

Republic Statistical Office

POVERTY IN SERBIA IN THE YEAR 2006

- Preliminary results -

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I SURVEY METHODOLOGY

1. Poverty Measurement

One of the Government of Serbia's goals is the creation of a solid statistical base for continuous and reliable poverty measurement. Monitoring poverty rates gives economic policy-makers important information about the trends in the standard of living, while detailed poverty profile provides key input for programs and policy measures aimed at both reducing specific forms of poverty as well as facilitating the social inclusion of the most vulnerable groups.

There are two phases in the development of poverty statistics. The first phase was marked by two consecutive Surveys of the Living Standard of the Population (SLSP) in 2002 and 2003, conducted at the request of the Government of Serbia and supported by the World Bank's expertise. Creating the PRSp in 2002-3 would not been possible without the critical and timely input from the SLSP surveys.

The second phase is characterized by a 2004 strategic decision to base poverty statistics on data collected by the Household Budget Survey (HBS), conducted (unlike SLSP, which was produced by a private survey firm) on a permanent basis by the Republic Statistical Office. HBS data collection will secure full national ownership and much-needed long-term continuity in poverty statistics.

There are important methodological differences between the above-mentioned surveys. The first set of differences derives from the way in which the SLSP and HBS gathered data on consumption: The HBS collected data throughout the year, while the SLSP took a measurement for a single month (June). Although both surveys are based on diaries with records on food expenditures, it is important to mention that in the Household Budget Survey the diary is kept for the 14-day period, while in the Survey of the Living Standard of the Population, the diary is kept for the 7-day period.

HBS followed standard approach recommended by Eurostat, collecting much more detailed data on consumption. The SLSP used a shorter form but allowed the interviewers more active control over the data provided.

Unlike the HBS, the SLSP offers more detailed data on the usage of health-care services, social programs, educational services and labor activity.

The second set of differences arises from measuring the flow of services from owner-occupied housing and durable consumer goods. Unlike HBS, SLSP doesn't include sufficient data to impute the value of housing rents for owners of flats/houses and for estimation of the service of using durable consumer goods. Therefore, these two categories of consumption have been left out from the analysis in this study.

2. Defining Consumption as Indicator of the Living Standard of the Population

Measurement of the living standard and/or poverty, followed by the establishment of the poverty line and, finally, their adjustment to the economy of scope, i.e. their reduction to consumer units.

Poverty in Serbia was analyzed on the basis of household consumption. In the transition countries, consumption is conventionally a better indicator of the living standard¹. First of all, in the situation of wide-spread grey economy, consumption is often underestimated and households are unwilling to disclose “illegal” sources of income. The similar situation is with some other incomes, such as external receipts which are rarely declared as sources of income. Furthermore, consumption is a better indicator, since expenditures show greater stability throughout time, unlike earnings, primarily because of irregular payment of wages. Finally, among the important reasons is a significant share of individual agricultural production in the sustenance of many households, which cannot be indicated through income in cash. Available data have been showing the validity of all enumerated factors in our circumstances.²

Household consumption was defined as a sum of food expenditures and other current expenditures, including purchased products, individual production and presents. According to the COICOP classification, the basic consumption components are:

- 1) food consumption;
- 2) consumption of alcohol and tobacco;
- 3) expenditures for clothes and shoes;
- 4) expenditures for dwelling, water, electricity and gas;
- 5) expenditures for household furniture and regular household maintenance;
- 6) health-care expenditures;
- 7) transportation expenditures;
- 8) expenditures for postal services and communication;
- 9) expenditures for recreation and culture;
- 10) expenditures for education;
- 11) expenditures for restaurants and hotels;
- 12) expenditures for other goods and services.

Imputation of the value of services by using durable consumer goods, as well as the imputation of rents for flat/house owners was left out from the analysis due to deficiency of necessary data in HBS for their calculation.

Thus defined consumption was deflated by regional indexes of food prices which were gained from HBS. The starting assumption was that the regional differences in prices of products, not falling within the “food” group, are the same as the regional differences in food prices. Namely, consumption (incomes) represents adequate index of population welfare only if the people who expend more, consume greater amount of goods or goods of better quality, and not if they expend more by purchasing the same goods for higher prices. Therefore, it is necessary to harmonize the price discrepancies,

¹ The World Bank, 2000, pg. 368.

² More details: Krstić, G., 2003, Poverty and Reform of the Financial Assistance to the Poor, pg. 9, and Bjeloglav, D. and others 2007, SLSP Project: Life in Serbia through Data and Surveys, pg. 11.

meaning that those who expend more actually consume more and/or consume articles of better quality.

3. Defining Equal Consumption Units

Since the consumption data was collected at the household level in order to determine the level of the population welfare, total household consumption must be distributed between household members on the basis of certain criteria.

One of the methods for estimating the level of individual consumption is to calculate consumption per capita, by dividing the household consumption with the household members. This method implies that all household members have an equal share in the resources (consumption) of a given household. However, this method is inadequate because it is unrealistic to expect that all individuals require the same amount of resources in order to reach the same welfare level. Two important facts neglected in imputing the same consumption level to all household members is the difference in consumption between adults and children and the economy of scale, that is, the fact that some expenditures are shared between household members (for instance: dwelling expenditures, expenditures for cars, daily newspapers and the like).

The economy of scale can be approximated by adjusting the household size to a variable that represents equal consumption units. For instance, the household with 3.5 consumer units spends 3.5 time more in comparison with an adult individual.

In addition to household size, gender and age of the household members also influence the necessary income, that is, household expenditures. Therefore, consumption units can take into consideration these characteristics of households and their members, as well. Consumer units can reflect only the household size, so they depend on one parameter θ . Household consumption by consumer unit POT_{pj} can be represented with the following formula:

$$POT_{pj} = \frac{POT}{n^\theta}$$

where POT is household consumption; n – number of household members and θ - parameter.

Special case is when $\theta = 1$ represents consumption per capita. OECD uses value $\theta = 0.7$. For typical household size in eastern European and former Soviet Union countries, the afore-mentioned formula represents a simplification of an OECD scale, according to which the first adult is=1, the second adult=0.7 and children=0.5.

Modified OECD scale has been used in this study, according to which the first adult=1, the second adult=0.7 and children up to 13 years of age have a 0.5 ponder.

4. Defining the Poverty Line

Definition of poverty depends on the poverty line definition, as well. Every person whose income is below certain existential minimum (poverty line) necessary for satisfying minimal life needs is considered to be poor. Existential needs of an individual or a family can

be determined at different levels, therefore the poverty line is a relatively arbitrary category which depends on time and space in which it is defined.

There are two types of the poverty line: absolute and relative. The absolute poverty line determines the absolute living standard minimum and is usually based on fixed consumer food basket necessary to satisfy minimum needs for certain quantity and structure of calories, increased for the amount of other expenditures, such as clothes, hygiene, fuel, lighting and the like. Thus defined absolute poverty line differs between countries, depending of the consumer basket structure and, for the purpose of international comparability, it is calculated in US dollars of the same purchasing power.

Relative poverty line defines poverty in relation to the national level of living standard and is used for international comparisons of the characteristics of the poor. It is usually defined as a certain percentage of median or average household income, thus changing depending on the shift in the average standard of the population.

In this study, the poverty line was defined in two steps: In the first step, food line was defined, which had been determined on the basis of minimum consumer food basket, embracing 193 food products from the HBS.

Minimum consumer food basket was determined by multiplying the price of single calorie per day at the national level, which had been determined on the basis of consumption from HBS, with nutritional minimum of 2,288 calories per day (FAO). The price of one calorie per day at the national level was determined in several steps. First, expenditures for each food article were calculated in calories per consumer unit per day for each household by multiplying purchased amounts with their caloric value (and dividing with the number of days and number of consumer units). By summing these individual expenditures for food articles in calories per household, total household expenditure for food in calories per consumer unit was gained. By summing these expenditures for all households, total food expenditures in calories per consumer unit per day at the national level was gained. In the next step, structure of food expenditures in calories at the national level was calculated by putting the expenditures in calories for each food article for all households in relation with total expenditures for food in calories at the national level. Then, the price of one calorie per food products was calculated by dividing the median price of each food product with its caloric value. The price of one calorie at the national level was calculated as a pondered average of price of one calorie of each product, while ponderers are corresponding shares of expenditures for food in calories of each product in total expenditures for food in calories. Finally, the price of a calorie per day at the national level was multiplied with 2,288 calories per day and with 365 days. In this way, minimum consumer food basket was determined, that is, food line, in the amount of RSD 31,276 per consumer unit per year, or RSD 2,606 per consumer unit per month.

The second step defined the complete poverty line which, in addition to expenses for food, included expenses for other things (clothes and shoes, hygiene and household goods, transportation, health, education, etc.). It was defined in such a way that the percentage of population below the poverty line was equal to the percentage of population whose food consumption is smaller than the food line. In other words, for the poverty line was defined as the total consumption of those households whose food consumption equals the minimum consumer basket.

In order to determine the percentage of the population whose food consumption is smaller than the food line, that is, minimum consumer basket, we begin with the following equation:

$$OHK = (UPH/RSOS)/MKH$$

where OHK is relation between household food consumption and minimum consumer food basket; UPH is total household food consumption; RSOS is equivalency scale (consumer unit); MKH is the minimum food basket.

After that, the percentage of the poor is calculated, that is, indicator (P0) after fulfilling the following condition:

$$OHK < 1$$

meaning that the food consumption is smaller than the minimum food basket.

Finally, the complete poverty line was evaluated as consumption that gives the same percentage of the poor as the percentage of the poor defined by the food line. This method is based on an implicit assumption that OHK and consumption per consumer unit are equally good measurement units of real poverty. In this way, we get the poverty line which amounts to CSD 6,221 per month per consumer unit.

Table 1. Poverty Lines Used in this Study

	Absolute poverty line per consumer unit	Relative poverty line per consumer unit
Poor	CSD 6,221	CSD 7,171

In this study, the relative poverty line was calculated as 60% of the value of median of total household consumption per consumer unit.

5. Basic Poverty Indicators

The most frequently used poverty indicators can be defined by Foster, Greer and Throbec (1984):

$$P(\alpha) = \frac{1}{n} \sum_{i=1}^n \left[\max \left(\frac{z - c_i}{z}, 0 \right) \right]^\alpha$$

where α is parameter, z – poverty line, c_i – unit of equivalent consumption of an individual and a n – total number of persons.

For $\alpha = 0$, $P(0)$ is a poverty index which represents the number of poor persons in percentage of the whole population. However, this poverty indicator does not say anything about the poverty of those people, that is, how much their consumption

(income) is below the poverty line. Poverty indicator which takes that into account is the poverty depth (poverty gap), which is gained for $\alpha=1$. Thus, $P(1)$ can be defined in the following way:

$$P(1) = P(0) \cdot (\text{Average deficit}),$$

where average deficit marks average consumption (income) deficit of all poor people in the percentage from poverty line. Poverty depth $P(1)$ represents total consumption (income) deficit of all the poor people in the percentage from the poverty line. When the average deficit of the poor is multiplied with the number of poor and expressed in the DP percentage, minimum amount of cash necessary for the elimination of poverty is obtained, under the assumption of perfect targeting.

Finally, for $\alpha = 2$ we get $P(2)$ which is titled "severity of poverty". This indicator measures inequality among the poor, because it gives larger ponder to the poor who are more distant from the poverty line.

In this analysis, all three poverty indicators shall be used, that is, poverty index $P(0)$, poverty depth $P(1)$ and severity of poverty $P(2)$.

6. Measures of Inequality

There are many different methods which make possible the measurement of inequality. One of them is 90/10 measure or decile measure which shows how much more the poorest person from the tenth decile (where the 10% of rich is located) spends from the richest person from the first decile (10% of the poorest). Decile measure is insensitive to the change in distribution of household consumption from the 11th to 89th percentile.

Measure of inequality that takes into consideration the total distribution of consumption (income) is the Gini coefficient. It is calculated by using the following formula:

$$G = \frac{2}{\mu n^2} \sum_{i=1}^n \left(r_i - \frac{n+1}{2} \right) c_i$$

where n is the number of persons, c_i is their equivalent consumption, μ is equivalent consumption, r_i is i -th rang of household in equivalent ranking of consumption (for the household with the lowest consumption equivalent r_i equals 1, while for the household with highest consumption equivalent r_i equals n). Gini coefficient is located in the interval between 0 (perfect inequality) and 1 (complete inequality). Gini coefficient is most sensitive in the middle of consumption distribution.

7. Data Sources

The poverty in Serbia was analyzed on the basis of the data obtained through the Household Consumption Survey, which had been conducted in the year 2006, according to international standards and recommendations of EUROSTAT, ILO and UN, thus providing for international data comparability.

Due to well-known difficulties in the realization of the Household Budget Survey in the period 2003-2005, it was decided to leave out those three years from the poverty analysis because quality of the gathered data was insufficient to be used for those purposes.

Two-stage stratified, rotating sample was applied in the survey with enumeration districts as primary selection units and households as secondary ones.

Stratification variables are:

- Territory (up to the level of region)
- Type of settlement (city and other)

Sample allocation by strata was conducted proportionally to the number of households in them.

Selection units of the first stage (enumeration districts) were chosen in proportion to their size (measured by the number of households), while households, within the framework of a chosen enumeration district, have been chosen incidentally.

Every 15 days 40 selection units were chosen, that is, 200 households (4,800 households per year).

The survey applies the method of diary keeping (a household keeps an individual consumption diary for fifteen, that is, sixteen days) regarding the items and services of individual consumption and also interview method on the basis of questionnaires, where the reference period for durables lasts twelve months, for semi-durables, income, agriculture, hunting and fishing - three months.

Every household chosen according to the sample plan, single-member or several members including, is a survey unit. A household is: a) a community of persons whose members live together, prepare food and spend earned income jointly; b) a single person, living, preparing food and spending income on his/her own.

This survey collects data on:

- household members (demographic and socio-economic characteristics);
- dwelling conditions (home heating method, home size, home installations and the like);
- level of household supply with durable consumer goods;
- total household financial expenditures (expenses) for personal consumption (food and non-alcoholic beverages; alcoholic drinks and tobacco; clothes and shoes; housing, water, electricity, gas and other

- fuels, furniture, home equipment and maintenance; health; transportation; communications; recreation and culture; education; restaurants and hotels and other goods and services);
- household incomes.

II POVERTY PROFILE FOR SERBIA IN 2006

1. Main poverty indicators

Poverty in Serbia was analyzed on the basis of household consumption as the main aggregate for poverty measurement.

In 2006, 8.8% of the population of Serbia was categorized as poor (Table 1), in view of the fact that their consumption per spending unit was, on the average, below the poverty line which was 6,221 dinars a month per spending unit. If the standard poverty index error is taken into account, the real poverty index ranges between 7.5% and 10.1% (with a 95% statistical certainty).

Table 1, apart from the poverty index, also shows the distribution of poverty through the use of two indicators – the poverty gap and poverty intensity. The poverty gap was 2.1%, which indicates that if the state were to mobilize funds in the amount of 2.1% of the poverty line for each person (either poor or not) and direct them towards the poor, poverty would be eliminated, provided that assistance to the poor is perfectly targeted.

The average consumption of the poor in 2006 was 23% below the poverty line.

Poverty intensity, an indicator taking into account the fact that certain poor persons have fallen deeper into poverty than others, i.e. that they are further down below the poverty line than others (and gives them a larger weight), was 0.8%.

On the basis of these data we can conclude that the poverty gap and intensity are not high, which is in accordance with the relatively low inequality in Serbia (see the part on the unequal distribution of consumption).

Table 2. Poverty indicators in Serbia in 2006 (%)
(standard errors are presented in brackets)

	Poverty line = 6221 dinars a month per spending unit		
	Index (R0)	Gap (R1)	Intensity (R2)
Urban areas	5.3 (0.66)	1.3 (0.27)	0.5 (0.16)
Other areas	13.3 (1.15)	3.1 (0.39)	1.2 (0.22)
Total	8.8 (0.63)	2.1 (0.23)	0.8 (0.13)

Source: APD 2006

The population in other areas is considerably poorer than in urban areas. The poverty index for the population of other areas was almost two and-a-half times larger than the poverty index for the population of urban areas (13.3% vs. 5.3%, respectively), and it was by around 50% larger than the average level for the entire population. The poverty gap and intensity of other areas were also statistically larger compared to urban areas.

2. Poverty by regions

The region with the largest share of the poor is central Serbia (Table 3). The poverty risk in this region is 21.6% larger than the average poverty risk of Serbia's population³. Within this region, a considerable difference in the poverty of urban and other areas is noticeable. The situation is similar in Vojvodina whose poverty index is somewhat below the national average. Other areas of central Serbia and Vojvodina are exposed to a high risk of poverty compared to the average for the entire population (60.9% and 53.9% respectively), while the populations of urban areas in both regions are in a much more favorable position since their poverty risk is below the national average.

Table 3. Poverty indicators by regions in Serbia in 2006 (%)

	Percentage of the poor	Relative poverty risk	Structure of overall population	Structure of the poor
Belgrade	4.3	-51.2	21.4	10.5
Urban areas	3.8	-56.6	17.2	7.5
Other areas	6.3	-28.9	4.2	3.0
Vojvodina	8.7	-0.9	26.7	26.5
Urban areas	4.9	-44.2	14.9	8.3
Other areas	13.6	53.9	11.8	18.2
Central Serbia	10.7	21.6	51.9	63.0
Urban areas	6.6	-24.8	23.8	17.9
Other areas	14.2	60.9	28.1	45.1
Total	8.8	-	100.0	100.0

Source: APD 2006

³ The relative poverty risk is the ratio between the poverty index for various groups and the poverty index for the entire population, expressed in percentage points. When the poverty risk for various groups of the population is examined, it is possible to learn which groups of the population are the most vulnerable.

The population of other areas of central Serbia, which was the most vulnerable, accounted for 28.1% of the total population and for almost half of the overall number of the poor (45.1%).

The population of urban areas in Belgrade, Vojvodina and central Serbia were in the most favorable position, since their poverty risk was much lower than the average for the entire population.

3. Poverty by type of household

When poverty is observed according to the size of the household, one can notice that poverty does not grow with an increase in the number of members (Table 4).

Table 4. Poverty indicators according to the type of household in Serbia in 2006 (%)

	Percentage of the poor	Relative poverty risk	Structure of overall population	Structure of the poor
One member	8.6	-2.5	5.7	5.5
Two members	8.7	-1.8	14.8	14.5
Three members	5.2	-41.6	17.4	10.1
Four members	5.7	-35.8	27.1	17.4
Five members	8.3	-6.1	15.9	14.9
Six members and more	17.3	96.0	19.1	37.6
Total	8.8	-	100.0	100.0

Source: APD 2006

The most vulnerable are the households with six and more members (poverty risk 96.0%). The poverty risk of one-member, two-member and five-member households was somewhat lower than the average, while the smallest was the number of poor three-member and four-member households whose poverty risk was below average.

4. Poverty according to age

Observed according to age, the percentage of the poor is the largest among children up to the age of 18 (around 12%). Their poverty risk was by almost a third larger than the population's average (Table 5). They accounted for 23.7% of the total population and for almost a third of the total number of the poor.

Table 5. Poverty indicators according to age in Serbia in 2006 (%)

	Percentage of the poor	Relative poverty risk	Structure of overall population	Structure of the poor
Age				
Children up to the age of 13	11.6	31.4	16.8	22.7
Children 14 - 18	11.7	32.5	6.9	9.1
Adults 19 - 24	7.2	-18.1	9.2	7.9
Adults 25 - 45	8.4	-5.2	28.3	28.1
Adults 46 - 64	7.0	-21.0	24.7	18.9
Aged 65 and more	10.0	13.4	14.1	13.3
Total	8.8	-	100.0	100.0
Children/adults				
Children	11.6	31.7	23.8	31.8
Adults	8.2	-7.5	76.2	68.2
Total	8.8	-	100.0	100.0

Source: APD 2006

The next category with an above average poverty risk are elderly persons (65 years of age and more). Namely, 10.0% of the elderly (65+) lived below the poverty line of 6,221 dinars by spending unit, so that their relative poverty risk was by 13.4% larger than the population's average.

Adults between 25 and 45 years of age (28.1%) had the largest share in the poor population, since this age group is dominant in the overall population. However, their poverty risk was below average.

5. Poverty by the gender and marital status of household head

Households with women as their heads were somewhat more vulnerable than other households (Table 6), since their relative poverty risk was slightly below the average (9.3%). Their share in the poor population is 22.4%.

Table 6. Poverty indicators according to the gender and marital status of the household head in Serbia in 2006 (%)

	Percentage of the poor	Relative poverty risk	Structure of overall population	Structure of the poor
Gender				
Male	8.6	-2.4	79.5	77.6
Female	9.6	9.3	20.5	22.4

Marital status				
Single	8.8	-0.8	3.0	3.0
Married	8.7	-1.1	76.1	75.2
Divorced	9.9	12.4	4.4	4.9
Widowed	9.0	2.0	16.5	16.9
Total	8.8	-	100.0	100.0

Source: APD 2006

The households whose head is divorced have a somewhat higher poverty risk than the average (12.4%), but their share in the overall structure of the poor is relatively small (4.9%). The households where the head is either single or married have a poverty risk close to the average level (-0.8% and 1.1%). Their share in the overall structure of the poor is almost equal to their share in the structure of the overall population.

6. Poverty according to the education level of the household head

Table 7 shows the connection between the household head's education level and poverty. We can conclude that the share of the poor drops with the increase in the level of education.

Table 7. Poverty indicators according to the education level of the household head in Serbia in 2006 (%)

	Percentage of the poor	Relative poverty risk	Structure of overall population	Structure of the poor
Unfinished primary school	21.0	138.1	16.6	39.5
Primary school	13.7	55.5	17.0	26.5
Secondary school	5.5	-38.0	51.3	31.8
Two-year post secondary school	0.6	-93.3	7.0	0.5
University education	1.8	-79.1	8.1	1.7
Total	8.8	-	100.0	100.0

Source: APD 2006

The households whose heads have not finished primary school have the largest poverty risk. The poverty risk of these households is 138.1% above average. The households whose heads have finished primary school also have a high poverty risk, 55.5%. On the other hand, the households whose heads have high education (post-secondary and university education) had a below average poverty risk. Only 0.6% of the households where the head had post-secondary school education, i.e. 1.8% of the households whose head had university education, were poor.

7. Poverty according to the socio-economic status of the household head

Table 8 shows poverty according to the socio-economic status of the household head based on the respondents' statements. The percentage of the poor according to the socio-economic status of the household head considerably differs.

Table 8. Poverty indicators according to the socio-economic status of the household head in Serbia in 2006 (%)

	Percentage of the poor	Relative poverty risk	Structure of overall population	Structure of the poor
Self-employed	10.2	15.4	15.3	17.7
Employed	5.2	-40.9	36.9	21.8
Unemployed	14.7	66.4	7.1	11.8
Pensioners	8.8	-0.7	36.9	36.7
Inactive others	28.2	219.8	3.8	12.0
Total	8.8	-	100.0	100.0

Source: APD 2006

The largest percentage of the poor was registered among households whose head was inactive, but was not a pensioner. Their poverty risk was two times above the average (219.8%), and their share in the total structure of the poor was 12%. The households whose head was unemployed had a relatively high poverty risk (66.4% above average), while their share in the total structure of the poor was 11.8%. Households whose head was a pensioner had a poverty risk close to the average level (-0.7%). However, they had a considerable share in the poor due to their high share in the structure of the overall population. The smallest number of poor households was registered among employed household heads (5.2%). Their poverty risk was considerably below average (-40.9%).

8. Poverty according to the main source of household income

Table 9 shows poverty according to the main source of household income based on the respondents' statements.

Households (26.3%) whose main source of income originates from other sources (gifts, social welfare and so on) have the largest poverty index. Their poverty risk was two times larger than the average, and they accounted for 16.9% of the poor population.

Households whose main source of income is from agriculture are exposed to a considerable poverty risk. Their poverty index is 11.5%, and they account for 15.2% of the poor. The next category according to the vulnerability level includes households whose main source of income is a pension. Around 10% of the population which live in such households are poor. They represent a dominant group in the structure of the poor (30.2%), since they account for nearly a quarter of the overall population.

Table 9. Poverty indicators according to the main source of household income in Serbia in 2006 (%)

	Percentage of the poor	Relative poverty risk	Structure of overall population	Structure of the poor
Public sector	4.8	-45.9	29.0	15.7
Private sector	7.1	-20.1	27.4	22.0
Agriculture	11.5	29.8	11.7	15.2
Pensions	10.2	15.8	26.2	30.2
Other	26.3	198.2	5.7	16.9
Total	8.8	-	100.0	100.0

Source: APD 2006

The lowest poverty rate is present among households whose main source of income originates from the public or private sector (4.8% and 7.1%), which is in line with the results of poverty according to the socio-economic status of the household head (Table 7, column for the self-employed and employed).

9. Poverty according to certain housing characteristics and the possession of durable goods

Table 10 shows poverty according to the size of housing space per household member, the type of heating and the possession of a television set, telephone and washing machine.

Table 10. Poverty indicators according to certain housing characteristics and the possession of durable goods in Serbia in 2006 (%)

	Percentage of the poor	Relative poverty risk	Structure of overall population	Structure of the poor
m² per household member				
Less than 10	30.6	247.1	7.5	26.0
More than 10	7.1	-20.0	92.5	74.0
Type of heating				
Central heating	2.7	-69.8	17.5	5.3
Electricity	3.5	-60.1	7.9	3.2
Solid fuel	12.5	41.4	60.4	85.4
Liquid fuel	13.5	52.9	0.5	0.7
Combined	4.4	-50.2	6.5	3.3
Gas	2.7	-69.1	7.3	2.3
Television set				
Possesses	8.5	-4.0	97.5	93.6
Does not possess	22.9	160.1	2.5	6.4
Telephone				
Possesses	5.6	-36.4	84.2	53.5
Does not possess	25.9	193.9	15.8	46.5

Washing machine				
Possesses	5.9	-33.5	87.4	58.2
Does not possess	29.3	232.9	12.6	41.8
Total	8.8	-	100.0	100.0

Source: APD 2006

Household members who live in a housing space of less than 10 m² have a poverty index of 30.6%, which is considerably above the population's average (247.1%). Their share in the total structure of the poor is 26%.

When observing the type of heating, we can conclude that households using solid or liquid fuel for heating have an above average poverty risk. The largest share in the structure of the total population is that of households using solid fuels (60.4%), which form the largest part of the structure of the poor (85.4%).

Households that do not possess a television set, telephone and washing machine were exposed to a much larger poverty risk compared to the households that possesses the mentioned goods. Households that possess a telephone and a washing machine have a poverty risk which is by a third lower than average.

10. Relative poverty line

The relative poverty line has been set at 60% of the median of the average consumption per spending unit, and was 7,171 dinars on the average per month per spending unit in 2006 (Table 11). According to this poverty line, in 2006, 14.4% of the inhabitants of Serbia were poor, since their monthly consumption per spending unit was below 7,171 dinars.

Table 11. Poverty indicators in the Republic of Serbia in 2006 (%)
(standard errors are presented in brackets)

	Poverty line = 7,171 dinars a month per spending unit		
	Index (R0)	Gap (R1)	Intensity (R2)
Urban area	9.5 (0.80)	2.1 (0.31)	0.8 (0.19)
Other areas	20.6 (1.45)	4.9 (0.47)	1.9 (0.27)
Total	14.4 (0.77)	3.3 (0.27)	1.3 (0.16)

Source: APD 2006

The relative poverty line was 15.3% higher than the absolute poverty line. If the relative poverty line is used, the poverty index increases by 63.6%. The poverty index, as well as the poverty gap and intensity, are considerably higher in other areas than in urban areas.

11. Inequality measures

The most frequently used inequality measure is the Gini coefficient whose value is calculated according to consumption in a spending unit and it was 28 in Serbia in 2006.

The inequality level in Serbia is close to the average for the group of East European economies in transition⁴. Especially interesting for us are comparisons with neighboring countries which also conducted household surveys that were very similar to the Serbian survey according to the manner in which they were conceived and the definition of the welfare aggregates.³ Bosnia and Slovenia have a lower inequality level (27 and 26 respectively), while in Macedonia, Bulgaria and Croatia (29, 33 and 26 respectively) this level is higher than in Serbia. The Gini values for the group of East European countries range from 26 to 40, while this value for consumption inequality in Serbia is 28, which is closer to the lower end of this range.

The second inequality measure is the share of 25% of the poorest households in the population's total consumption, which was 11.1%.

In 2006, an average household in Serbia spent the most on food and non-alcoholic beverages, which accounted for 39.5% of total consumption. Households in other areas spent on food 42.5% and households in urban areas 37.5% of total consumption.

⁴ Source: Biljana Bogicevic, Gorana Krstic, Bosko Mijatovic, Branko Milanovic – *Siromastvo i reforma finansijske podrške siromasima (Poverty and Reform of Financial Support to the Poor)*, 2003