# POVERTY IN SERBIA 2011, 2012 and 2013

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## POVERTY IN SERBIA 2011, 2012 and 2013

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### FOREWORD

Towards the end of 2013, the Social Inclusion and Poverty Reduction Unit of the Government of the Republic of Serbia, in collaboration with the Center for Social Policies and Center for Liberal-Democratic Studies, launched a comprehensive project titled "Absolute Poverty and Trends in Measuring Poverty in the Republic of Serbia". The project was conceived in response to the absence of official data on absolute poverty after 2010, as well as to the need to shed light on new trends in measuring poverty and their impact on the Republic of Serbia.

The project comprises two components: one (whose contents are presented below) aimed at presenting the level and profile of absolute poverty and the level of inequality in Serbia in the period 2011–2013, thus filling the existing data gap, and another (G. Matković: *Merenje siromaštva – teorijski koncepti, stanje i preporuke za Srbiju*) aimed at reviewing in detail the poverty monitoring options and recommending measures for further monitoring.

Until 2010, poverty was monitored in Serbia under the absolute poverty concept, based on the calculations performed by the Statistical Office of the Republic of Serbia, whereas the relative poverty concept and measurement based on EU indicators were first applied in the *First National Report on Social Inclusion and Poverty Reduction*. The data on absolute consumption poverty were last officially published in 2010 and have not been monitored as part of official statistics since then, despite the fact that they have been included among country-specific financial poverty indicators (*Praćenje socijalne uključenosti u Srbiji*, 2010).

The study below aims to present a detailed overview and analysis of the level and profile of poverty in the Republic of Serbia between 2011 and 2013. To ensure comparability with earlier poverty indicators and analyses, this study follows the measurement methodology applied by the Statistical Office of the Republic of Serbia until 2010.

Household Budget Survey data were processed for the purposes of the present study by the team of the Statistical Office of the Republic of Serbia led by Vladan Božanić. Their cooperation is greatly appreciated.

## INTRODUCTION

This study will present an assessment and analysis of absolute poverty in Serbia in 2011, 2012 and 2013, as well as an assessment of inequality. In line with the findings and arguments from the other project component<sup>1</sup>, we have opted for the absolute poverty concept, according to which all those whose consumption does not exceed the level of the poverty line are regarded as poor.

The statistical apparatus for poverty assessment comprises the *Household Budget Survey*, conducted regularly by the Statistical Office of the Republic of Serbia, together with the accompanying instruments. This ensures the consistency and comparability of findings with earlier poverty assessments carried out by the Statistical Office of the Republic of Serbia until 2010 inclusive, thereby achieving the purpose of this study and facilitating the monitoring of poverty over several years according to unchanged methodology.

#### Methodological Notes<sup>2</sup>

Household Budget Survey (HBS). As part of its statistical surveys programme, the Statistical Office of the Republic of Serbia conducts regular household budget surveys. This survey collects data on household income, expenditures and consumption, with all three categories disaggregated. In addition, data on certain key population living standard indicators, such as housing conditions, possession of durable consumer goods etc., are also collected. The key data on demographic, economic and social characteristics of the population are also covered by the survey.

A *respondent unit* is a household selected according to the sampling plan. A household is understood as a unit whose members live, prepare meals and spend the generated income together, or a single person who lives, prepares meals and spends income on his/her own.

*Survey method.* The survey method involves a diary (the household keeps a diary of consumption for fifteen or sixteen days) for products and services for individual consumption, and a questionnaire-based interview for income (one month and three months), durable goods (reference period of twelve months), semi-durable goods (three months), and income, agriculture, hunting and fishing (three months).

*Territorial coverage.* The survey is conducted throughout the territory of the Republic of Serbia, and data processing provides data on the Republic of Serbia – total, City of Belgrade Region, Vojvodina Region, Šumadija and Western Serbia Region and South-Eastern and Eastern Serbia Region.

The *survey sample* is a two-stage stratified sample. First-stage units are enumeration districts, and second-stage units are households. Every fifteen days, 200 households are surveyed, totalling 4,800 households in a year. Of the planned 4,800 households, 4,592 households were surveyed successfully in 2011 (plan fulfilment rate of 96%), 4,546 households in 2012 (95%), and 4,517 households in 2013 (94%).

<sup>&</sup>lt;sup>1</sup> Matković, G. (2014). *Merenje siromaštva – teorijski koncepti, stanje i preporuke za Srbiju*, Social Inclusion and Poverty Reduction Unit of the Government of the Republic of Serbia

<sup>&</sup>lt;sup>2</sup> More detailed methodological notes are available in *Household Budget Survey 2012*, SORS, 2013.

*Consumption definition.* Households' individual consumption is disaggregated according to the United Nations' COICOP classification, comprising the following headings: (1) food and nonalcoholic beverages; (2) alcoholic beverages and tobacco; (3) clothing and footwear; (4) housing, water, electricity, gas and other fuels; (5) furnishings, household equipment and routine household maintenance; (6) health; (7) transport; (8) communication; (9) recreation and culture; (10) education; (11) restaurants and hotels; (12) miscellaneous goods and services.

*Equivalence scale* (equivalent adults). Given that costs per member decrease with additional household members and that costs are lower for children than for adults, an equivalence scale is applied to calculate household costs per "equivalent adult". This survey uses the OECD equivalence scale, according to which the consumption of the first adult household member is assigned the weight of 1, the second and each additional adult (aged 14 and over) -0.7, and each child (under 14) -0.5.

*Poverty line.* In this paper, we used the absolute poverty line, as did the Statistical Office of the Republic of Serbia between 2006 and 2010. This line was computed in 2006 on the basis of the Household Budget Survey, using nutritional standards and the appropriate proportion of non-food items. At the time, the amount per equivalent adult (the first adult in the household) stood at RSD 6,411 per month.<sup>3</sup> The poverty lines for 2011 and 2012 were computed by uprating the abovementioned poverty line for 2006 by the retail price index, i.e. the consumer price index. Thus, the poverty lines for 2011 and 2012, which were used in this study, stood at RSD 9,483 and RSD 10,223, respectively, per equivalent adult.

*Imputation*. Although the concept of consumption would be enhanced by including the imputed value of the services of using durable consumer goods and immovable assets (the use of dwellings), this has not been done owing to the fact that the relevant data are not available in the Household Budget Survey.

*Regional price indices.* Consumption as defined above is deflated by regional food price indices obtained from the Household Budget Survey. Thus, higher consumption of a household will only be a result of the consumption of larger quantities or higher-quality products, rather than a result of higher prices.

*Poverty incidence* is the ratio of the number of poor members of a population to the size of that population (total population, the unemployed, children etc.); in other words, it shows the proportion of poor members in a given population.

*Poverty depth.* Poverty incidence shows only the number of the poor, i.e. the number of those whose consumption is below the poverty line, but does not show the intensity of their poverty. Another measure – poverty depth – is, therefore, used to show how far off their consumption is from the poverty line. Poverty depth measures the poverty deficit of the entire population<sup>4</sup>, and also indicates the resources required, assuming perfect targeting, to eliminate poverty entirely.

*Poverty severity* is the third poverty measure, which shows the inequality among the poor, i.e. assigns more weight to the poorest.

The matter of the precision of poverty assessments has not been clarified in the general public, which may result in ambiguity and doubts. Thus, the substantial increase in poverty in 2010 and the visible reduction in 2011 may seem overestimated, given that the GDP did not change so much.

A poverty assessment is only as good as the methodology applied, i.e. it is decisively influenced by the quality of the Household Budget Survey (HBS), which is never perfect: the survey sample is not perfect, the survey interviewers' work is not outstanding, respondents' answers are not always entirely accurate, it is not certain that the poverty line has been determined with absolute

<sup>&</sup>lt;sup>3</sup> See Krstić, G. and Sula, V. (2007). *Osnovni dokument o trendovima i profilu siromaštva u Srbiji: 2004–2006. godine*, mimeo.

<sup>&</sup>lt;sup>4</sup> Poverty depth is the mean distance between the entire population's consumption and the poverty line, where the non-poor are given a distance of zero. Therefore, poverty depth is a measure of the consumption deficit of the entire population; see Technical Note: *Measuring poverty and analyzing changes in poverty over time*, The World Bank, <u>http://siteresources.worldbank.org/INTPA/Resources/tn\_measuring\_poverty\_over\_time.pdf</u>

precision down to every dinar, and so forth; thus, the Household Budget Survey, as all other statistical sources, may be taken as a useful instrument for an indicative assessment of the consumption levels of individual households, and thereby also of poverty in Serbia, but it may not yield a precise calculation according to which no more and no less than 6.9% of the population of Serbia, or exactly 499 thousand people, were poor in 2011. In other words, it may be stated with a reasonable degree of reliability that, in 2011, poverty was in the vicinity of the abovementioned values, give or take a percentage point. Hence, poverty measurement as described above is not essentially concerned with measuring precisely whether the poverty incidence is exactly 7% or, perhaps, 8% (which is not of crucial importance), but with establishing that it is **not** 3%, or 15%, or 25%.

On the other hand, doubts regarding the results of poverty assessment may be ill-founded, as the development of the consumption of the poorest is affected by many factors – pension policy, development of agricultural output and prices of agricultural products, various components of social policy, budgetary, monetary and import policies, development of the dinar exchange rates, etc. Without thorough analyses of the impact of those policies and phenomena on the income and consumption of specific population groups, the status and change in the status of the poorest cannot be assessed reliably. The Household Budget Survey is not sufficient for such analyses; instead, complex econometric models for income and consumption simulation, which would include these and other economic variables and economic policy instruments, should be developed.

The reliability of assessments is further decreased with the disaggregation of survey results by various criteria. This is a result of the fact that the sample decreases with disaggregation, which certainly decreases the quality of the statistical base. For instance, in the Household Budget Survey 2011, there were only 30 poor individuals over the age of 75 in Serbia, which is sufficient only for an indicative assessment. If their numbers were to be assessed by major regions (Šumadija, Belgrade, etc.), the assessment would certainly be unreliable, as the number of poor survey respondents over the age of 75 would be below ten per region.

## **POVERTY ASSESSMENT IN 2011**

#### Key Poverty Indicators

The basic data on poverty in Serbia in 2011 are shown in Table 1:

Table 1. Poverty in Serbia, 2011

	2011
Poverty line (per equivalent adult), RSD per month	9,483
Poverty incidence, %	6.8
Poverty depth, %	1.1
Poverty severity, %	0.3

Source: Household Budget Survey 2011, SORS

In 2011, the poverty incidence in Serbia stood at 6.8%, i.e. the consumption of 6.8% of the total population was below the poverty line (RSD 9,483 per month). In absolute terms, the number of the poor totalled 499 thousand.

In that year, the poverty incidence in Serbia decreased relative to the preceding year, 2010, when it stood at 9.2% according to the same methodology.<sup>5</sup> This was certainly aided by real individual consumption growth by a total of 1.0% (according to the Household Budget Survey), while the consumption of the poorest grew at a far higher rate. At the same time, the GDP at constant prices grew by 1.6%, which signalled that Serbia was overcoming the economic crisis together with the European Union, i.e. with the positive impact of European Union's recovery on Serbia through foreign trade and financial relations. Real wages grew modestly – by 0.2% in 2011.<sup>6</sup> The development of pensions, which were regularly uprated twice, in May (by 5.5%) and October 2011 (by 1.5%), also contributed to improving the situation.

The *poverty depth* stood at a moderate 1.1% in 2011, which means that it would have sufficed to earmark only 1.1% of the gross domestic product, i.e. RSD 35 billion<sup>7</sup>, to eliminate poverty in Serbia, assuming perfectly targeted transfers.<sup>8</sup> This relatively low rate means that the poor citizens of Serbia were, on average, moderately poor, i.e. they were, on average, quite close to the poverty line.

*Poverty severity* is the third poverty measure monitored. The value of this measure was also moderate – only 0.3% – confirming the inference that poverty in Serbia is moderate ("shallow").

<sup>&</sup>lt;sup>5</sup> See Poverty in the Republic of Serbia, 2008–2010, Statistical Release LP20, SORS, 29 April 2011

<sup>&</sup>lt;sup>6</sup> Statistical Yearbook of Serbia 2012, SORS, 2013, p. 62

<sup>&</sup>lt;sup>7</sup> The GDP reached RSD 3,209 billion in 2011 (SORS).

<sup>&</sup>lt;sup>8</sup> It should be noted that great caution is required in these considerations, as perfect targeting of transfers is not possible, nor is it certain that an attempt to eliminate poverty by transfers would be the best policy – owing to either the need to raise taxes, or the potential disincentives to work, as well as the fact that consumption might fall short of the possible level as a result of individual choices.

#### Sensitivity Analysis

Many poverty indicators, including those used in the present study, are fully determined by (1) the selected poverty line, (2) the average consumption in the country and (3) the relative distribution of consumption among citizens. Given that poverty line assessment is always methodologically complex, and even contentious, it is worthwhile to examine the sensitivity of the assessed poverty level to minor changes in the poverty line.

As a sensitivity assessment method, we will use an ordinary comparison of the poverty levels, i.e. poverty incidence values obtained by minor shifts of the poverty line. The table below shows the results of this comparison:

Poverty line variations, basic line = 100	Poverty incidence 2011, %	Poverty incidence 2007, %
80	2.2	2.9
90	4.1	4.2
95	5.4	5.0
100	6.8	6.6
105	8.3	7.8
110	10.1	8.9
120	13.5	11.8

Table 2. Poverty line and poverty incidence, 2011

Source: Household Budget Survey 2011, SORS

Living Standards Measurement Study, Serbia 2002–2007, SORS, 2008

As shown above, the assessed poverty incidence is highly sensitive to the choice of the poverty line level. If, for instance, the selected poverty line is raised by 5%, the poverty incidence will increase from 6.8% to 8.3%. On average, a one-percent rise of the poverty line results in an increase of the poverty incidence by about 0.3 percentage points. Greater steps also result in greater increases of the poverty incidence: thus, raising the poverty line by 20% results in doubling the poverty incidence (from 6.8% to 13.5%).

Such sensitivity of poverty points to potentially high impact of future economic shocks, even minor ones, on the population's living standard. Even moderately positive economic developments, together with economic growth, can lift a considerable number of people out of poverty quickly, just as negative ones (exacerbation of the economic crisis) can push a considerable number of people into poverty.

For comparison purposes, the rightmost column of the table above shows the sensitivity analysis results from 2007. Careful observation reveals similar sensitivity of the poverty incidence in Serbia to poverty line changes. As the said analysis is based on the Living Standards Measurement Survey (similar, but not methodologically equivalent to the Household Budget Survey), it enables only an indicative comparison.

Such poverty incidence sensitivity is not at all uncommon worldwide. For instance, sensitivity analysis has shown that raising the poverty line from 50% to 60% of the median income, i.e. by 20%, also doubles the poverty incidence (from 9.9% to 19.8%).<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> Saunders P., Hill T. and Bradbury B. (2007). *Poverty in Australia: Sensitivity Analysis and Recent Trends*, University of New South Wales.

#### Poverty by Settlement Types

By settlement types, poverty was considerably less pronounced in urban areas and considerably more pronounced in "other" areas (small towns and villages):

	Number of the poor, thousand	Poverty incidence, %
Urban	188	4.7
Other	311	9.4
Serbia	499	6.8

Source: Household Budget Survey 2011 data, SORS

The poverty incidence in other areas was twice as high as that in urban areas (9.4% versus 4.7%). Of the 499 thousand poor in Serbia, 188 thousand (37.7%) lived in urban areas, and 311 thousand (62.3%) – in other areas.

Such disparity is common in underdeveloped countries, as the modern, more productive sector of the economy is mainly located in cities, while agriculture lags behind in technological development and yields lower income per worker, with commensurate effects on consumption. At the same time, the qualification structure of the active population involved in agriculture is considerably worse compared to other, predominantly urban economic activities. These factors are also present in Serbia; however, the situation of rural areas is further aggravated by the unfavourable demographic and migration trends, which have led to population ageing. As a result, many rural households consist of elderly persons only; their productivity is lower and they consequently encounter more difficulties in meeting their needs.

Despite their more favourable situation, Serbian urban settlements are not immune to poverty, and poverty incidence is quite high for urban conditions: one in twenty people does not meet even the minimum consumption standards. Such high poverty incidence in urban areas may be attributed to the economic crisis experienced in recent years, with high unemployment of the working-age population and unfavourable development of the population's income – both wages and social transfers (pensions in particular). Owing to such adverse economic developments, Serbian cities fail to capitalise on their economic potentials (both human and material) and become the drivers of economic and social progress of the entire country.

In addition, disparities in poverty among cities may be and often are substantial.<sup>10</sup> This was the case in Serbia, where the poverty incidence was lower in Belgrade than in urban areas taken as a whole (including Belgrade): 3.7% compared to 4.7%. These disparities may, to a significant extent, be attributed to historic reasons – from past development levels to (lack of) success in transforming the local economy from old, socialist to new, more advanced forms.

In addition to urban and rural areas, Serbia is characterised by another distinct group of settlements – small towns – intermediate between the other two categories, with both rural and urban features (e.g. Lapovo, Mionica, Lučani, Guča, Osečina, Beočin, Irig). In the Household Budget Survey, these settlements are included among "other" settlements. Accurate data on the situation of poverty in these settlements are not available, since the Household Budget Survey does not treat them as a separate category, distinct from "other" settlements. Yet, it is probable that the poverty incidence in these settlements is between the values for rural and urban settlements (with specific exceptions, such as the high dependence of the population's income on

<sup>&</sup>lt;sup>10</sup> Dimensions of Urban Poverty in the Europe and Central Asia Region, World Bank Policy Research Working Paper 3998, 2006.

one factory, e.g. Lučani, Kosjerić, with either a positive or a negative impact).

Overall, the disparities among the said areas are not excessively wide and are common in East and South-East European countries, where the ratio of rural to urban poverty incidence ranges from 1.3:1 to 3:1.<sup>11</sup>

#### The Geography of Poverty

The level of poverty by regions, in terms of poverty incidence, and the territorial distribution of the poor in Serbia are shown in the table below.

Table 4. Poverty by regions in Serbia, 2011

	Number of the poor, thousand	Poverty incidence, %
Serbia	499	6.8
Vojvodina	118	6.2
Belgrade	56	3.7
Central Serbia excluding Belgrade	324	8.3
Šumadija, Western Serbia	127	5.7
South-Eastern Serbia, Eastern Serbia	197	11.7

Source: Household Budget Survey 2011, SORS

As shown above, of the three main regions, Central Serbia had the highest poverty incidence – 8.3% – and the largest number of the poor in absolute terms – 324 thousand (two thirds of the total number in Serbia). Vojvodina ranked second, with the poverty incidence of 6.2% and 118 thousand in absolute terms, with Belgrade in the third place, with 3.7% and 56 thousand poor. Of the two sub-regions of Central Serbia, Eastern/South-Eastern Serbia had the highest poverty incidence (11.7%), while Šumadija and Western Serbia combined had a relatively low poverty incidence, at 5.7%.

<sup>&</sup>lt;sup>11</sup> Ibid.

Table 5. Regional deve	elopment levels.	Serbia = 100.	2011
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	Level
Vojvodina	100.0
Belgrade	174.6
Central Serbia	66.5
Šumadija, Western Serbia	68.2
Eastern and South-Eastern Serbia	64.4

Source: Regional gross domestic product 2011-2012, SORS, see

http://webrzs.stat.gov.rs/WebSite/userFiles/file/Nacionalni/Radni%20dokument%202012%20srps ki.doc, accessed on January 12, 2014.

As shown above, Belgrade was by far the highest-developed region in Serbia (with a development index of 174.6% of the national average) and was virtually the only region whose development level exceeded the national average. It was followed by Vojvodina, whose development level, measured by the per capita gross domestic product, corresponded to the national average, while Central Serbia ranked lowest, with a development level equal to only two thirds of the national average. Of the two sub-regions of Central Serbia, the Šumadija and Western Serbia Region was slightly more developed (68.2% of the national average), while the Eastern and South-Eastern Serbia Region ranked lowest, at 64.4% of the national average.

A comparison between the lists of regions by development levels and by poverty incidence shows consistency: Belgrade was the most developed and hence had the lowest poverty incidence; Vojvodina ranked second by both development level and poverty, while Central Serbia was in the least favourable position by both criteria. This shows once again that economic development is the best poverty reduction tool.

Interestingly enough, the poverty incidence in the Šumadija and Western Serbia Region was somewhat lower than in Vojvodina, regardless of its considerably lower development level (the GDP of Vojvodina exceeded that of Šumadija and Western Serbia by as much as 46.6%). This inconsistency was caused by the inequalities within these regions: consumption inequality among citizens was higher in Vojvodina than in Šumadija and Western Serbia – the Gini coefficient stood at 0.25 in Vojvodina, and 0.23 in Šumadija and Western Serbia in 2011 (see the section *(In)equalities in Serbia*); thus, higher uniformity of the population's standard in the latter region resulted in a lower poverty rate despite considerably lower income compared to Vojvodina. In other words, despite the income (gross domestic product) gap, higher uniformity meant that the group with the lowest consumption had higher consumption per equivalent adult in Šumadija and Western Serbia than in Vojvodina, and consequently a lower poverty incidence.

#### The Profile of the Poor

This section will present the profile of the poor in Serbia, i.e. propose to answer the question who are the poor in Serbia, by different demographic, social and economic characteristics. Studying and understanding the profile of the poor is an essential prerequisite for successful poverty reduction, as it is only on this basis that the appropriate social policy instruments, including financial transfers to the poor, can be chosen and fine-tuned.<sup>12</sup>

The first indicator to be presented is household type, i.e. poverty by household size.

	Poverty incidence	Breakdown of the poor	Total population breakdown
Single-member	4.0	4.4	7.4
Two-member	5.4	15.7	19.7
Three-member	3.4	9.1	18.1
Four-member	5.0	16.9	22.8
Five-member	8.8	18.1	13.9
Six-member and larger	13.5	35.8	18.0
Serbia	6.8	100	100

Table 6. Poverty by household type, 2011, %

Source: Household Budget Survey 2011, SORS

Large households (five or more members) were affected by poverty to an above-average extent, which is, essentially, to be expected, given the different ratio of the members with income (labour, pension, etc.) to the inactive without any income (children, the elderly without income). More specifically, this ratio is less favourable in larger households than in smaller ones. Yet, it may be observed that poverty incidence disparities among households of different sizes were not dramatically wide, as the ratio of members with income to those without income was not dramatically different: almost all households had members with and without income, which largely smoothed out the final results. Thus, the poverty incidence of households with six or more members was only twice as high as the average for the overall population, and about three times as high as that for small households. The moderate level of poverty of multi-member households could partly be attributed to the fact that these households rarely consisted only of parents and children (without income), and frequently of multi-generational families, where the elderly had their own income (pensions etc.).

People living in the largest households accounted for the largest proportion of the poor population -35.8%, followed by those in five-member households (18.1%), which meant that these two groups accounted for slightly more than a half of the poor in Serbia.

<sup>&</sup>lt;sup>12</sup> On the situation and problems in Serbia, see Matković, G., Mijatović, B. and Stanić, K. (2014). *Novčana davanja za decu i porodice sa decom u Srbiji – analiza i preporuke*, CLDS.

The next profile indicator is age:

Table 7. Poverty by age, 2011, %

Age	Poverty incidence	Breakdown of the poor	Total population breakdown
Up to 13	10.0	16.3	11.1
14–18	9.4	7.2	5.2
19–24	7.7	8.3	7.4
25–45	6.3	23.0	24.9
46–65	5.7	24.4	28.9
0–65	6.9	79.2	77.5
65+	6.2	20.7	22.5
0–75	6.7	90.4	91.2
75+	7.4	9.6	8.8
Serbia	6.8	100	100

Source: Household Budget Survey 2011, SORS

As shown above, the poverty incidence decreased as the age increased: it was the highest for the youngest children (10.0%) and declined until the age of 65 (5.7%). The decisive reason for this was economic activity, which increased until the end of the working life (65 years of age for men). Above the age of 65, the poverty incidence rose only slightly, but still remained below the average for the overall Serbian population, which testifies to solid protection against slipping into poverty, provided by the Serbian pension system to pensioners, i.e. the entire elderly population.

The disparities in this respect were not particularly wide either (the ratio of the highest to the lowest rate is below one to two). The general reason for the relatively moderate disparities was the fact that households were usually a mix of individuals belonging to different socio-economic and demographic categories, which was reflected in the average household position. Children virtually never lived on their own; instead, they lived with parents or an elderly person with income; an elderly person without income often lived with an elderly person with a pension or other income, etc.

Poverty disparities between children and adults were in line with this.

Table 8. Child and adult poverty, 2011, %

	Poverty incidence	Breakdown of the poor	Total population breakdown
Children (0-18)	9.8	23.6	16.4
Adults	6.2	76.4	73.6
Serbia	6.8	100	100

Source: Household Budget Survey 2011, SORS

On average, children were more affected by poverty - their poverty incidence stood at 9.8%,

compared to 6.2% for adults, i.e. it exceeded the adult poverty incidence by one half. Adults in families with children had a poverty incidence equal to that of children, seeing that they shared the same fate by sharing income: household consumption was distributed proportionately among all members, regardless of age. The status of children and the relatively narrow poverty disparities between adults and children were materially informed by the fact that the number of families with many children was on the decline; instead, families with fewer children – one or two – prevail. The problem of child poverty was thus alleviated relative to the earlier situation, when the number of children per family had been greater and poverty had been more pronounced among children and families with children. Yet, the principal logic verified in Serbia in former times still applied:<sup>13</sup> the more children in the family, the poorer they were, on average.

The last demographic indicator to be presented is poverty by sex.

Table 9. Poverty by sex, 2011, %

	Poverty incidence	Breakdown of the poor	Total population breakdown
Males	6.7	48.1	48.5
Females	6.8	51.9	51.5
Serbia	6.8	100	100

Source: Household Budget Survey 2011, SORS

There were practically no poverty disparities between men and women, as the poverty incidence was equal for both sexes. The somewhat higher share of women in the total number of the poor was a result of their higher share in the total Serbian population. A certain gap between women and men in terms of average earnings was not reflected in consumption, as all household members were assumed to spend household income jointly, irrespective of its source.

After demographic indicators, an overview of those relating to work characteristics of Serbian citizens will be given. The first indicator relates to the educational attainment of the household head.

Table 10. Poverty by educational attainment of household head, 2011, %

Age	Poverty incidence	Breakdown of the poor	Total population breakdown
Incomplete primary education	16.5	34.1	14.0
Primary education	11.1	32.8	20.0
Secondary education	4.0	30.9	51.8
Non-university higher education	2.5	2.2	6.1
University-level higher education	-	-	8.0
Serbia	6.8	100	100

Source: Household Budget Survey 2011, SORS

<sup>&</sup>lt;sup>13</sup> See Living Standard Measurement Study, Serbia 2002–2007, SORS, 2008, p. 22.

The educational attainment of household head<sup>14</sup> is an important poverty factor: the poverty incidence decreased as the educational level rose. While the poverty incidence was 16.5% for households whose heads had incomplete primary education and 11.1% for those whose heads had primary education, it was only 4.0% and 2.5% for those whose heads had secondary and non-university higher education, respectively. In 2011, there was no poverty among households whose heads had university education.

Owing to this configuration of poverty incidence values, those living in households whose heads had incomplete or complete primary education prevailed in the absolute number of the poor: they accounted for two thirds of all poor (66.9%), although they accounted for only 36.0% of the total population. Another major category were those living in households whose heads had secondary education: they accounted for 30.9% of all poor, which was considerably below their share in the total population (51.8%).

Poverty by the current labour market status of the household head is shown in the table below.

	Poverty incidence	Breakdown of the poor	Total population breakdown
Employed	5.0	35.2	47.4
Unemployed	17.1	20.9	8.3
Inactive	6.7	43.9	44.3
Serbia	6.8	100	100

Table 11. Poverty by labour market status of household head, 2011, %

Source: Household Budget Survey 2011, SORS

Of the three possibilities – employed, unemployed or inactive household head – the situation where the household head was unemployed was by far the least advantageous: for those cases, the average poverty incidence was as high as 17.1%. The reason why it was not even higher lies in the fact that these households had other sources of income and that some members were employed, irrespective of the fact that the household head was unemployed.

Households with an inactive head were at a much lower risk of poverty -6.7%, which corresponded to the average for the Republic of Serbia as a whole -6.8%. The relatively favourable status of the households with inactive heads is primarily attributed to the Serbian pension system, as pensioners are, by definition, included in the inactive population. Among the inactive, pensioners had a far lower poverty incidence compared to the other inactive (6.1% versus 16.2%).

Households with an employed head had the lowest, albeit not negligible poverty incidence (5.0%). The fact that 35.2% of the poor lived in households in which at least one member (the head) was employed showed that even work was not sufficient to avoid poverty in Serbia. A reason for this may be found in the fact that many employed worked part-time or even irregularly and in the grey economy, and therefore earned modest income. Among the employed, the self-employed had a higher poverty incidence compared to those in dependent employment (6.3% versus 4.3%).

<sup>&</sup>lt;sup>14</sup> "The household head is a person that is recognisable as such by all household members. It is most commonly the person who makes important decisions or is responsible for the financial situation and welfare of the household members." (SORS definition)

In 2011, poverty decreased visibly compared to the preceding year, specifically as a result of mitigating the economic crisis of the previous years and positive economic impact of economic growth on the population's income and expenditure (according to the Household Budget Survey). The poverty incidence stood at 6.8%, i.e. a total of 499 thousand Serbian citizens were poor. The unemployed, unskilled workers and the population of Eastern and South-Eastern Serbia were the most affected by poverty. These three factors (employment status, educational attainment and geographic location) best accounted for individuals' poverty. Children constituted a specific group, whose poverty incidence exceeded that of adults by one half and which certainly belonged to the disadvantaged groups.

## POVERTY ASSESSMENT IN 2012<sup>15</sup>

#### **Key Poverty Indicators**

The basic data on poverty in Serbia in 2012 are shown in Table 12:

Table 12. Poverty in Serbia, 2012

	2012.
Poverty line (per equivalent adult), RSD per month	10,223
Poverty incidence, %	8.8
Poverty depth, %	1.9
Poverty severity, %	0.7

Source: Household Budget Survey 2012, SORS

In 2012, the *poverty incidence* in Serbia reached 8.8%, i.e. the consumption of 8.8% of the total population was below the poverty line (RSD 10,223 per month). This means that the number of the poor totalled 642 thousand.

In 2012, the poverty incidence in Serbia increased relative to the preceding year, 2011, when it stood at 6.8% according to the same methodology. The direct cause was a 3.1% decrease of individual consumption in real terms (according to the Household Budget Survey), while the individual consumption of the poorest declined at an even higher rate. The essential reason was a 1.5% gross domestic product decline (at constant prices), showing that the economic crisis intensified in Serbia in 2012, which was substantially aggravated by a poor harvest.<sup>16</sup> The number of the poor also grew from 499 thousand to 642 thousand, i.e. by 30%.

The *poverty depth* stood at 1.9% in 2012, which means that earmarking 1.9% of the gross domestic product, i.e. RSD 64 billion<sup>17</sup>, was needed in order to eliminate poverty in Serbia, assuming perfectly targeted transfers. Such relatively low value means that, despite a certain deterioration during 2012, Serbian citizens were still, on average, moderately poor, i.e. that their consumption was, on average, at a small distance from the poverty line.

<sup>&</sup>lt;sup>15</sup> Many of the assessments of poverty in 2011 also apply to poverty in 2012 and will not be repeated here.

<sup>&</sup>lt;sup>16</sup> The decline of agricultural output only partly affected farmers' income; a compensating price rise occurred for those products where imports could not provide a good substitute, and losses were partly passed onto consumers.

<sup>&</sup>lt;sup>17</sup> The Serbian GDP reached RSD 3,349 billion in 2012 (SORS).

*Poverty severity* remained quite low at 0.7; hence, it may also be concluded that in 2012, despite certain deterioration in the status of the poor in Serbia, their poverty remained moderate.

The 2012 *sensitivity analysis* reveals similarities with the above findings for 2011. The table below shows the results of a comparison of the poverty levels, i.e. poverty incidence values obtained by minor shifts of the poverty line.

Poverty line variations, basic line = 100	Poverty incidence 2012, %
80	3.6
90	6.1
95	7.1
100	8.8
105	9.9
110	11.8
120	15.3

Table 13. Poverty line and poverty incidence, 2012

Source: Household Budget Survey 2012, SORS

Yet, in 2012, poverty incidence changes were relatively smaller for a given poverty line shift: thus, lowering the poverty line by 20% resulted in a 59% decrease of the poverty incidence, compared to 68% in 2011; raising the poverty line by 20% led to a 74% increase of the poverty incidence in 2012, compared to 99% in 2011. This shows that in 2012 poverty "thinned" to a certain extent, i.e. that there were somewhat fewer Serbian citizens around the poverty line than in the preceding year.

#### Poverty by Settlement Types

By settlement types, poverty was considerably less pronounced in urban areas and considerably more pronounced in "other" areas (small towns and villages):

Table 14. Poverty, urban and other areas, 2012

	Number of the poor, thousand	Poverty incidence, %
Serbia	642	8.8
Urban	241	6.0
Other	401	12.3

Source: Household Budget Survey 2012, SORS

In 2012, the poverty incidence in "other" areas was almost twice as high as that in urban areas (12.3% compared to 6.0%). Of the 642 thousand poor in Serbia, 241 thousand (37.7%) lived in urban areas, and 401 thousand (62.3%) – in other areas.

The less favourable position of "other" areas was primarily a result of the situation in rural areas and in agriculture (which yielded lower income compared to "urban" economic activities), unfavourable demographic developments and population ageing, as well as a development specific to 2012 – a considerable decline in agricultural output, in particular crop production (30% decline relative to 2011) as a result of a disastrous drought. The poor harvest meant a decline in income, not only for farmers themselves, but also for the entire rural population.

Population poverty in Serbian towns and cities was considerably lower than in other areas, but is not negligible: the poverty incidence was 6.0% in 2012, i.e. one in seventeen people was poor. The current economic crisis largely affected Serbian towns and cities as well.

Compared to the preceding year, 2011, the poverty incidence rose noticeably in 2012: from 4.7% to 6.0% in urban areas and from 9.4% to 12.3% in other areas.

#### The Geography of Poverty

The table below shows poverty levels by regions, expressed in terms of poverty incidence, and the territorial distribution of the poor in Serbia:

	Number of the poor, thousand	Poverty incidence, %
Serbia	642	8.8
Vojvodina	191	9.3
Belgrade	47	3.1
Central Serbia excluding Belgrade	405	10.8
Šumadija, Western Serbia	112	5.3
South-Eastern Serbia, Eastern Serbia	293	17.7

Table 15. Poverty by regions in Serbia, 2012

Source: Household Budget Survey 2012, SORS

In 2012, Central Serbia still had the highest poverty incidence of all three main regions – 10.8%, as well as the largest number of the poor in absolute terms – 405 thousand. Vojvodina followed close behind, with a poverty incidence of 9.3% and 191 thousand poor in absolute terms, with Belgrade in the third place, with 3.1% and 47 thousand poor. Of the two sub-regions of Central Serbia, Šumadija and Western Serbia combined had a relatively low poverty incidence of 5.3% while Eastern and South-Eastern Serbia had by far the highest poverty incidence (as high as 17.7%).

A comparison of development levels and poverty still showed a mainly consistent link between the two; in 2012, the more developed Vojvodina still had a considerably higher poverty incidence than the Šumadija and Western Serbia Region. As previously, this was caused by the considerably higher uniformity of consumption in the Šumadija and Western Serbia Region (Gini coefficient 0.22) than in Vojvodina (Gini coefficient 0.27), where an increase against the preceding year was recorded.

Compared to the preceding year, 2011, poverty increased substantially in the Eastern and South-Eastern Serbia Region (poverty incidence grew from 11% to 17.7%), as well as in Vojvodina (from 6.2% to 9.3%), owing to a significant increase in inequality (Gini coefficient increased from 0.25 to 0.27). On the other hand, poverty was reduced in Belgrade (from 3.7% to 3.1%) and in Šumadija and Western Serbia (from 5.7% to 5.3%).

The relatively high poverty increase in Vojvodina and Eastern and South-Eastern Serbia partly resulted from agricultural underperformance in 2012, which affected both farmers and, through higher prices, the poorer urban population in these areas to an above-average extent and pushed part of them below the poverty line. The cause of the considerable deterioration of the poverty incidence in Eastern and South-Eastern Serbia lies in the sharp decline of the region's gross domestic product – by 5.1% in 2012, according to the Statistical Office of the Republic of Serbia.

These developments indicated that a country with a single social policy might experience diverging tendencies in poverty dynamics by regions, primarily owing to the differences in their socio-economic systems and the influence of different poverty factors.

#### The Profile of the Poor

Successful poverty reduction requires answering the question who are the poor, i.e. identifying the profile of the poor in Serbia by different demographic, social and economic indicators.

Poverty by household size – from single-member to very large households – will be examined first:

	Poverty incidence	Breakdown of the poor	Total population breakdown
Single-member	4.9	4.3	7.8
Two-member	5.0	11.1	19.6
Three-member	7.6	15.3	17.8
Four-member	6.9	18.1	22.9
Five-member	13.8	21.6	13.8
Six-member and larger	14.3	29.6	18.1
Serbia	6.8	100	100

Table 16. Poverty by household type, 2012, %

Source: Household Budget Survey 2012, SORS

Household status is decisively informed by the ratio of the employed to the unemployed/inactive members without income; a more favourable (higher) ratio reduces the risk of poverty. Given that the ratio is usually less favourable in larger households (more children or inactive elderly persons without income), large households in Serbia are poorer than small ones. In 2012, as in 2011, households with five or more members were particularly disadvantaged, while smaller ones (up to four members) had a poverty incidence below the average for the overall population. Yet, poverty disparities were not particularly wide, as the poverty incidence of large households was only two to three times higher than that of smaller ones. This relatively narrow disparity resulted from the fact that the abovementioned ratio of members with income to those without income was not dramatically different either. In Serbia, multi-member families rarely include many children; instead, they are usually multigenerational households in which several members have their own income (work, pension, etc.).

Accordingly, of all poor, most (51.2%) lived in households with five or more members, followed by those in four-member households (18.1%), and so forth.

The next profile indicator is poverty by age:

Age	Poverty incidence	Breakdown of the poor	Total population breakdown
Up to 13	12.5	15.0	10.6
14–18	12.0	6.9	5.0
19–24	12.3	9.6	6.9
25–45	8.6	24.4	24.9
46–65	7.7	25.7	29.3
0–65	9.3	81.8	76.8
65+	6.9	18.1	23.3
0–75	8.9	92.0	90.9
75+	7.7	8.0	9.1
Serbia	8.8	100	100

Table 17. Poverty by age, 2012, %

Source: Household Budget Survey 2012, SORS

As expected, the poverty incidence decreased as the age increased: it was the highest for the youngest children (12.5%) and decreased to 7.7% for the oldest group (65+). The decisive reason for this was economic activity, which also increased until the end of the working life (65 years of age for men); the poverty incidence was even lower for the oldest population (above the age of 65), which was mainly inactive and partly consisted of pension recipients, which testifies to the protection provided by the Serbian pension system.

Poverty disparities between generations were not particularly wide since a household usually comprised members of different generations who shared the common household income, thus balancing everyone's consumption.

If the abovementioned figures for different age groups are aggregated, the following child-adult ratios are obtained:

Table 18. Child and adult pov	verty, 2012, %
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	Poverty incidence	Breakdown of the poor	Total population breakdown
Children (0-18)	12.3	21.9	15.7
Adults	8.1	78.1	84.3
Serbia	8.8	100	100

Source: Household Budget Survey 2012, SORS

As is usually the case, children were more affected by poverty than adults: their poverty incidence stood at 12.3% in 2012, compared to 8.1% for adults, i.e. it exceeded the adult poverty incidence by one half. The reason for this lies in the less favourable ratio of income earners to dependants in families with children. Naturally, adults in families with children had a poverty incidence equal to that of children, seeing that household consumption was distributed proportionately among all members, regardless of age.

Compared to 2011, no relative changes were recorded; instead, both child and adult poverty increased at an equal rate.

Poverty by sex is shown in the following table:

Table 19. Poverty by sex, 2012, %

	Poverty incidence	Breakdown of the poor	Total population breakdown
Males	9.0	49.3	48.3
Females	8.6	50.7	51.7
Serbia	8.8	100	100

Source: Household Budget Survey 2012, SORS

The poverty disparity between men and women was quite narrow; however, it is interesting to note that, unlike 2011, it existed in 2012: men's poverty incidence in 2012 was 9.0%, and women's – 8.6%. As shown below, the poverty disparity between men and women remained at a very low level in 2013 as well, with men's poverty below that of women; this gives rise to the conclusion that men's and women's poverty are equal and that the result for 2012 was a small statistical error.

The next indicator is the educational attainment of the household head.

Age	Poverty incidence	Breakdown of the poor	Total population breakdown
Incomplete primary education	19.5	29.8	13.4
Primary school	15.0	34.5	20.2
Secondary school	5.6	33.5	53.0
Non-university higher education	2.3	1.6	6.3
University-level higher education	0.7	0.5	7.1
Serbia	8.8	100	100

Table 20. Poverty by educational attainment of household head, 2012, %

Source: Household Budget Survey 2012, SORS

The educational attainment of the household head is among the most important poverty factors. The table above clearly shows that the poverty incidence decreased as the educational attainment of the household head rose. It stood at 19.5% for households whose heads had incomplete primary education and 15.0% for households whose heads had primary education, while it was considerably lower – 5.6% for households whose heads had secondary education, 2.3% – non-university higher education and only 0.7% – university education.

Thus, the segment of the working population with the lowest income was the most affected by poverty; these were unskilled, usually physical labourers without vocational secondary education or a title of a skilled worker. They also prevailed in the poor population in absolute terms: in 2012, as in 2011, they accounted for two thirds of all poor (64.3%), although they accounted for only 33.6% of the total population.

Poverty by the labour market status of the household head is shown in the table below.

	Poverty incidence	Breakdown of the poor	Total population breakdown
Employed	6.5	32.1	43.3
Unemployed	21.0	24.3	10.1
Inactive	8.2	43.6	46.7
Serbia	8.8	100	100

Table 21. Poverty by labour market status of household head, 2012, %

Source: Household Budget Survey 2012, SORS

A household was at the highest risk of poverty if the household head was unemployed, as the poverty incidence in those cases stood at 21.0%. It would certainly have been higher if these households had had no other income. Households whose heads were employed or inactive were considerably less affected by poverty. For households with inactive heads, the poverty incidence

was favourable – a modest 6.6%, as a result of the support provided to the elderly inactive by the pension system. The finding that there were many poor (one third of the total number) in households with employed members shows that even work did not provide sufficient protection from poverty in Serbia. The poverty incidence of the self-employed and of those in dependent employment was at a similar level (6.7% and 6.4%, respectively).

\* \* \*

In 2012, poverty increased noticeably compared to the preceding year – from 6.8% to 8.8%, primarily owing to the drought and a very poor harvest, which led to gross domestic product decline and a drop in the consumption of all citizens, especially the poorer strata. A total of 642 thousand poor were registered, and the risk of poverty was the highest for members of larger households, the unemployed and unskilled, the population of Eastern and South-Eastern Serbia and children.

## POVERTY ASSESSMENT IN 2013<sup>18</sup>

#### **Key Poverty Indicators**

The key data on poverty in Serbia in 2013 are shown in Table 22:

Table 22. Poverty in Serbia, 2013

	2013
Poverty line (per equivalent adult), RSD per month	11,020
Poverty incidence, %	8.6
Poverty depth, %	1.8
Poverty severity, %	0.6

Source: Household Budget Survey 2013, SORS

In 2013, the *poverty incidence* in Serbia stood at 8.6%, i.e. the consumption of 8.6% of the total population was below the poverty line (RSD 11,020 per month). This means that the number of the poor in Serbia totalled 610 thousand.

Therefore, in 2013, the poverty incidence in Serbia slightly decreased, i.e. it remained at almost the same level relative to the preceding year, 2012, when it stood at 8.8% according to the same methodology. As the Serbian gross domestic product grew by 2.5% in 2013, according to the preliminary data of the Statistical Office of the Republic of Serbia, a more noticeable poverty reduction could be expected as a result of increased individual consumption and gross domestic product growth. However, poverty was not reduced; instead, the gross domestic product structure changed: real individual consumption in Serbia, according to the Household Budget Survey 2013, declined by 1.4%, while export grew substantially, i.e. the output was shifted from domestic individual consumption towards export. Such development of the real consumption was caused primarily by a 1.9% decrease of real wages and a 3.9% decrease of real pensions in 2013 relative to 2012.<sup>19</sup>

The aforementioned decline of total individual consumption could have even led to a poverty increase in Serbia; however, this was not the case, since the consumption of the poorest ten percent of the population in 2013 remained close to the 2012 level. Several factors contributed to this, from agricultural output growth and relative food price reduction, to the social protection system, i.e. protection of the poorest citizens.

The poverty depth stood at 1.9% in 2013, which means that earmarking 1.8% of the gross

<sup>&</sup>lt;sup>18</sup> Many of the assessments of poverty in 2011 and 2012, presented above, also apply to poverty in 2013 and will not be repeated here.

<sup>&</sup>lt;sup>19</sup> See Monthly Statistical Bulletin No 12/2013, SORS, p. 32 and Monthly Bulletin for December 2012 and 2013, Republic of Serbia Pension and Disability Insurance Fund.

domestic product, i.e. RSD 65 billion<sup>20</sup>, was needed to eliminate poverty in Serbia, assuming perfectly targeted transfers. Again, the relatively low poverty depth value meant that Serbian citizens were still, on average, moderately poor, i.e. that their individual consumption was, on average, at a small distance from the abovementioned poverty line.

The *poverty severity* remained quite low, at 0.6 and poverty in Serbia in 2013, as in 2012, can be assessed as mainly moderate.

The 2013 *sensitivity analysis* reveals a high similarity with the findings for 2011 and 2012 presented above. The table below shows a comparison of the poverty incidence values obtained by shifting the poverty line by 5% upwards and downwards from the basic line.

Poverty line variations, basic line = 100	Poverty incidence 2013, %
80	3.7
90	5.9
95	7.1
100	8.6
105	10.3
110	12.9
120	17.7

Table 23. Poverty line and poverty incidence, 2013

Source: Household Budget Survey 2013, SORS

In 2013, poverty incidence changes were similar to those in 2012 with a lowered poverty line, while a somewhat different tendency was observed with a raised poverty line: poverty incidence change was somewhat higher than in 2012. Thus, raising the poverty line by 20% resulted in a 106% increase of the poverty incidence (from 8.6% to 17.7%). Poverty thus "thickened" to a certain extent, as the same shift yielded more poor in 2013 than in the preceding year.

<sup>&</sup>lt;sup>20</sup> The Serbian GDP reached RSD 3,618.2 billion in 2013 (SORS).

#### Poverty by Settlement Types

By settlement types, poverty was considerably less pronounced in urban areas and considerably more pronounced in "other" areas (small towns and villages):

Table 24.	Poverty	urban	and othe	r areas	2013
	TOVCITY,	unpun		i aicas,	2010

	Number of the poor, thousand	Poverty incidence, %
Serbia	610	8.6
Urban	264	6.3
Other	347	12.0

Source: Household Budget Survey 2013, SORS

As shown above, in 2013, the poverty incidence stood at 6.3% in urban areas and 12.0% in other areas, while the number of the poor amounted to 264 thousand and 347 thousand, respectively.

The poverty incidence in other areas was twice as high as in urban areas in 2013 (12.0% versus 6.3%), although the disparity decreased somewhat compared to 2012: the ratio of the poverty incidence in other areas to that in urban areas dropped from 2.05 in 2012 to 1.91 in 2013. These disparities between the said areas are common in East and South-East European countries, where the ratio of rural to urban poverty incidence ranges from 1.3:1 to 3:1.

The considerably higher poverty incidence in other areas resulted from several causes with a cumulative effect: the modern, more productive part of the economy is mainly located in urban areas, while agriculture lags behind in technological development and yields lower income per worker to the farming population, which is reflected in consumption; the qualification structure of the active population, which is considerably worse in agriculture compared to other, predominantly urban economic activities, also contributes to this; the position of rural areas, as well as many small towns, is further aggravated by negative demographic developments that have led to population ageing, as a result of which many rural households consist solely of elderly persons whose productivity is below average and who consequently fail to fully meet their needs. In general, Serbian agriculture is currently undergoing an epoch-making transformation from a system characterised by smallholdings, typical of the 19<sup>th</sup> and even 20<sup>th</sup> centuries, into a more technologically advanced one, characterised by larger, consolidated holdings, less oriented towards farmers' markets and more integrated in large value chains.

Albeit in a more favourable situation, Serbian urban settlements are not immune to poverty, and one in sixteen inhabitants was poor in 2013. The reason for this certainly lies in the protracted economic crisis combined with the high unemployment of the working-age population, with the resultant decline in income and consumption.

#### The Geography of Poverty

The table below shows poverty levels by regions, expressed in terms of poverty incidence, and the territorial distribution of the poor in Serbia:

	Number of the poor, thousand	Poverty incidence, %
Serbia	610	8.6
Vojvodina	108	5.6
Belgrade	95	5.6
Central Serbia excluding Belgrade	408	11.8
Šumadija, Western Serbia	145	7.2
South-Eastern Serbia, Eastern Serbia	263	18.0

Table 25. Poverty by regions in Serbia, 2013

Source: Household Budget Survey 2013, SORS

In 2013, among the main regions of Serbia (Central Serbia, Vojvodina, Belgrade), Central Serbia still had the highest poverty incidence, at 11.8%, with a total of 408 thousand poor. Vojvodina and Belgrade were in a considerably better position – both regions had a poverty incidence of 5.6%, with a total of 108 thousand and 95 thousand poor, respectively. Of the two sub-regions of Central Serbia, the Šumadija and Western Serbia Region had a relatively low poverty incidence of 7.2%, while the Eastern and South-Eastern Serbia Region was in the worst situation by far, with a poverty incidence as high as 18.0%. Such high poverty incidence in the Eastern and South-Eastern Serbia development level: its gross domestic product per capita amounted to only 63.3% of the national average and was the lowest among all regions; on the other hand, consumption inequality, as measured by the Gini coefficient and the S80/S20 ratio, corresponded to the national average and hence did not represent a cause of high poverty.

Compared to 2012, the relative poverty relations did not change materially in Central Serbia and its sub-regions; that said, poverty was still by far the most pronounced in Eastern and South-Eastern Serbia. A relative change occurred only between Vojvodina and Belgrade, which displayed a converging trend; however, the poverty depth and poverty severity were lower in Belgrade than in Vojvodina. Not even preliminary data on the regional gross domestic product in 2013 are available at the moment and this important factor cannot be included in the analysis.

#### The Profile of the Poor

After answering the question on the scale of poverty, the question who are the poor is essential, as its answer provides an insight into the poverty situation of specific demographic, social and economic groups and the risk that their members will become poor. The profile of the poor in Serbia will, therefore, be examined below, by different demographic, social and economic indicators.

Among the basic indicators of this type is poverty by household size: from single-member to sixmember and larger.

	Poverty incidence	Breakdown of the poor	Total population breakdown
Single-member	6.4	5.7	7.8
Two-member	6.3	13.8	19.0
Three-member	5.4	11.6	18.3
Four-member	5.3	14.6	23.5
Five-member	12.7	22.0	14.9
Six-member and larger	16.9	32.4	16.5
Serbia	8.6	100	100

Table 26. Poverty by household type, 2013, %

Source: Household Budget Survey 2013, SORS

In 2013, as in previous years, large households were particularly affected by poverty: while the poverty incidence for smaller households (up to four members) was about 6%, which was below the average for the overall Serbian population, it stood at 12.7% for five-member households and 16.9% for six-member and larger ones. This disparity was a result of different ratios of employed members with income to unemployed/inactive members without income; the ratio was less favourable in large households owing to the presence of either many children or inactive elderly persons without income. As a result, people living in large households accounted for a very high proportion of all poor: while five-member and larger households accounted for only 31.4% of the total population of Serbia, they constituted 54.4% of all poor.

Yet, the problem of poverty of large households was not highly pronounced in Serbia, as shown by the relatively low poverty incidence. This is attributed to two reasons: (1) there are few children in Serbia and the contribution of this factor is, therefore, substantially lower than in other developing countries and (2) many elderly people have their own income (pensions), which improves the position of multigenerational households. Let us consider poverty by age:

Table 27. Poverty by age, 2013, %

Age	Poverty incidence	Breakdown of the poor	Total population breakdown
Up to 13	11.9	16.6	12.0
14–18	10.2	6.1	5.1
19–24	10.6	8.5	6.9
25–45	7.6	22.6	25.7
46–65	8.2	27.7	28.9
0–65	8.9	81.5	78.6
65+	7.4	18.5	21.4
0–75	8.5	90.5	91.7
75+	9.9	9.5	8.3
Serbia	8.6	100	100

Source: Household Budget Survey 2013, SORS

As shown above, the Serbian population is divided into two broad categories: the younger, comprising all age groups from 0 to 24, with similar poverty incidence values of about 11%, and the older, comprising the age groups from age 25 upwards, with a poverty incidence of about 8%.

These differences are caused by different proportions of people with their own income and dependants in these two categories. Naturally, the younger (children and youth in education), as a rule, do not have their own income and poverty is more pronounced in their families than in families in which members with their own income (work, pension, etc.) prevail. Yet, the poverty disparity between these age categories was not particularly wide, owing to the fact that different generations lived together and shared household income, thus balancing everyone's consumption.

The younger generation (up to the age of 24) accounted for 31.2%, and the older – for 68.8% of all poor. Such low share of the younger generation was a result of unfavourable demographic processes that brought about the inverse age pyramid: older cohorts were more numerous than younger ones.

The ratio of child to adult poverty was similar:

	Poverty incidence	Breakdown of the poor	Total population breakdown
Children (0–18)	11.4	22.7	17.2
Adults	8.0	77.3	82.8
Serbia	8.6	100	100

Table 28. Child and adult poverty, 2013, %

Source: Household Budget Survey 2013, SORS

Child poverty incidence stood at 11.4% in 2013 and was higher than the adult poverty incidence (8.0%). As in previous years, and in line with worldwide developments, children were more affected by poverty, i.e. they were at a higher risk of poverty than adults for reasons presented above. Yet, the disparity was not particularly wide, primarily owing to the relatively small average number of children per family.

The table below shows poverty by sex:

Table 29. Poverty by sex, 2013, %

	Poverty incidence	Breakdown of the poor	Total population breakdown
Males	8.5	47.5	48.2
Females	8.7	52.5	51.8
Serbia	8.6	100	100

Source: Household Budget Survey 2013, SORS

Men's and women's poverty levels were similar and the difference amounted to statistical error. Even if there had been differences between the sexes in earnings and other income, the consumption would still have been balanced, as in most cases men and women lived together.

Educational attainment constitutes one of the key determinants of poverty, seeing that better educated individuals have higher income, as a result of which fewer of them are poor.

The effect of the educational attainment of the household head on poverty is shown in the table below.

Age	Poverty incidence	Breakdown of the poor	Total population breakdown
Incomplete primary education	21.9	27.1	10.6
Primary school	15.1	31.8	18.1
Secondary school	5.9	37.5	54.6
Non-university higher education	2.0	1.5	6.3
University-level higher education	1.8	2.1	10.4
Serbia	8.6	100	100

Table 30. Poverty by educational attainment of household head, 2013, %

Source: Household Budget Survey 2013, SORS

As shown above, poverty clearly decreased as the educational attainment of the household head increased: from 21.9% for those without complete primary education, to 1.8% for those with university education. In absolute terms, those with only primary education or below prevailed among the poor: they accounted for 58.9% of all poor. Those with secondary education followed, at 37.5% of all poor, which was considerably below their share in the overall population (54.6%).

Such a firm (negative) correlation between educational attainment (qualification) and poverty clearly shows that the labour market rewards qualification and that raising the educational attainment level of workers is a good path towards poverty reduction.

The qualification level of the household head is certainly not always the decisive factor in poverty, as the household head's labour market status may be different, as shown in the following table.

	Poverty incidence	Breakdown of the poor	Total population breakdown
Employed	6.1	33.9	48.1
Unemployed	20.4	24.2	10.2
Inactive	8.6	41.9	41.7
Serbia	8.6	100	100

Table 31. Poverty by labour market status of household head, 2013, %

Source: Household Budget Survey 2013, SORS

A household was at the lowest risk of poverty if the household head was employed; these households had a poverty incidence of 6.1% and accounted for 33.9% of all poor. This corresponds to the trends observed in many other countries, European ones in particular, where poverty is concentrated in households without employed members, i.e. those consisting entirely

of the unemployed or inactive, while the employed avoid poverty by having regular earnings. The fact that, in Serbia, poverty is widespread even among families with employed heads is a result of both low wages and methodological reasons – the employed include all who work at least one hour per week, and individuals who work less than full time (especially in the grey economy) are very numerous in Serbia. The poverty incidence for households with heads in dependent employment stood at 4.3%, and for the self-employed – 10.1%.

Households with unemployed heads were at the highest risk of poverty, with a poverty incidence of 20.4%. Their position would have been even less favourable without income from other sources: pensions, social benefits, remittances from relatives or other members' earnings.

The poverty incidence for households with inactive heads was quite low, only slightly higher than for households with employed heads, and stood at 8.6%, which corresponded to the poverty level of the overall Serbian population. A crucial factor contributing to such low poverty level of the inactive is certainly the Serbian pension system, which provides income to a major portion of the elderly population; consequently, the poverty incidence for households headed by pensioners was even lower, at 7.2%. On the other hand, other inactive household heads faced a high risk of poverty -24.1%.

\* \* \*

In 2013, poverty remained at a level approximately equal to that of the preceding year – 8.6% versus 8.8%. According to the preliminary data, the gross domestic product grew, but the share of individual consumption declined, resulting in a stagnation of the poverty incidence. According to the Household Budget Survey, the number of the poor was assessed at 610 thousand, and – as usual – the risk of poverty was the highest for members of large households, the unemployed, inactive (excluding pensioners) and unskilled, children and the population of Eastern and South-Eastern Serbia.

## (IN)EQUALITIES IN SERBIA

As stated above, poverty level is determined by (1) the chosen poverty line (sensitivity analysis was addressed above), (2) average consumption in the country (which is a function of Serbia's development level, i.e. GDP per capita) and (3) consumption distribution among citizens. The latter issue boils down to (in)equality among citizens, and in our case citizens' consumption (in)equality.

The measurement of inequality is a complex area, encumbered with numerous difficulties in methodology and data collection. In this study, two simplest and clearest indicators were chosen: the Gini coefficient of consumption inequality and the ratio of the consumption of the richest quintile to that of the poorest quintile (top and bottom 20% of the population by consumption); the same household budget surveys were used as data sources.

The Gini coefficient measures inequality in the population as a whole; its value varies from 0 to 1, where 0 indicates complete consumption equality of all individuals, and 1 indicates the concentration of all consumption in one individual:

	Gini coefficient				
	2011	2012	2013		
Serbia	0.25	0.26	0.26		
Urban	0.25	0.25	0.26		
Other	0.25	0.26	0.26		
Vojvodina	0.25	0.27	0.25		
Belgrade	0.24	0.25	0.27		
Šumadija and Western Serbia	0.23	0.22	0.24		
South-Eastern Serbia and Eastern Serbia	0.24	0.26	0.26		

Table 32. Gini coefficient in Serbia, 2011–2013

Source: Household Budget Survey 2011, 2012 and 2013, SORS

As shown above, the Gini coefficient had low values in Serbia in the observed years – 0.25 and 0.26 – which were near the bottom of the global list. This means that consumption inequality was quite moderate in Serbia.<sup>21</sup>

The two categories from the table above - urban and other population - had similar Gini

<sup>&</sup>lt;sup>21</sup> The version of the Gini coefficient based on consumption per equivalent adult is used here; it normally yields lower values than the two alternative versions: (1) based on consumption per capita and (2) based on income. However, the difference between the two Gini coefficient values based on consumption is not large in Serbia, as the former stood at 0.25 in 2011, as stated in the table, and the latter – at 0.27. For the calculation of the Gini coefficient and the S80/S20 ratio for Serbia based on income, see *Poverty and Social Inequality in Republic of Serbia*, PD10, SORS, December 30, 2013.

coefficient values, which corresponded to the national average; the same applied to the four regions, with values close to the average. Vojvodina displayed somewhat higher inequality than others in 2012, while the Šumadija and Western Serbia Region was characterised by slightly more uniform consumption than others.

The table below shows the Gini coefficient as a measure of consumption inequality in some countries.

	Coefficient
Argentina	0.44
Belarus	0.27
Brazil	0.55
China	0.42
India	0.34
Macedonia	0.44
Montenegro	0.29
Poland	0.33
Romania	0.27
Ukraine	0.26

Table 33. Gini coefficient, 2010 or 2011

Source: World Bank http://data.worldbank.org/indicator/SI.POV.GINI

As shown above, inequality in some countries in the East and South-East Europe region is similar to that in Serbia, while in others it is higher; in addition, almost all non-European developing countries are characterised by considerably higher inequality than Serbia.

The S80/S20 ratio, as a key measure of inequality, focuses only on the relationship of the richest and poorest quintiles in society, thus neglecting the middle 60% as unimportant; however, in the Gini coefficient and similar measures, they may have a decisive impact on the end result.

Table 34. S80/S20 ratio in Serbia, 2011–2013

	2011	2012	2013
80/20	3.6	3.8	3.9

Source: Household Budget Survey 2011 and 2012, SORS

The table above indicates that the consumption of the top 20% by consumption was about 3.8 times higher than that of the bottom 20%. In Serbia, the value of this inequality index was also relatively low compared to other countries, some of which are shown in the table below. As the S80/S20 ratios for these European countries are calculated according to a different methodology (based on income), this overview is given for illustrative purposes only and does not lend itself to an accurate comparison with Serbia.

	S80/S20
EU-28	5.1
Austria	3.8
Belgium	3.9
Bulgaria	6.5
Greece	6.0
Italy	5.6
Hungary	3.9
Germany	4.5
Romania	6.2
Sweden	3.6

Table 35. S80/S20 ratio, 2010

Source: Eurostat

http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tessi180&plugin =0

Therefore, the quite low values of both the Gini coefficient and the S80/S20 ratio indicate that consumption inequality is not particularly pronounced in Serbia, i.e. that it is moderate by global standards.

## POVERTY IN THE PERIOD 2008–2013

The table below shows the development of poverty in Serbia in the period 2008–2013. The observed period commences with 2008 because, from that year onwards, the Household Budget Survey has been carried out on the basis of the identical questionnaire and according to the methodological procedure aligned with the European standards, thus facilitating the comparability of results.

Table 36. Poverty in Serbia, 2008–2013

	2008	2009	2010	2011	2012	2013
Poverty line per equivalent adult, RSD per month	7,401	8,022	8,544	9,483	10,223	11,020
Poverty incidence (proportion of the poor)	6.1	6.9	9.2	6.8	8.8	8.6
Number of the poor, thousand	470	525	686	499	642	610

Source: Poverty in the Republic of Serbia 2008–2010, LP20, April 29, 2011, SORS, Household Budget Survey 2011, 2012 and 2013, SORS

Serbia's economic progress between 2000 and 2008 had an impact on poverty reduction and the proportion of the poor in the overall population decreased to 6.1% in 2008. However, with the onset of the economic crisis in the autumn of that year, the population's living standard started deteriorating on the global level. The poverty incidence grew simultaneously – first to 6.9% in 2009, and then to 9.2% in 2010. The country experienced a moderate economic recovery in 2011 and the poverty incidence decreased to 6.8%, only to increase to 8.8% in 2012 owing to a very poor harvest. Poverty remained unchanged in 2013, despite economic growth. Overall, the economic crisis brought about a considerable, but not dramatic poverty increase, and the number of the poor ranged between 470 thousand and 686 thousand during these years.

In addition to the development of the gross domestic product, poverty dynamics are also strongly influenced by the state policy on individual consumption – through expansive or restrictive budget, tax, monetary and credit, exchange rate and other policies. During the past decade, and even in the early 2000s, the state stimulated individual and total consumption in various ways, while the financial basis for this was provided by obtaining international sovereign loans. Serbia lived beyond its means. It is only recently that this orientation has been abandoned, under the pressure of economic necessity, i.e. the risk of sovereign default. As a result of a probable slowdown in individual consumption in the foreseeable future (pension and public sector wage cuts have been announced), a certain poverty increase may be expected even in the case of the country's economic recovery manifested in moderate economic growth.

An important factor of the relatively moderate poverty in Serbia is the uniformity of the population's consumption: as shown above, the Gini coefficient, which measures inequality, is very low (0.25 to 0.26), reflecting the fact that consumption disparities among Serbian citizens are lower than in many other countries worldwide. For a given gross domestic product and a given poverty line, poverty is lower in a country with lower inequality, as is the case in Serbia. The level of inequality in Serbia is under the influence of many other factors in addition to solidarity within households: from moderate wage disparities, tax and social insurance contributions, pensions

and social benefits, to inward remittances (estimated at EUR 2.2 billion in 2013 by the National Bank of Serbia) and humanitarian assistance.

Finally, the table below shows the socio-economic and demographic categories with the highest poverty incidence in the observed period:

	2008	2009	2010	2011	2012	2013
Non-urban areas	7.5	9.6	13.6	9.4	12.3	12.8
Eastern/South-Eastern Serbia				11.7	17.7	18.0
Unemployed, household head				17.1	21.0	20.4
Incomplete primary education, household head	9.0	14.8	14.2	16.5	19.5	21.9
Primary education, household head	10.5	9.2	12.7	11.1	15.0	15.1
Five-member family	5.2	5.7	11.7	8.8	13.8	12.7
Six-member and larger family	10.0	14.2	16.4	13.5	14.3	16.9
Children 0–18	7.1	9.3	12.2	9.8	12.3	11.4

Table 37. Poverty incidence of the most vulnerable groups, 2008–2013, %

Source: Poverty in the Republic of Serbia 2008–2010, LP20, April 29, 2011, SORS; Household Budget Survey 2011, 2012 and 2013, SORS

As shown above, the key poverty risk factors are:

- educational attainment of the household head (complete or incomplete primary education);
- labour market status of the household head (unemployed);

- household size (five-member and larger households);

- place of permanent residence (non-urban area, Eastern and South-Eastern Serbia); and

- being a child.

Specific focus on these population categories is required in designing social policy measures.