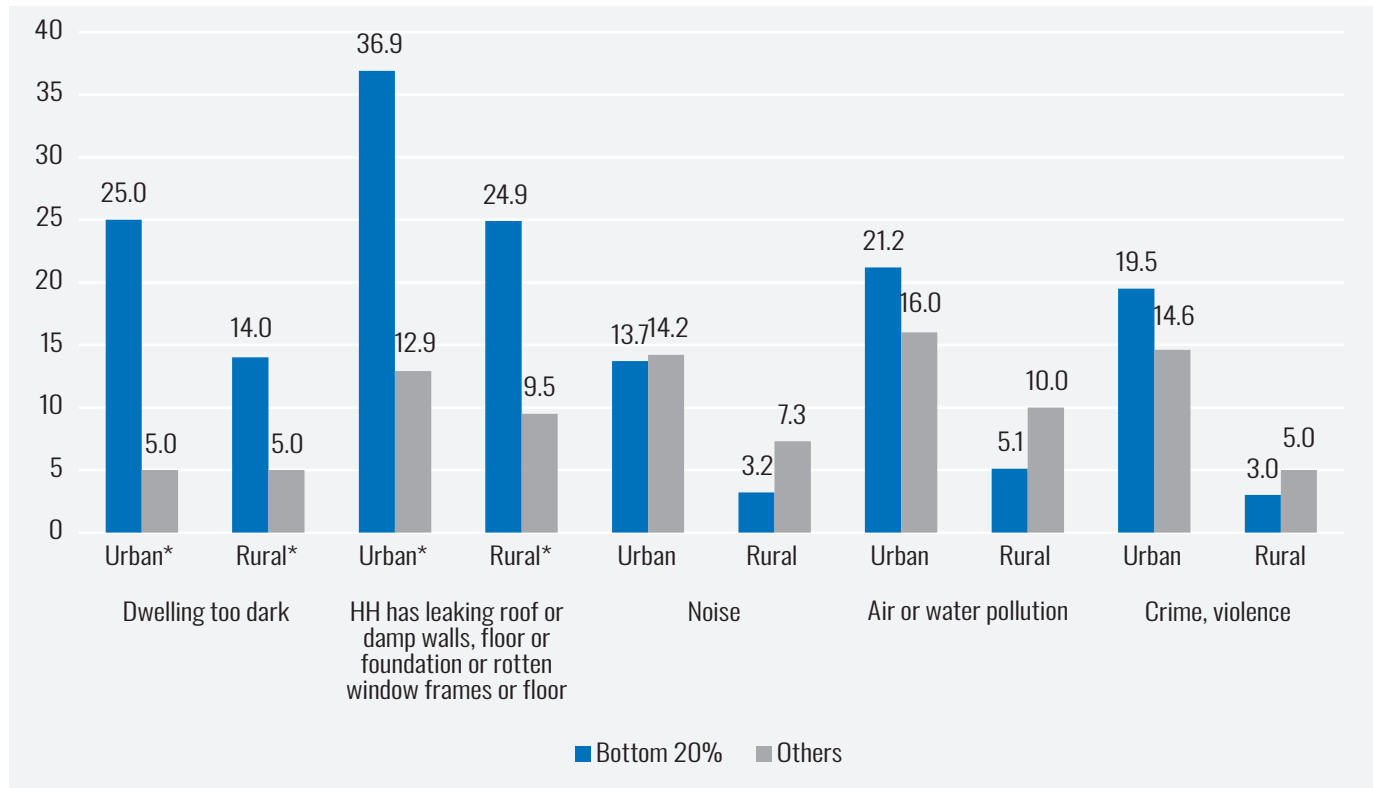


Note: * pairs denote statistically significant difference.

The first important finding is that the conclusion about the equal share of dwelling owners among the poorest quintile of HHs and others should be revised. Surprisingly, a significant difference in this regard occurs in rural settlements, where real estate is cheaper; that is, where better-off HHs own a dwelling more frequently than the poorest ones. Concerning all other described items, the earlier recognized differences between the poorest and other children occur both in urban and rural settlements.

The same conclusion stands for lack of natural light (dwelling is too dark) and presence of problems such as leaking roof, damp walls or rotted window frames (Figure 22).

Figure 22. Shares of children aged 0–17 from the bottom 20 per cent and other HHs on equivalised disposable family income, whose HHs suffer from specific housing and environmental deprivation issues, urban and rural, in per cent



Note: * pairs denote statistically significant difference.

Rural/urban division does not change the conclusion about equality of all children in facing environmental problems in housing: no statistically significant difference appears between the poorest and other children regardless of how urban their settlement is.

Some impact of the level of parent education on the difference between the poorest and other children regarding quality of housing is noted. Here we stress that for statistical reasons it was not possible to compare the poorest and other children whose parents' highest educational achievement is elementary school or less, because the number of non-poor children with uneducated parents in the sample is less than 25. Most significant differences appear among children whose parents have a secondary education (see Table 1 in Annex 6). Better-off children whose parents have secondary education more frequently have a computer, washing machine, toilet and bathroom, as well as the ability to replace old furniture than the poorest children with parents of the same educational attainment. The fact that these differences do not show up this much among children whose parents have high education shows that monetary poverty might be accidental and occasionally hits families who live in good housing conditions.

Housing conditions of the poorest and other children look similar when analysed for the poverty gap based on wealth index (MICS data) and based on equivalised disposable family income (EU-SILC data) in a way that the poorest children face lower-quality housing conditions. However, the environmental issues conclusions are different in the two surveys. MICS 6 noted that better-off children face more noise, pollution and crime/violence in their neighbourhood, while EU-SILC data showed no difference between the two groups of children in this regard. One of the main reasons for this is that the urban/rural division is much more impactful on the wealth index than on disposable income. In other words, rural children live with less material wealth but enjoy a cleaner, safer and quieter environment.

CONCLUSION

This analysis began with the finding that children in Serbia have not enjoyed the benefits of economic progress as much as the adults have, based on statistical measurements of relative and absolute poverty. With the aim to find out more about determinants, characteristics and outcomes of child poverty in Serbia, we conducted an analysis of MICS 6 and EU-SILC 2019 data with a focus on children. Our primary goal was to utilize MICS 6 data because this data set contains plenty of useful information about children's living conditions and development. We used EU-SILC data to check if the main conclusions about child poverty were similar if based on a monetary poverty measurement.

MICS 6 data analysis showed that there is no significant difference in the poverty of boys and girls as well as of different age groups (0–4, 5–14, 15–17). This was confirmed by the EU-SILC sample. There are some stronger determinants of poverty, though. One is region of residence, where child poverty is more concentrated in Sumadija and Western Serbia and Southern and Eastern Serbia than in Belgrade, while Vojvodina is between these two poles. This was another finding confirmed by EU-SILC data, which showed that child poverty is more prevalent in the southern than in the northern regions of Serbia. An even stronger determinant, both in MICS and EU-SILC samples, is type of settlement of residence. Child poverty is much more evident in rural settlements, especially if presented through the MICS wealth index. It was only Belgrade region in which child poverty in rural settlements was not significantly different than child poverty in urban settlements, primarily due to much lower poverty prevalence in villages around Belgrade. Concerning poverty of rural Roma children, there is no significant difference between regions. However, concerning urban settlements, Roma children from Sumadija and Western Serbia are much less poor than Roma children from urban settlements in any other region.

The next strong determinant of poverty is the parents' level of education. In MICS it was expressed through the mother's education and in EU-SILC through the higher education between father and mother. Whichever indicator, the conclusion is that child poverty is much more probable in families where parents have a lower education (elementary or none). The fact that low education is more typical for rural areas points to interaction of these determinants and consequent complexity of actions needed to fight child poverty. It is best illustrated by the fact that even among children of mothers with high education in non-urban areas the share of the poor is 8.7 per cent.

There were a few more determinants analysed in MICS 6 data that showed impact on child poverty. As expected, one was unemployment of the HH head, but more significant is ethnicity of the HH head. In the latter case it was very clear that children of Bosniak and especially of Roma origin suffer a much higher prevalence of poverty than other children in Serbia. Poverty is much more prevalent among children of Roma origin, both in urban and rural settlements, while for children of Bosniak origin this stands only for rural settlements. As higher poverty rates among Roma in Serbia have been a well-recognized and persistent problem for decades, poverty of Roma children was analysed in a separate sample, regularly implemented in MICS surveys in Serbia, beginning with the first. In general, this analysis shows that child poverty is more prevalent among Roma children than among other children, leaving them with scarce financial resources and in much worse housing conditions.

Concerning characteristics of child poverty in Serbia, we analysed several aspects like financial situation, housing conditions and assets ownership. The difference in the financial situation of HHs in which children live is one of the most important distinguishers between the poorest 20 per cent and other children. Two main features of financial situations that distinguish the poorest and other children are FSA and salary. FSA (and any kind of social benefits) is a more typical source of income for the poorest HHs, while a salary from a job is more typical for better-off HHs. Nevertheless, although it is expected that the poorest HHs with children receive economic assistance programmes more often than other HHs, this is true only for urban HHs. In rural areas there is no statistically significant difference between children from the poorest 20 per cent of HHs and other children in this regard, which once again distinguishes the embeddedness of poverty of rural children. One of the main reasons for children from the 20 per cent of poorest HHs not benefiting from CA was that their parents were told they did not meet the conditions, which points to a well-known fact that monetary social assistance measures in Serbia are well targeted but narrow in scope. Additional analysis brought two more types of income to the forefront: income from self-employment and pensions. These two are important for keeping children out of

poverty, the former in urban settlements and the latter in rural settlements. Having a pension in the HH is important for bringing Roma children out of poverty, too.

Analysis of material wealth indicators based primarily on HH and personal assets shows that it is only basic components in which the poorest 20 per cent and other children do not differ significantly. Similar shares of children from both groups have electricity, a TV set, telephone, bed, table with chairs and a wardrobe. On the other hand, children from more affluent HHs enjoy better access to the internet, laptop computers and numerous HH appliances. This picture is worse for Roma children, where those from the lowest three wealth deciles lack even the mentioned basic components significantly more often than other Roma children.

In quality of housing and environmental issues, the only indicator in which the great majority of children are the same, regardless of area of living or wealth status, is ownership of a dwelling. This is valid for Roma children, too. The rest of the analysed indicators show, in general, that urban children suffer worse housing environments (air/water pollution and crime/violence) while children from rural areas have worse quality of housing units. However, the latter is valid much more for the poorest rural children. More often than other rural children they lack a bathroom or flush toilet in the house, natural light or have rotted windows and doors, damp walls or a leaking roof. Roma children, most of whom live in urban areas, also suffer air/water pollution (more than 50 per cent of them) regardless of their HH's wealth status, while housing quality is significantly worse for the poorest 60 per cent of Roma children than for the others.

Child poverty produces different outcomes important for child growth and development:

- ▲ Poverty affects children's growth and produces an increase in stunting, and critical difference in this regard happens between the poorest and other children in urban areas. On the other hand, urban non-poor children tend to be overweight more than the poorest urban children. Among Roma children stunting prevalence is the greatest nutrition issue, and it is much more present among children from the lowest three wealth deciles.
- ▲ Violent disciplining is used on more than 40 per cent of children, and there is no significant difference between the wealth categories of children 1–14 years old in this respect, regardless of area of residence. The same stands for the poorest and other Roma children, but the prevalence of violent discipline is much higher among Roma children than among children in Serbia in general (close to 70 per cent compared with a bit over 40 per cent in the national sample).
- ▲ Preschool attendance sharply increases with the score on the wealth index. This tendency is less emphasized in rural areas, but this is primarily due to the widespread lack of preschool institutions in rural settlements, which could be considered as structural poverty of rural children in general. One of the consequences of higher preschool attendance is the big disparity in the literacy–numeracy domain, where 3–4-year-old children from the upper four quintiles score better than the poorest children. Among Roma children there is no gap between the poorest and other children regarding preschool attendance, but they attend this level of education much more rarely than children from the national sample. A similar conclusion stands for achievement in the literacy–numeracy domain: no poverty gap, but lower achievement than in the national sample.
- ▲ Problems with school attendance of the poorest children continue at the elementary school level. Enrolment numbers are high, but in rural areas the poorest children attend elementary school significantly less than other children (88.6 per cent and 99.4 per cent, respectively). This means that exclusion of the poorest children from education, especially in rural areas, is a constant problem. Roma children do not differ in elementary school attendance with regard to their poverty status, but their attendance rate is much lower than in the national sample.
- ▲ At the secondary school level, the problem is in giving up education; the difference between the poorest and other children in being out of school is statistically significant — 17.5 per cent against 1 per cent. These disparities are noted both in rural and urban areas, to a similar extent. Here the difference appears in the Roma sample, too. Poorer children have lower attendance rates.
- ▲ The share of children engaged in child labour in Serbia is significant — 9.5 per cent — but it is not typical for the poorest children, as they and other children take part in child labour in similar percentages. The poorest 20 per cent and other children differ significantly only in conducting economic activities below the age-specific threshold, and this occurs mainly in urban areas. With waste

collection being excluded from the list of economic activities in MICS, child labour is less present among Roma children than in Serbia in general; however, they are more exposed to hazardous work.

- ▲ Child marriage is present in Serbia and, from the poverty point of view, it is much higher among women from the poorest 20 per cent of HHs (5.1 per cent) than among other women (0.8 per cent). This trend is present more in urban than in rural settlements. Child marriage is a huge issue in the Roma community: the occurrence of child marriage in the Roma population is almost 10 times higher than in the general population in Serbia. However, while child marriage was more frequent among women from the three lowest wealth quintiles than women from the two highest quintiles, there is no such difference when we look at Roma girls who are now 15–19 years old. This may mean that efforts to eradicate child marriage are finally succeeding.

RECOMMENDATIONS

The analysis presented above shows that some children in Serbia face a much higher risk of poverty from the moment they are born. This means that they step onto the way to poverty very early and with time have less and less opportunity to step off. This conclusion is consistent with our introductory remark that children in Serbia have not enjoyed the benefits of recent economic progress as much as adults have.

Persistent child poverty in Serbia coincides with a policy framework that is insufficient to fight poverty. Although the relative poverty rate in Serbia has stayed around one quarter of the population for almost 10 years now, and the at-risk-of-poverty rate has been even higher among children, the Poverty Reduction Strategy was never reintroduced after year 2012. The Economic Reform Programme (ERP), which is usually considered as the overarching public policy document for all developmental targets, including social policy, contains a single structural reform in the area of social protection: introduction of the integrated system of social cards²⁵. Another public policy document relevant to the fight against child poverty could be the Strategy of Social Protection Development. However, this strategy was drafted for the period 2019–2025 and was never adopted by the Government. Similar to this is the situation with the Law on Social Protection Development. The Law on Changes and Additions to the Law on Social Protection was drafted in 2018 but not enacted.

The analysis of determinants of child poverty presented above derived two groups of children among whom poverty is more concentrated and who are somehow territorially distinguished from most other children. These two groups are children from rural areas and children from substandard settlements. The latter are mostly urban settlements, almost completely inhabited by Roma population.

The recommendations presented below are aimed at solving the most urgent poverty problems recognizable from MICS data and are directed towards the two most disadvantaged groups described above and to the most burning dimensions of their poverty and deprivation.

1. Diversify and increase financial assistance for the poorest families with children.

- 1.1. Increase the amount of FSA and CA.
- 1.2. Relax conditions for FSA to allow for greater coverage.
- 1.3. Ensure consistent application of the regulation allowing Roma families without registered residency to apply for FSA via the Centre for Social Work.
- 1.4. Relax conditions for access to utility bill discounts for the poorest HHs.
- 1.5. Improve infrastructure and support construction of housing units in rural areas and Roma settlements.

2. It is necessary to broaden access to underrepresented children at all levels of education, starting with preschool education. This problem is more dramatic in rural areas and in Roma settlements.

- 2.1. Ensure adaptation of other types of community infrastructure into preschool environments (where conditions allow) and/or improve transportation to preschool institutions in rural areas and in or near Roma settlements.
- 2.2. Ensure greater diversification of preschool programmes.
- 2.3. Ensure equity considerations for preschool enrolment.
- 2.4. Run outreach and awareness campaigns in rural areas and Roma settlements with a focus on the benefits of preschool education for child development and continuation of education.

²⁵ The Law on Social Card was enacted in 2021.

2.5. Capacitate local self-governments in meeting the basic educational needs, including transportation, of children from poor HHs and those with multiple deprivations.

3. Improve digital literacy and competences of children.

3.1. Provide improved access to the internet and computers to rural and Roma children.

3.2. Advance development of digital competences for rural and Roma children.

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ANNEXES

Annex 1. Testing of wealth index deciles and quintiles distinction

Table 1. Distribution of different economic indicators across five quintiles of wealth index

Percentage of different categories within five wealth index quintiles, Serbia, 2019

		Wealth index quintile					Total
		Poorest	Second	Middle	Fourth	Richest	
Total		100.0	100.0	100.0	100.0	100.0	100.0
Received assistance through Financial Social Assistance — FSA	Yes	29.9	11.6	5.0	3.5	0.9	9.2
	No	70.1	88.4	95.0	96.5	99.1	90.8
Salary from job	No salary	33.1	20.9	10.7	7.7	8.9	15.3
	Salary	66.9	79.1	89.3	92.3	91.1	84.7
Income from social benefits	No income	55.4	71.4	79.0	85.5	86.4	76.7
	Income from social benefits	44.6	28.6	21.0	14.5	13.6	23.3
No income source	Some income source	98.8	99.8	99.8	100.0	100.0	99.7
	No income source	1.2	0.2	0.2	0.0	0.0	0.3
Has household been unable to pay utility bills	Yes	49.9	26.9	23.3	18.5	12.8	24.9
	No	50.1	73.1	76.7	81.5	87.2	75.1
Can HH afford to keep home warm	Yes	76.9	94.6	92.5	98.1	98.8	93.0
	No	23.1	5.4	7.5	1.9	1.2	7.0

Table 2. Distribution of different economic indicators across 10 deciles of wealth index**Percentage of different categories within 10 wealth index deciles, Serbia, 2019**

		Percentile Group of com1										Total
		1st decile	2nd decile	3rd decile	4th decile	5th decile	6th decile	7th decile	8th decile	9th decile	10th decile	
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Received assistance through Financial Social Assistance — FSA	Yes	44.1	12.1	12.1	11.1	5.4	4.6	3.3	3.6	1.5	0.5	9.2
	No	55.9	87.9	87.9	88.9	94.6	95.4	96.7	96.4	98.5	99.5	90.8
Salary from job	No salary	37.6	27.6	19.2	22.4	9.9	11.4	6.3	9.1	10.4	7.6	15.3
	Salary	62.4	72.4	80.8	77.6	90.1	88.6	93.7	90.9	89.6	92.4	84.7
Income from social benefits	No income	50.0	62.1	70.9	71.8	74.1	83.6	83.7	87.4	83.5	89.0	76.7
	Income from social benefits	50.0	37.9	29.1	28.2	25.9	16.4	16.3	12.6	16.5	11.0	23.3
No income source	Some income source	98.9	98.6	100.0	99.7	99.9	99.7	100.0	100.0	100.0	100.0	99.7
	No income source	1.1	1.4	0.0	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.3
Has household been unable to pay utility bills	Yes	59.8	38.2	29.5	24.6	26.2	20.6	20.2	16.7	13.0	12.7	24.9
	No	40.2	61.8	70.5	75.4	73.8	79.4	79.8	83.3	87.0	87.3	75.1
Can HH afford to keep home warm	Yes	71.4	83.7	95.1	94.2	90.3	94.5	97.9	98.3	98.3	99.2	93.0
	No	28.6	16.3	4.9	5.8	9.7	5.5	2.1	1.7	1.7	0.8	7.0

Table 3. Distribution of different economic indicators across five quintiles of wealth index, Roma sample**Percentage of different categories within five wealth index quintiles, Serbia Roma settlements, 2019**

		Wealth index quintile					Total
		Poorest	Second	Middle	Fourth	Richest	
Total		100.0	100.0	100.0	100.0	100.0	100.0
Received assistance through Financial Social Assistance — FSA	Yes	79.5	77.8	69.6	62.1	44.5	68.3
	No	20.5	22.2	30.4	37.9	55.5	31.7
Salary from job	No salary	43.3	38.7	38.8	33.9	33.5	38.1
	Salary	56.7	61.3	61.2	66.1	66.5	61.9
Income from social benefits	No income	17.4	10.9	13.6	18.0	29.7	17.3
	Income from social benefits	82.6	89.1	86.4	82.0	70.3	82.7
No income source	Some income source	100.0	100.0	100.0	100.0	100.0	100.0
	No income source	0.0	0.0	0.0	0.0	0.0	0.0
Has household been unable to pay utility bills	Yes	82.1	81.5	80.1	71.5	58.7	75.3
	No	17.9	18.5	19.9	28.5	41.3	24.7
Can HH afford to keep home warm	Yes	44.0	46.6	58.0	67.4	79.5	57.4
	No	56.0	53.4	42.0	32.6	20.5	42.6

Table 4. Distribution of different economic indicators across 10 deciles of wealth index, Roma sample**Percentage of different categories within 10 wealth index deciles, Serbia Roma settlements, 2019**

		Percentile Group of com1										Total	
		1st decile	2nd decile	3rd decile	4th decile	5th decile	6th decile	7th decile	8th decile	9th decile	10th decile		
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Received assistance through Financial Social Assistance — FSA	Yes	73.9	85.4	76.1	79.5	70.5	68.9	68.8	54.7	51.5	35.5	68.3	
	No	26.1	14.6	23.9	20.5	29.5	31.1	31.2	45.3	48.5	64.5	31.7	
Salary from job	No salary	39.5	47.4	43.0	34.1	44.3	34.0	33.7	34.2	35.0	31.6	38.1	
	Salary	60.5	52.6	57.0	65.9	55.7	66.0	66.3	65.8	65.0	68.4	61.9	
Income from social benefits	No income	23.8	10.8	8.4	13.5	17.0	10.6	17.1	19.0	25.0	35.7	17.3	
	Income from social benefits	76.2	89.2	91.6	86.5	83.0	89.4	82.9	81.0	75.0	64.3	82.7	
No income source	Some income source	99.9	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	
	No income source	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
Has household been unable to pay utility bills	Yes	84.3	80.4	82.6	80.4	84.0	77.2	80.6	62.1	69.0	45.8	75.3	
	No	15.7	19.6	17.4	19.6	16.0	22.8	19.4	37.9	31.0	54.2	24.7	
Can HH afford to keep home warm	Yes	31.8	56.7	40.4	53.2	53.5	61.9	62.3	72.7	75.4	84.6	57.4	
	No	68.2	43.3	59.6	46.8	46.5	38.1	37.7	27.3	24.6	15.4	42.6	

Annex 2. Determinants of child poverty, national sample

Table 1. Influence of area of residence on different social determinants of child poverty

Percentage of poor children within different social categories in urban and other settlements, Serbia, 2019

				Other	Poorest 20%
Area	Urban	Total		93.6	6.4
	Other	Total		70.5	29.5
Area	Urban	Region	Belgrade	93.4	6.6
			Vojvodina	96.4	3.6
			Sumadija and Western Serbia	95.2	4.8
			Southern and Eastern Serbia	88.8	11.2
	Other	Region	Belgrade	91.7	8.3
			Vojvodina	75.5	24.5
			Sumadija and Western Serbia	67.6	32.4
			Southern and Eastern Serbia	59.3	40.7
Area	Urban	Ethnicity of household head	Serbian	97.7	2.3
			Hungarian	95.8	4.2
			Bosnian	84.4	15.6
			Roma	19.8	80.2
			Other/Does not want to declare	96.6	3.4
	Other	Ethnicity of household head	Serbian	76.4	23.6
			Hungarian	65.9	34.1
			Bosnian	21.7	78.3
			Roma	6.3	93.7
			Other/Does not want to declare	90.6	9.4
Area	Urban	Mother's education	Primary or none	53.0	47.0
			Secondary	96.2	3.8
			Higher	99.7	0.3
	Other	Mother's education	Primary or none	34.5	65.5
			Secondary	76.9	23.1
			Higher	91.3	8.7
Area	Urban	Activity status of household head	Employed	95.3	4.7
			Unemployed	86.1	13.9
			Inactive	90.4	9.6
	Other	Activity status of household head	Employed	73.3	26.7
			Unemployed	42.0	58.0
			Inactive	69.7	30.3

			Other	Poorest 20%	
Area	Urban	Size of household	Single parent HH	96.2	3.8
			3–4 members	97.2	2.8
			5+ members	90.6	9.4
	Other	Size of household	Single parent HH	37.1	(62.9)
			3–4 members	72.5	27.5
			5+ members	70.5	29.5
Area	Urban	Sum of children 0–17	1.00	95.9	4.1
			2.00	97.1	2.9
			3+	84.7	15.3
	Other	Sum of children 0–17	1.00	71.7	28.3
			2.00	75.5	24.5
			3+	62.5	37.5

Table 2. Influence of ethnicity of household head on different social determinants of child poverty

Percentage of poor children within categories of interaction between household head's ethnicity and different other social categories, Serbia, 2019

			Other	Poorest 20%	
Serbian and Other [1]	Serbian	Total	88.4	11.6	
	Other and does not want to declare	Total	59.3	40.7	
Serbian and Other	Serbian	Mother's education	Primary or none	57.4	42.6
			Secondary	87.1	12.9
			Higher	97.3	2.7
	Other and does not want to declare	Mother's education	Primary or none	28.3	71.7
			Secondary	82.0	18.0
			Higher	99.6	0.4
Serbian and Other	Serbian	Activity status of household head	Employed	90.9	9.1
			Unemployed	77.5	22.5
			Inactive	83.9	16.1
	Other and does not want to declare	Activity status of household head	Employed	61.0	39.0
			Unemployed	27.6	72.4
			Inactive	62.8	37.2
Serbian and Other	Serbian	Size of household	Single parent HH	88.9	11.1
			3–4 members	92.1	7.9
			5+ members	86.3	13.7
	Other and does not want to declare	Size of household	Single parent HH	70.2	(*)
			3–4 members	76.5	23.5
			5+ members	52.9	47.1

				Other	Poorest 20%
Serbian and Other	Serbian	Sum of children 0–17	1.00	88.1	11.9
			2.00	90.3	9.7
			3+	84.6	15.4
	Other and does not want to declare	Sum of children 0–17	1.00	73.7	26.3
			2.00	69.4	30.6
			3+	47.1	52.9

[1] Due to the small number of cases, all ethnic minority HH heads are grouped into 'Other'.

() Figures that are based on 25–49 unweighted cases.

(*) Figures that are based on fewer than 25 unweighted cases.

Table 3. Influence of mother's level of education on different social determinants of child poverty**Percentage of poor children within categories of interaction between mother's level of education and different other social categories, Serbia, 2019**

			Other	Poorest 20%	
Mother's education	Primary or none	Total	41.1	58.9	
	Secondary	Total	86.5	13.5	
	Higher	Total	97.5	2.5	
Mother's education	Primary or none	Activity status of household head	Employed	44.4	55.6
			Unemployed	22.3	77.7
			Inactive	38.5	61.5
	Secondary	Activity status of household head	Employed	88.9	11.1
			Unemployed	73.4	26.6
			Inactive	83.8	16.2
	Higher	Activity status of household head	Employed	98.2	1.8
			Unemployed	93.7	6.3
			Inactive	96.0	4.0
Mother's education	Primary or none	Size of household	Single parent HH	26.0	(*)
			3-4 members	53.4	46.6
			5+ members	38.6	61.4
	Secondary	Size of household	Single parent HH	91.0	9.0
			3-4 members	88.9	11.1
			5+ members	85.2	14.8
	Higher	Size of household	Single parent HH	97.3	2.7
			3-4 members	98.1	1.9
			5+ members	97.0	3.0
Mother's education	Primary or none	Sum of children 0-17	1.00	46.5	53.5
			2.00	50.7	49.3
			3+	32.8	67.2
	Secondary	Sum of children 0-17	1.00	88.3	11.7
			2.00	88.0	12.0
			3+	82.1	17.9
	Higher	Sum of children 0-17	1.00	95.1	4.9
			2.00	98.1	1.9
			3+	98.8	1.2

() Figures that are based on 25-49 unweighted cases.

(*) Figures that are based on fewer than 25 unweighted cases.

Annex 3. Characteristics of child poverty, national sample

Table 1. Housing and environmental characteristics by area

Percent distribution of children by selected housing characteristics, Serbia, 2019

		Area				Area			
		Urban		Other		Urban		Other	
		Total		Total		Poorest quintile and others		Poorest quintile and others	
						Poorest 20%		Others	
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Household owns the dwelling	Own	88.3	96.6	85.5	88.4	92.2	98.5		
	Rent	11.7	3.4	14.5	11.6	7.8	1.5		
Dwelling problem: leaking roof	Yes	11.7	16.9	38.0	9.9	34.6	9.5		
	No	88.3	83.1	62.0	90.1	65.4	90.5		
Dwelling problem: dampness	Yes	18.8	29.2	53.5	16.4	50.1	20.6		
	No	81.2	70.8	46.5	83.6	49.9	79.4		
Dwelling problem: rot	Yes	9.3	21.0	43.7	7.0	43.0	11.8		
	No	90.7	79.0	56.3	93.0	57.0	88.2		
Dwelling too dark	Yes	11.5	8.9	31.5	10.2	12.4	7.4		
	No	88.5	91.1	68.5	89.8	87.6	92.6		
Dwelling has shower unit or bathtub	Yes	98.8	94.6	85.5	99.7	81.6	100.0		
	No	1.2	5.4	14.5	0.3	18.4	0.0		
Household replace furniture when worn out or damaged	Yes	69.6	62.8	21.3	72.8	32.8	75.4		
	No	30.4	37.2	78.7	27.2	67.2	24.6		
Problems in place: noise	Yes	21.3	12.4	21.7	21.3	9.5	13.6		
	No	78.7	87.6	78.3	78.7	90.5	86.4		
Problems in place: environment	Yes	35.0	26.2	32.8	35.2	18.9	29.2		
	No	65.0	73.8	67.2	64.8	81.1	70.8		
Problems in place: crime	Yes	14.7	6.6	11.5	14.9	3.1	8.1		
	No	85.3	93.4	88.5	85.1	96.9	91.9		
HH deprived of indoor flush toilet and indoor shower or bathtub	No	99.1	94.7	86.4	100.0	81.9	100.0		
	Yes	0.9	5.3	13.6	0.0	18.1	0.0		
HH has leaking roof or damp walls, floor or foundation or rotten window frames or floor	No	75.5	62.6	42.3	77.7	36.2	73.6		
	Yes	24.5	37.4	57.7	22.3	63.8	26.4		

Annex 4. Outcomes of child poverty, national sample

Table 1. Birth registration by area

Percentage of poor and other children under age 5 by whether birth is registered and percentage of children not registered, Serbia, 2019

Area				Children whose births are registered with civil authorities			Total registered [1]	Number of children
				Have birth certificate		No birth certificate		
				Seen	Not seen			
Area	Urban	Total	83.1	16.1	0.8	99.9	1,075	
	Other	Total	79.7	18.7	1.6	99.9	763	
Area	Urban	Bottom quintile of wealth index	Poorest 20%	67.1	32.4	0.5	100.0	69
			Others	84.2	15.0	0.8	99.9	1,006
	Other	Bottom quintile of wealth index	Poorest 20%	73.1	26.0	0.5	99.7	235
			Others	82.6	15.4	2.0	100.0	527

[1] MICS indicator PR.1 — Birth registration; SDG indicator 16.9.1

[A] Children aged 0–1 years are excluded, as functional difficulties are only collected for age 2–4 years.

Table 2. Nutritional status of children by area

Percentage of poor and other children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Serbia, 2019

Area				Weight for age		Height for age		Weight for height			
				Underweight		Stunted		Wasted		Overweight	
				Per cent below		Per cent below		Per cent below		Per cent above	
				-2 SD [1]	-3 SD [2]	-2 SD [3]	-3 SD [4]	-2 SD [5]	-3 SD [6]	+2 SD [7]	+3 SD [8]
Area	Urban	Total	1.6	0.4	5.9	2.9	4.3	1.0	12.6	2.4	
	Other	Total	0.4	0.0	4.9	0.7	0.8	0.0	9.1	2.5	
Area	Urban	Bottom quintile of wealth index	Poorest 20%	(3.9)	(0.0)	(16.6)	(1.4)	(9.7)	(0.0)	(1.7)	(0.0)
			Others	1.4	0.4	4.9	3.1	3.8	1.1	13.7	2.7
	Other	Bottom quintile of wealth index	Poorest 20%	0.8	0.0	7.5	0.3	0.4	0.0	11.1	1.6
			Others	0.3	0.0	3.7	0.9	1.0	0.0	8.3	3.0

[1] MICS indicator TC.44a — Underweight prevalence (moderate and severe)

[2] MICS indicator TC.44b — Underweight prevalence (severe)

[3] MICS indicator TC.45a — Stunting prevalence (moderate and severe); SDG indicator 2.2.1

[4] MICS indicator TC.45b — Stunting prevalence (severe)

[5] MICS indicator TC.46a — Wasting prevalence (moderate and severe); SDG indicator 2.2.2

[6] MICS indicator TC.46b — Wasting prevalence (severe)

[7] MICS indicator TC.47a — Overweight prevalence (moderate and severe); SDG indicator 2.2.2

[8] MICS indicator TC.47b — Overweight prevalence (severe)

Note: Denominators for weight for age, height for age, and weight for height may be different.

Children are excluded from one or more of the anthropometric indicators when their weights and heights have not been measured or are implausible (flagged), or their age is not available, whichever applicable.

(.) Figures that are based on 25–49 unweighted cases.

Table 3: Early childhood education by area

Percentage of poor and other children aged 36–59 months who are attending early childhood education, Serbia, 2019

				Percentage of children aged 36–59 months attending early childhood education [1]	Number of children aged 36–59 months
Area	Urban	Total		70.5	444
	Other	Total		45.9	302
Area	Urban	Bottom quintile of wealth index	Poorest 20%	(*)	29
			Others	75.1	415
	Other	Bottom quintile of wealth index	Poorest 20%	11.8	94
			Others	61.4	208

[1] MICS indicator LN.1 — Attendance to early childhood education

(*) Figures that are based on fewer than 25 unweighted cases.

Table 4. Early child development index by area

Percentage of poor and other children aged 3–4 years who are developmentally on track in literacy–numeracy, physical, social–emotional, and learning domains, and the early child development index score, Serbia, 2019

		Percentage of children aged 3–4 years who are developmentally on track for indicated domains				Early child development index score [1]	Number of children aged 3–4 years		
		Literacy–numeracy	Physical	Social–Emotional	Learning				
Area	Urban	Total		39.3	100.0	98.1	100.0	98.4	444
	Other	Total		28.8	99.5	95.2	100.0	95.4	302
Area	Urban	Bottom quintile of wealth index	Poorest 20%	(*)	(*)	(*)	(*)	(*)	29
			Others	39.6	100.0	97.9	100.0	98.3	415
	Other	Bottom quintile of wealth index	Poorest 20%	13.1	100.0	98.5	100.0	99.3	94
			Others	35.9	99.3	93.7	100.0	93.6	208

[1] MICS indicator TC.53 — Early child development index; SDG Indicator 4.2.1

(*) Figures that are based on fewer than 25 unweighted cases.

Table 5. Child marriage by area

Percentage of women aged 15–49 years who first married or entered a marital union before their 15th birthday, percentages of women age 20–49 who first married or entered a marital union before their 15th and 18th birthdays, and percentage of women age 15–19 years currently married or in union, Serbia, 2019

			Women aged 15–49 years		Women aged 20–49 years			Women aged 15–19 years	
			Per-centage married before age 15	Number of women aged 15–49 years	Per-centage married before age 15 [1]	Per-centage married before age 18 [2]	Number of women aged 20–49 years	Percentage currently married/in union [3]	Number of women aged 15–19 years
Area	Urban	Total	0.7	2,349	0.1	2.7	2,141	2.7	208
	Other	Total	2.5	1,391	3.3	11.0	1,216	5.2	175
Area	Urban	Bottom quintile of wealth index	Poorest 20%	100	(*)	(*)	(*)	(*)	(*)
			Others	2,249	0.0	1.9	2,052	1.8	197
	Other	Bottom quintile of wealth index	Poorest 20%	390	6.8	22.3	328	11.7	61
			Others	1,002	1.9	6.2	887	1.7	114

[1] MICS indicator PR.4a — Child marriage (before age 15); SDG 5.3.1

[2] MICS indicator PR.4b — Child marriage (before age 18); SDG 5.3.1

[3] MICS indicator PR.5 — Young women aged 15–19 years currently married or in union

(*) Figures that are based on fewer than 25 unweighted cases.

Annex 5. Determinants of child poverty, EU-SILC sample

Table 1. Influence of NUTS1 region of residence on different social determinants of child poverty

Percentage of poor children within different social categories in Northern and Southern Serbia, EU-SILC, Serbia, 2019

				Other	Poorest 20%
	Serbia North	Total		81.0	19.0
	Serbia South	Total		68.1	31.9
NUTS1 regions	Serbia North	Settlement type	Urban	84.7	15.3
			Other	72.1	27.9
	Serbia South	Settlement type	Urban	78.0	22.0
			Other	56.8	43.2
NUTS1 regions	Serbia North	Higher level of education between father and mother	Primary or none	12.0	88.0
			Secondary	76.5	23.5
			Higher	98.5	1.5
	Serbia South	Higher level of education between father and mother	Primary or none	3.8	96.2
			Secondary	60.6	39.4
			Higher	92.4	7.6

Table 2. Influence of interaction of the type of settlement of residence and higher of the parents' education on child poverty

Percentage of poor children within categories of interaction between type of settlement and parents' education, EU-SILC, Serbia, 2019

				Other	Poorest 20%
Settlement type	Urban	Total		81.9	18.1
	Other	Total		63.0	37.0
Settlement type	Urban	Higher level of education between father and mother	Primary or none	18.2	81.8
			Secondary	73.9	26.1
			Higher	97.2	2.8
	Other	Higher level of education between father and mother	Primary or none	1.5	98.5
			Secondary	61.8	38.2
			Higher	90.2	9.8

Annex 6. Characteristics of child poverty, EU-SILC sample

Table 1. Interaction of highest of parents' education and housing quality characteristics among the poorest children

Percentage of poorest children with various housing characteristics within different levels of education of the parent with higher education, EU-SILC, Serbia, 2019

				Others	Poorest 20%	Total
Total				100.0	100.0	100.0
Higher level of education between father and mother	Primary or none	Ownership of the accommodation unit	Owner	81.8	45.6	48.9
			Tenant/subtenant	0.0	5.2	4.7
			Free accommodation	18.2	49.2	46.3
	Secondary	Ownership of the accommodation unit	Owner	74.6	71.8	73.7
			Tenant/subtenant	6.2	4.0	5.5
			Free accommodation	19.2	24.2	20.8
	Higher	Ownership of the accommodation unit	Owner	78.8	66.6	78.3
			Tenant/subtenant	8.0	7.5	8.0
			Free accommodation	13.2	25.9	13.7
Higher level of education between father and mother	Primary or none	Landline or mobile telephone	Yes	81.8	89.3	88.6
			No	18.2	10.7	11.4
	Secondary	Landline or mobile telephone	Yes	99.4	97.6	98.8
			No	0.6	2.4	1.2
	Higher	Landline or mobile telephone	Yes	98.5	100.0	98.6
			No	1.5	0.0	1.4
Higher level of education between father and mother	Primary or none	Do you have a colour TV?	Yes	81.8	71.2	72.2
			No	18.2	28.8	27.8
	Secondary	Do you have a colour TV?	Yes	99.8	96.8	98.8
			No	0.2	3.2	1.2
	Higher	Do you have a colour TV?	Yes	100.0	97.8	99.9
			No	0.0	2.2	0.1
Higher level of education between father and mother	Primary or none	Do you have a computer?	Yes	67.8	6.3	12.0
			No	32.2	93.7	88.0
	Secondary	Do you have a computer?	Yes	90.8	65.5	82.8
			No	9.2	34.5	17.2
	Higher	Do you have a computer?	Yes	96.8	93.4	96.7
			No	3.2	6.6	3.3
Higher level of education between father and mother	Primary or none	Do you have a washing machine?	Yes	81.8	47.9	51.0
			No	18.2	52.1	49.0
	Secondary	Do you have a washing machine?	Yes	99.8	91.7	97.2
			No	0.2	8.3	2.8
	Higher	Do you have a washing machine?	Yes	100.0	97.8	99.9
			No	0.0	2.2	0.1

				Others	Poorest 20%	Total
Higher level of education between father and mother	Primary or none	Do you have a car?	Yes	81.8	18.6	24.4
			No	18.2	81.4	75.6
	Secondary	Do you have a car?	Yes	85.2	68.2	79.8
			No	14.8	31.8	20.2
	Higher	Do you have a car?	Yes	90.1	72.9	89.4
			No	9.9	27.1	10.6
Higher level of education between father and mother	Primary or none	Replacing worn-out furniture	Yes	0.0	4.3	3.9
			No	100.0	95.7	96.1
	Secondary	Replacing worn-out furniture	Yes	41.3	19.7	34.5
			No	58.7	80.3	65.5
	Higher	Replacing worn-out furniture	Yes	67.1	31.2	65.6
			No	32.9	68.8	34.4
Higher level of education between father and mother	Primary or none	Toilet with flush	Yes	76.8	56.9	58.7
			No	23.2	43.1	41.3
	Secondary	Toilet with flush	Yes	99.7	91.6	97.1
			No	0.3	8.4	2.9
	Higher	Toilet with flush	Yes	100.0	100.0	100.0
			No			
Higher level of education between father and mother	Primary or none	Bath or shower in dwelling	Yes	76.8	58.6	60.3
			No	23.2	41.4	39.7
	Secondary	Bath or shower in dwelling	Yes	99.8	92.9	97.6
			No	0.2	7.1	2.4
	Higher	Bath or shower in dwelling	Yes	100.0	100.0	100.0
			No			
Higher level of education between father and mother	Primary or none	Leaking roof, damp walls/floor/foundation, or rot in window frames or floor	Yes	91.0	81.7	82.5
			No	9.0	18.3	17.5
	Secondary	Leaking roof, damp walls/floor/foundation, or rot in window frames or floor	Yes	14.4	22.9	17.1
			No	85.6	77.1	82.9
	Higher	Leaking roof, damp walls/floor/foundation, or rot in window frames or floor	Yes	7.1	0.0	6.8
			No	92.9	100.0	93.2

				Others	Poorest 20%	Total
Higher level of education between father and mother	Primary or none	Problems with the dwelling: too dark, not enough light	Yes	23.2	65.8	61.9
			No	76.8	34.2	38.1
	Secondary	Problems with the dwelling: too dark, not enough light	Yes	5.9	11.3	7.6
			No	94.1	88.7	92.4
	Higher	Problems with the dwelling: too dark, not enough light	Yes	3.6	0.0	3.4
			No	96.4	100.0	96.6
Higher level of education between father and mother	Primary or none	Noise from neighbours or from the street	Yes	25.5	8.7	10.3
			No	74.5	91.3	89.7
	Secondary	Noise from neighbours or from the street	Yes	10.5	7.7	9.6
			No	89.5	92.3	90.4
	Higher	Noise from neighbours or from the street	Yes	14.1	8.6	13.8
			No	85.9	91.4	86.2
Higher level of education between father and mother	Primary or none	Pollution, grime or other environment problems	Yes	25.5	16.4	17.3
			No	74.5	83.6	82.7
	Secondary	Pollution, grime or other environment problems	Yes	13.3	12.0	12.9
			No	86.7	88.0	87.1
	Higher	Pollution, grime or other environment problems	Yes	15.0	2.5	14.5
			No	85.0	97.5	85.5
Higher level of education between father and mother	Primary or none	Crime, violence or vandalism in the area	Yes	18.2	25.7	25.0
			No	81.8	74.3	75.0
	Secondary	Crime, violence or vandalism in the area	Yes	9.7	7.2	8.9
			No	90.3	92.8	91.1
	Higher	Crime, violence or vandalism in the area	Yes	14.3	15.5	14.3
			No	85.7	84.5	85.7



**CHILD POVERTY
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