

ANNEX 1: Data Sources and Methodology

A. Data Sources: The analysis in this report relies on data from three household surveys that were carried out in Serbia and Montenegro in 2003.

1. **Serbia Living Standards Survey 2003:** A follow-up panel survey to the 2002 Living Standard Survey conducted by the Government of Serbia, the survey captured information on multiple dimensions of living standards of household members, including their consumption and income. The survey was based on a two-stage stratified sample, with primary sample units being the census districts and secondary units being the households. They are representative of all six major regions and urban and rural areas in each region. 2,548 households, comprising 8,027 individuals were sampled in this survey. The survey was also able to identify 21 Roma households, comprising 81 individuals. These Roma households have been defined as “integrated Roma” in the paper.
2. **Serbia Roma Living Standards Booster Survey 2003:** This was a special survey conducted to capture the living standard information of “non-integrated” or “settlement” Roma households that are usually not captured by the census. As a result, known Roma settlements in Serbia were identified, and from this sample frame 525 households were surveyed using the same questionnaire used to survey the general population. An additional module was added to the questionnaire to capture information on the type of settlement, the ethnic structure of the household, the language(s) spoken by individual members, and characteristics of the local community.
3. **ISSP/UNDP Household Survey of Roma, Ashkaelia, Egyptians, Refugees and IDPs in Montenegro 2003:** This survey was developed and conducted by the Institute of Strategic Studies and Prognoses (ISSP) in Montenegro to collect information on the living standards of the vulnerable population in Montenegro. The sample was categorized into four sub-samples (Roma, Ashkaelia and Egyptians (RAE), refugees, IDPs and a control group for the regular population). The sample captured a total number of 828 households, comprising 3,592 individuals. The sample frame was identified using a database from Commissariat for Displaced Persons of Republic of Montenegro and UNHCR.

B. Treatment of Consumption Aggregate: The development of poverty lines and poverty rates in this report for the analysis of households in Serbia follows the methodology used for the 2003 Serbia and Montenegro Poverty Assessment⁴⁴. The consumption aggregate for the Montenegro survey was constructed and made available by Center for Entrepreneurship and Economic Development. In all cases, imputed rent was subtracted from total consumption for the purposes of this report, because the inclusion of imputed rent is expected to overestimate poverty for Roma.

In order to calculate the new poverty line for Serbia, the consumption aggregate for 2002 was first adjusted to exclude imputed rent. Then the poverty line was recalculated in order to give the same poverty rate of 10.16% in 2002, as calculated by the World Bank 2002 Poverty Assessment. This poverty line was then adjusted for inflation, and applied to 2003 data. As a result, the poverty line used in the report was calculated to be Dinars 3,997 per capita per month. The extreme poverty line already excluded imputed rent and hence was not redefined. It was used as defined in the World Bank 2002 Poverty Assessment, and adjusted for food inflation (which was almost zero), giving a poverty line of Dinars 1,901 per person per month. In the case of Montenegro, the previously used poverty line of Euro 116.2 per person per month was adjusted in

⁴⁴ World Bank (2003), *Serbia and Montenegro Poverty Assessment*

the same way as done for the Serbia data, resulting in a new poverty line of Euro 84, which was used in this report.

C. Calculation of counterfactual consumption for impact evaluation of social transfers:

To assess the impact of a particular social transfer on a household's economic welfare, (if consumption is used as the measure of welfare), one must first estimate the consumption level of the household assuming that the transfers did not exist. Accordingly, this analysis constructs a 'counterfactual consumption' level that is consistent with the absence of both public and private transfers. It does so by making an assumption about what proportion of the transfers were used by households to finance additional consumption. The change in consumption relative to the change in income (in this case, transfer income) is defined as the 'marginal propensity to consume out of transfer income'. It can range between 0 and 100 percent, depending on each household's behavior. That is to say, if the marginal propensity to consume were 100 percent, the household would consume all of its transfer income, while at 0 percent it would not change its consumption level at all.

It is difficult, however, to predict the behavior of households in the absence of these transfers. Many might reduce their consumption by the full amount of the transfer income received. If a household is faced with the loss of transfer income, however, there are several reasons why it might reduce its consumption by less than the reduction in its income. It might finance part of its continuing consumption by increasing its indebtedness. Some household members might choose to work more or begin working, thereby offsetting part of the lost transfers through increased wages or earnings. Faced with a sustained and foreseeable loss in income from transfers, some households might withdraw a child from school, or expand home production activities so as to maintain consumption levels closer to their levels before the loss of income occurred. Other households might join together or change their composition so as to exploit economies of scale from a larger household, although doing so could entail a loss of independence that the household members see as detracting from their overall well-being. Thus, it is clear that households would not always change their consumption levels by the full amount of the change in their incomes.

It is hard to obtain reliable empirical estimates of households' average marginal propensity to consume out of transfer income. Accordingly, the analysis in this report uses a counterfactual consumption level based on a marginal propensity to consume of 100 percent. However, it is useful to review alternative calculations to estimate the counterfactual consumption levels, which are provided below. Counterfactual consumption levels are defined for four different assumptions about the marginal propensity to consume out of transfer income – 25, 50, 75 and 100 percent. The tables below show the impact of social transfers on poverty and economic welfare under alternative assumptions about the marginal propensity to consume from transfer income.

The following statistics are presented here:

1. **Coverage of Social Protection transfers** – Percentage of each subgroup receiving the benefit
2. **Beneficiary Incidence** – Percentage of Beneficiaries belonging to each subgroup
3. **Transfer Incidence** – Percentage of total transfer amounts received by each subgroup

Coverage of Social Protection transfers - General Population

Marginal Propensity to Consume out of Transfer Income – 25%								
	Percent of Population	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	51.3	49.5	67.7	67.4	60.5	50.9	44.5	33.6
Old age pension	33.2	31.9	44.5	43.8	41.2	33.6	26.6	20.9
Social Assistance	20.4	19.5	28.2	26.8	27.6	19.4	17.1	11
MOP	1.5	1.6	0.9	2.3	2.2	1.5	1.4	0.1
Child Allowance	14.3	13.7	18.9	18.1	21	13.2	11.1	7.8
Social Protection	64.6	62.7	81.9	82.9	78.7	63.8	56.2	41.7
Marginal Propensity to Consume out of Transfer Income – 50%								
	Percent of Population	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	51.3	46.6	76.1	74.6	62.8	49.1	40.5	29.8
Old age pension	33.2	29.7	51.1	49.6	42.8	31.7	24.2	17.7
Social Assistance	20.4	19.7	23.9	25.1	28.1	19.9	17.4	11.5
MOP	1.5	1.5	1.5	1.6	3	1.6	1.1	0.1
Child Allowance	14.3	14.2	14.7	15.4	22.3	14.1	10.2	9.1
Social Protection	64.6	60	88.7	87.3	80.5	63.6	52.9	38.9
Marginal Propensity to Consume out of Transfer Income – 75%								
Q75	Percent of Population	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	51.3	42.7	81.3	83	62.2	48.9	37.3	25.5
Old age pension	33.2	26.7	55.7	57.1	41.3	30.5	22.9	14.2
Social Assistance	20.4	19.4	23.8	23.7	27.6	23.3	16.7	10.8
MOP	1.5	1.5	1.4	1.6	3.2	1.3	1.2	0.1
Child Allowance	14.3	14.2	14.4	13.4	22.3	16.2	10.5	8.8
Social Protection	64.6	56.8	91.9	92.9	79.9	66.3	49.7	34.5

Coverage of Social Protection transfers - Roma Population

Marginal Propensity to Consume out of Transfer Income – 25%								
Q25	Percent of Population	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	11.7	12.9	11	7.9	8.3	15.2	16.2	10.9
Old age pension	5.6	6.6	5.1	2.4	1.3	11.2	6.7	6.5
Social Assistance	73.8	65.8	78.3	81.7	80.4	71.5	69.8	65.5
MOP	21.2	13.3	25.6	34.4	26.5	16.5	13.5	15
Child Allowance	57.3	52.6	59.8	59.9	59.4	59.5	53.9	53.6
Social Protection	78.8	72.2	82.5	84.3	82.9	77	78.5	71.1
Marginal Propensity to Consume out of Transfer Income – 50%								
Q50	Percent of Population	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	11.7	8.7	13.1	9.4	11.5	14	16.2	7.4
Old age pension	5.6	5.1	5.9	2.8	4.4	9.3	7.8	3.9
Social Assistance	73.8	65.2	77.8	82.7	82.9	74.1	64.6	64.6

MOP	21.2	13.9	24.7	36.7	29.6	13.1	11.6	14.9
Child Allowance	57.3	53.1	59.2	60.7	63.5	57.8	50.9	53.3
Social Protection	78.8	68.9	83.4	86.8	86	79.3	74.3	67.4
Marginal Propensity to Consume out of Transfer Income – 75%								
Q75	Percent of Population	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	11.7	7.9	13.3	10.4	16.8	12.6	13.2	5.4
Old age pension	5.6	5	5.9	3	9.6	4.9	6.6	3.9
Social Assistance	73.8	62.6	78.5	85.2	85	71.1	65.1	62.4
MOP	21.2	13.3	24.5	38.9	31.8	12	8.1	14.9
Child Allowance	57.3	50.3	60.2	66.3	62.6	52.6	53.6	51.1
Social Protection	78.8	66.4	84	89.8	89.9	75.8	73.2	64.9

Beneficiary Incidence – General Population

Marginal Propensity to Consume out of Transfer Income – 25%							
Q25	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	86.9	13.2	26.3	23.5	19.8	17.3	13.1
Old age pension	86.7	13.4	26.5	24.8	20.2	16.0	12.6
Social Assistance	86.4	13.8	26.4	27.1	19.0	16.8	10.8
MOP	93.9	6.1	31.0	30.0	19.6	18.2	1.2
Child Allowance	87.0	13.3	25.5	29.5	18.5	15.6	10.9
Social Protection	87.4	12.7	25.7	24.3	19.7	17.4	12.9
Marginal Propensity to Consume out of Transfer Income – 50%							
Q50	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	76.3	23.8	29.1	24.5	19.1	15.7	11.6
Old age pension	75.4	24.7	29.9	25.8	19.0	14.6	10.7
Social Assistance	81.4	18.8	24.6	27.6	19.5	17.1	11.2
MOP	83.7	16.3	21.7	40.6	21.3	15.2	1.2
Child Allowance	83.7	16.6	21.7	31.4	19.8	14.4	12.8
Social Protection	78.1	22.0	27.1	24.9	19.6	16.3	12.0
Marginal Propensity to Consume out of Transfer Income – 75%							
Q75	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	64.7	35.4	32.4	24.2	19.0	14.5	9.9
Old age pension	62.5	37.5	34.5	24.8	18.3	13.8	8.6
Social Assistance	74.0	26.2	23.3	27.0	22.8	16.4	10.5
MOP	78.3	21.7	21.7	43.0	17.5	16.6	1.2
Child Allowance	77.6	22.7	18.8	31.3	22.7	14.7	12.4
Social Protection	68.3	31.8	28.8	24.7	20.5	15.4	10.6

Beneficiary Incidence – Roma Population

Marginal Propensity to Consume out of Transfer Income – 25%							
Q25	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5

Social Insurance	39.5	60.6	13.5	14.3	25.8	28.0	18.4
Old age pension	41.7	58.2	8.6	4.6	39.7	24.2	22.9
Social Assistance	31.9	68.1	22.2	21.9	19.3	19.1	17.5
MOP	22.5	77.5	32.5	25.2	15.5	12.8	14.0
Child Allowance	32.9	67.1	20.9	20.9	20.7	19.0	18.5
Social Protection	32.8	67.2	21.4	21.2	19.4	20.1	17.8

Marginal Propensity to Consume out of Transfer Income – 50%

Q50	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	23.9	76.1	16.0	19.7	23.8	27.8	12.6
Old age pension	29.2	70.8	9.9	15.7	32.8	27.7	13.8
Social Assistance	28.3	71.7	22.4	22.7	20.0	17.6	17.4
MOP	21.0	79.0	34.6	28.2	12.3	10.9	14.0
Child Allowance	29.8	70.3	21.2	22.4	20.1	17.8	18.5
Social Protection	28.1	71.9	22.0	22.0	20.0	18.9	17.0

Marginal Propensity to Consume out of Transfer Income – 75%

Q75	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	20.0	80.0	17.8	29.0	21.5	22.6	9.1
Old age pension	26.3	73.6	10.7	34.5	17.4	23.6	13.8
Social Assistance	25.1	74.9	23.2	23.2	19.2	17.6	16.8
MOP	18.5	81.5	36.8	30.2	11.3	7.7	14.0
Child Allowance	26.0	74.0	23.2	22.0	18.3	18.7	17.7
Social Protection	25.0	75.0	22.9	23.0	19.2	18.6	16.4

Transfer Incidence – General Population

Marginal Propensity to Consume out of Transfer Income – 25%

Q25	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	85.3	14.8	26.3	20.8	20.1	16.9	16.0
Old age pension	86.4	13.7	24.9	21.2	20.9	16.5	16.6
Social Assistance	84.7	15.4	26.7	24.5	17.0	16.6	15.2
MOP	90.2	9.8	33.0	27.2	29.9	8.6	1.3
Child Allowance	88.0	12.3	24.2	30.1	17.6	17.3	10.8
Social Protection	85.2	14.9	26.8	21.5	19.6	16.8	15.3

Marginal Propensity to Consume out of Transfer Income – 50%

Q50	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	69.9	30.1	34.9	22.0	18.6	13.1	11.4
Old age pension	70.6	29.5	33.6	23.2	18.3	13.0	12.0
Social Assistance	75.8	24.3	30.2	23.8	15.7	17.8	12.5
MOP	75.5	24.5	29.3	35.8	26.1	7.6	1.3
Child Allowance	84.2	16.1	21.4	31.8	19.2	14.8	12.8
Social Protection	69.3	30.8	35.4	22.0	18.3	13.3	11.0

Marginal Propensity to Consume out of Transfer Income – 75%

Q75	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	52.8	47.3	44.9	21.1	15.3	10.3	8.4
Old age pension	53.6	46.5	43.9	22.1	15.0	10.7	8.3
Social Assistance	65.7	34.5	31.5	22.6	21.9	15.0	9.0
MOP	70.7	29.3	29.3	41.5	16.8	11.2	1.3
Child Allowance	76.9	23.3	17.7	32.9	21.9	15.0	12.5
Social Protection	53.2	46.9	44.4	21.1	15.8	10.5	8.2

Transfer Incidence – Roma Population

Marginal Propensity to Consume out of Transfer Income – 25%							
Q25	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	57.1	42.9	10.4	8.4	19.9	32.9	28.4
Old age pension	57.8	42.2	6.4	2.4	28.1	29.6	33.4
Social Assistance	27.8	72.2	27.1	19.3	19.3	20.1	14.1
MOP	23.3	76.7	40.7	17.7	13.2	16.9	11.5
Child Allowance	37.0	63.0	21.3	17.5	18.5	21.7	21.0
Social Protection	37.4	62.6	22.8	15.7	18.5	22.1	20.8
Marginal Propensity to Consume out of Transfer Income – 50%							
Q50	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	33.3	66.7	16.9	14.7	18.6	32.1	17.7
Old age pension	38.5	61.5	12.9	13.0	21.4	34.1	18.6
Social Assistance	24.1	75.9	28.9	22.9	18.2	16.0	13.8
MOP	22.4	77.6	42.5	21.6	10.8	13.6	11.5
Child Allowance	33.2	66.8	21.7	21.2	17.3	18.9	20.9
Social Protection	24.9	75.1	25.6	24.1	17.5	18.8	14.0
Marginal Propensity to Consume out of Transfer Income – 75%							
Q75	Non-poor	Poor	Q1	Q2	Q3	Q4	Q5
Social Insurance	29.7	70.3	21.0	27.3	15.9	23.1	12.6
Old age pension	35.8	64.2	14.9	29.2	12.8	24.5	18.6
Social Assistance	20.5	79.5	32.0	25.5	15.5	13.4	13.5
MOP	16.3	83.7	47.3	20.5	13.9	6.9	11.5
Child Allowance	29.6	70.4	24.5	22.1	14.6	18.7	20.1
Social Protection	21.4	78.6	32.9	24.7	15.0	14.9	12.5

ANNEX 2: Univariate Analysis of the Roma Poverty in Serbia

1. Roma (residing in settlements)

A. Characteristics of the Household Head

	Poverty Headcount		Poverty Gap		Poverty Severity		Composition of the sample		Sample Size
	<i>Estimate</i>	<i>Std.Err.</i>	<i>Estimate</i>	<i>Std.Err.</i>	<i>Estimate</i>	<i>Std.Err.</i>	<i>Poor</i>	<i>All sample</i>	
Total	60.5%	3.3%	0.193	0.017	0.084	0.010	100	100	
Area of Residence									525
urban	57.5%	4.3%	0.184	0.022	0.077	0.012	59	62	
other	65.2%	5.4%	0.208	0.029	0.095	0.019	41	38	
Region									525
Belgrade	51.1%	9.4%	0.140	0.044	0.055	0.025	15	18	
Central Serbia	60.0%	4.5%	0.189	0.022	0.079	0.013	55	55	
Vojvodina	67.7%	5.7%	0.238	0.038	0.114	0.024	30	27	
Type of Settlement									525
slums	75.1%	5.9%	0.277	0.042	0.138	0.029	31	25	
rural settlements in towns	52.1%	6.5%	0.173	0.033	0.074	0.018	23	27	
poor rural	60.0%	6.3%	0.168	0.028	0.065	0.014	26	26	
suburban	54.8%	8.2%	0.153	0.032	0.057	0.016	20	22	
Household size									525
1-2	42.8%	6.4%	0.109	0.021	0.041	0.011	5	7	
3	43.2%	6.4%	0.105	0.022	0.040	0.011	7	10	
4	50.8%	5.7%	0.169	0.026	0.078	0.014	15	18	
5	60.1%	5.7%	0.207	0.028	0.092	0.017	20	20	
6+	71.0%	4.1%	0.229	0.022	0.099	0.014	53	45	
Gender									525
male	58.8%	3.5%	0.187	0.017	0.080	0.010	86	88	
female	73.5%	6.5%	0.244	0.037	0.115	0.024	14	12	
Marital Status									525
legitimate marriage	59.6%	3.7%	0.180	0.019	0.074	0.011	65	66	
common law marriage	57.8%	6.7%	0.202	0.030	0.092	0.017	19	19	
single	49.3%	18.8%	0.177	0.106	0.127	0.081	2	2	

divorced	72.6%	12.4%	0.269	0.061	0.122	0.038	3	3	
widowed	70.0%	6.1%	0.247	0.031	0.111	0.021	11	10	
Current residential status									525
Serbian citizen	59.6%	3.5%	0.191	0.018	0.083	0.011	92	93	
IDP or refugee	72.1%	7.8%	0.221	0.049	0.091	0.028	8	7	
Education of the Household Head									525
no schooling	79.2%	4.2%	0.274	0.031	0.132	0.023	30	23	
elementary	66.0%	4.8%	0.207	0.022	0.086	0.013	40	37	
vocational (1-2 years)	48.6%	4.9%	0.152	0.025	0.064	0.014	25	31	
vocational (3-4 yrs) or gymnasium	33.0%	8.6%	0.078	0.021	0.023	0.008	4	7	
Employment of the Household Head									525
Employed	35.6%	5.7%	0.097	0.020	0.036	0.010	13	22	
works, unofficial	60.8%	8.5%	0.168	0.039	0.063	0.022	10	10	
others, working	67.9%	10.4%	0.216	0.038	0.076	0.017	7	6	
Unemployed	64.4%	5.1%	0.230	0.026	0.109	0.015	43	40	
Pensioners	54.5%	7.4%	0.127	0.031	0.047	0.016	8	10	
social protection income	97.8%	1.8%	0.361	0.067	0.165	0.059	9	6	
Housewife	87.2%	6.0%	0.258	0.057	0.120	0.039	6	4	
unable to work	85.4%	7.5%	0.253	0.069	0.112	0.042	4	3	
Household size									525
1-4	47.1%	4.1%	0.139	0.018	0.060	0.010	27	35	
5-6	60.3%	4.4%	0.194	0.021	0.083	0.012	35	35	
7+	76.2%	4.5%	0.255	0.028	0.113	0.018	38	30	
Age of Household Head									525
10-19	52.4%	18.2%	0.182	0.068	0.067	0.030	0	1	
20-39	55.2%	4.7%	0.184	0.023	0.083	0.014	37	41	
40+	64.1%	3.6%	0.200	0.019	0.085	0.011	62	59	
Language spoken in Household									525
Only Romani	74.7%	6.0%	0.264	0.040	0.126	0.028	27	22	
Only Serbian	57.6%	8.6%	0.141	0.028	0.046	0.012	8	9	
Combination of Romani and Serbian	55.4%	4.1%	0.178	0.021	0.077	0.012	60	66	
Other	73.0%	14.3%	0.169	0.038	0.052	0.017	4	4	
Ethnic Structure of the Community									525

Only Roma	56.3%	5.4%	0.167	0.027	0.075	0.016	30	33	
Mostly Roma	58.1%	5.4%	0.187	0.029	0.078	0.016	39	40	
Other than Roma	69.0%	5.6%	0.235	0.031	0.103	0.022	31	27	
Ethnic Structure of the Household							100	100	525
Only Roma	61.6%	3.5%	0.197	0.018	0.085	0.011	95	93	
Mostly Roma	45.0%	10.9%	0.154	0.055	0.071	0.033	4	5	
Other than Roma	47.6%	16.1%	0.131	0.091	0.080	0.077	1	2	

B. Characteristics of the Individuals

	Poverty Headcount		Poverty Gap		Poverty Severity		Composition of the sample		Sample Size
	Estimate	Std.Err.	Estimate	Std.Err.	Estimate	Std.Err.	Poor	All sample	
Total	60.5%	3.3%	0.193	0.017	0.084	0.010	100	100	
Gender									2366
male	59.3%	3.5%	0.191	0.018	0.084	0.011	49	50	
female	61.7%	3.4%	0.196	0.017	0.084	0.010	51	50	
Age groups									2366
0-9	64.2%	4.2%	0.211	0.023	0.095	0.014	25	24	
10-19	64.8%	4.4%	0.220	0.021	0.098	0.013	21	20	
20-39	57.1%	3.5%	0.179	0.017	0.077	0.010	32	33	
40+	57.9%	3.6%	0.173	0.016	0.071	0.009	23	23	
Education									2366
no schooling	67.6%	3.7%	0.226	0.022	0.103	0.015	45	41	
elementary	63.4%	4.2%	0.204	0.020	0.087	0.011	35	33	
vocational (1-2 years)	47.6%	4.2%	0.137	0.018	0.055	0.011	16	20	
vocational (3-4 yrs) or gymnasium	37.5%	6.7%	0.098	0.021	0.034	0.010	2	4	
Employment Status									2366
employed	32.9%	4.6%	0.086	0.016	0.030	0.007	3	7	
works, unofficial	47.8%	7.6%	0.132	0.028	0.052	0.015	4	5	
others, working	65.4%	7.1%	0.222	0.035	0.089	0.020	5	5	
unemployed	63.1%	3.8%	0.201	0.020	0.089	0.013	31	30	
pensioners	37.7%	5.6%	0.090	0.019	0.032	0.010	2	3	
social protection income	89.7%	5.4%	0.326	0.047	0.143	0.036	3	2	
housewife	61.6%	4.5%	0.196	0.021	0.087	0.013	12	11	
child, student, pupil	64.0%	4.0%	0.211	0.022	0.094	0.013	38	36	

unable to work	71.6%	8.3%	0.213	0.046	0.093	0.030	2	2
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2. General Population

A. Characteristics of the Household Head

	Poverty Headcount		Poverty Gap		Poverty Severity		Composition of the sample		Sample Size
	<i>Estimate</i>	<i>Std.Err.</i>	<i>Estimate</i>	<i>Std.Err.</i>	<i>Estimate</i>	<i>Std.Err.</i>	<i>Poor</i>	<i>All sample</i>	
Total	6.1%	0.8%	0.012	0.002	0.004	0.001	100	100	
Area of Residence									2548
Urban	3.0%	0.7%	0.006	0.002	0.002	0.001	27	56	
Other	10.1%	1.5%	0.019	0.004	0.006	0.001	73	44	
Region									2548
Belgrade	1.6%	0.7%	0.004	0.002	0.001	0.001	6	21	
Vojvodina	4.5%	1.2%	0.007	0.003	0.002	0.001	20	27	
Western Serbia	8.8%	3.8%	0.014	0.008	0.004	0.003	16	11	
Central Serbia	4.9%	1.4%	0.007	0.002	0.002	0.001	14	17	
Eastern Serbia	7.4%	2.5%	0.017	0.006	0.006	0.003	11	9	
Southeast Serbia	14.1%	2.9%	0.033	0.007	0.013	0.003	32	14	
Household size									2548
1-2	6.7%	0.9%	0.013	0.002	0.004	0.001	24	22	
3	4.0%	1.0%	0.006	0.002	0.002	0.001	13	19	
4	3.5%	0.8%	0.007	0.002	0.002	0.001	16	28	
5	6.9%	1.8%	0.014	0.005	0.005	0.002	14	13	
6+	10.8%	2.1%	0.021	0.006	0.007	0.002	33	18	
Gender									2548
male	6.1%	0.8%	0.011	0.002	0.004	0.001	83	83	
female	6.1%	1.4%	0.013	0.004	0.004	0.002	17	17	
Marital Status									2548
legitimate marriage	5.8%	0.8%	0.011	0.002	0.004	0.001	74	77	
common law marriage	2.7%	2.7%	0.000	0.000	0.000	0.000	1	2	
single	5.8%	3.6%	0.007	0.004	0.001	0.001	2	3	
divorced	6.9%	2.7%	0.013	0.006	0.003	0.002	4	4	
widowed	7.4%	1.6%	0.016	0.004	0.005	0.002	19	15	

Current residential status										2548
Serbian citizen	6.0%	0.8%	0.012	0.002	0.004	0.001	97	98		
IDP or refugee	7.8%	4.2%	0.018	0.012	0.006	0.004	3	2		
Education of the Household Head										2548
no schooling or unfinished elementary	15.8%	2.2%	0.036	0.006	0.013	0.003	46	18		
elementary	9.5%	1.9%	0.017	0.004	0.005	0.002	31	20		
vocational (1-2 years)	0.5%	0.5%	0.001	0.001	0.000	0.000	0	3		
vocational (3-4 yrs) or gymnasium	2.6%	0.6%	0.004	0.001	0.001	0.000	18	46		
post secondary and higher education	1.5%	0.7%	0.001	0.001	0.000	0.000	4	14		
Employment of the Household Head										2548
employed	3.4%	0.8%	0.005	0.001	0.002	0.001	20	36		
works, unofficial	4.5%	2.4%	0.005	0.004	0.001	0.001	3	4		
others, working	8.4%	2.6%	0.018	0.007	0.005	0.002	16	11		
unemployed	8.9%	2.6%	0.022	0.009	0.009	0.005	9	6		
pensioners	7.3%	1.1%	0.013	0.003	0.004	0.001	46	38		
income from other sources	7.8%	3.6%	0.033	0.018	0.017	0.011	0	0		
housewife	6.4%	2.4%	0.020	0.012	0.010	0.007	4	3		
unable to work	33.6%	15.7%	0.110	0.055	0.038	0.020	2	0		
other, who don't work	7.0%	5.2%	0.015	0.013	0.004	0.004	1	1		
Household size										2548
1-4	4.7%	0.6%	0.009	0.001	0.003	0.001	53	69		
5-6	8.8%	1.7%	0.019	0.004	0.007	0.002	34	24		
7+	10.5%	3.4%	0.016	0.007	0.004	0.002	13	7		
Age of household head										2548
20-39	4.7%	1.4%	0.010	0.004	0.003	0.001	9	11		
40+	6.2%	0.8%	0.012	0.002	0.004	0.001	91	89		

B. Characteristics of the Individual

	Poverty Headcount		Poverty Gap		Poverty Severity		Composition of the sample		
	Estimate	Std.Err.	Estimate	Std.Err.	Estimate	Std.Err.	Poor	All sample	Sample Size
Total	6.1%	0.8%	0.012	0.002	0.004	0.001	100	100	
Gender									8027
male	6.1%	0.8%	0.012	0.002	0.004	0.001	48	48	

female	6.1%	0.8%	0.011	0.002	0.004	0.001	52	52	
Age groups									8027
0-19	5.3%	0.9%	0.010	0.002	0.004	0.001	18	20	
20-39	5.3%	0.9%	0.011	0.002	0.004	0.001	21	25	
40+	6.7%	0.8%	0.013	0.002	0.004	0.001	61	55	
Educational level									6902
no schooling or unfinished elementary	14.2%	1.7%	0.030	0.005	0.010	0.002	43	19	
elementary	7.9%	1.2%	0.014	0.003	0.005	0.001	29	23	
vocational (1-2 years)	3.9%	1.6%	0.007	0.003	0.002	0.001	1	2	
vocational (3-4 yrs) or gymnasium	3.3%	0.6%	0.006	0.002	0.002	0.001	23	41	
post secondary and higher education	1.5%	0.6%	0.003	0.002	0.001	0.001	4	15	
Employment status									6902
employed	3.9%	0.7%	0.007	0.002	0.002	0.001	19	29	
works, unofficial	4.5%	1.4%	0.006	0.002	0.001	0.001	3	4	
others, working	8.6%	2.0%	0.015	0.004	0.005	0.002	12	9	
unemployed	9.0%	1.9%	0.020	0.005	0.007	0.002	16	11	
pensioners	6.0%	0.8%	0.011	0.002	0.004	0.001	23	24	
income from other sources	18.4%	8.0%	0.059	0.036	0.027	0.021	1	0	
housewife	8.7%	1.4%	0.017	0.003	0.006	0.001	16	11	
unable to work	28.2%	7.4%	0.062	0.024	0.019	0.008	3	1	
other, who don't work	4.1%	1.1%	0.009	0.003	0.003	0.001	7	11	

Source: Own calculations based on SLS 2003 and Roma settlement booster dataset

ANNEX 3: Multivariate Analysis of Roma Poverty in Serbia

Characteristics associated with Household Welfare of the Roma residing in settlements and General Population 2003, (dependent variable: real consumption by adult equivalent)

Household characteristics	Roma	General Population
HH size	-0.056 (5.29)**	-0.033 (4.16)**
Rural	-0.129 (1.01)	-0.093 (2.49)*
Region (reference: Belgrad)		
Vojvodina	-0.045 (0.36)	0.115 (2.61)**
West Serbia		-0.048 (0.65)
Central Serbia	-0.031 (0.23)	0.014 (0.28)
East Serbia		-0.056 (0.81)
South East Serbia		-0.188 (2.92)**
Type of settlement (reference: slum)		
rural settlements in towns	0.134 (1.13)	
poor rural	0.272 (2.09)*	
Suburban	0.22 (2.17)*	
Female (reference: male HH head)	0.009 (0.08)	0.01 (0.28)
Marital status (reference: legitimate marriage)		
common law marriage	-0.042 (0.63)	-0.112 (2.03)*
Single	0.03 (0.14)	-0.065 (0.97)
Divorced	-0.082 (0.49)	-0.09 (1.83)
Widower	-0.031 (0.35)	0.08 (2.46)*
IDP or refugee	-0.025 (0.25)	-0.291 (4.13)**
Education of Household Head (reference: no education)		
Elementary	0.083 (1.43)	0.123 (3.40)**
Vocational	0.129 (1.93)	0.191 (3.21)**
Secondary	0.32 (3.09)**	0.349 (9.13)**
High school or higher	0.354 (3.01)**	0.573 (12.23)**
Employment of the HH Head (reference: officially employed)		
Works, but unofficially	-0.188 (2.15)*	-0.049 (1.03)
Self-employed or others working	-0.121 (0.92)	0.225 (4.66)**
Unemployed	-0.303 (4.37)**	-0.175 (4.10)**
Pensioner	-0.161 (1.94)	-0.078 (3.03)**
Social Protection Income	-0.444 (3.57)**	-0.471 (3.76)**
Housewife	-0.303	-0.053

	(2.05)*	(0.98)
Unable to work	-0.411	-0.271
	(3.58)**	(1.68)
Others who do not perform activity		0.06
		(0.52)
Age of HH Head		
20-39	-0.182	
	(1.24)	
40+	-0.188	-0.106***
	(1.21)	(3.19)**
Language spoken in the household (reference: only Roma)		
Only Serbian	0.137	
	(1.09)	
Mixed, Roma and Serbian	0.177	
	(2.47)*	
Other languages	0.325	
	(3.08)**	
Community Ethnic Structure (reference: only Roma)		
Mostly Roma	-0.049	
	(0.57)	
Minority Roma	-0.114	
	(1.20)	
Household Ethnic Structure (reference: only Roma)		
Mostly Roma	0.083	
	(0.68)	
Minority Roma	0.017	
	(0.08)	
Constant	8.627	9.095
	(52.04)**	(127.59)**
Observations	525	2542
R-squared	0.29	0.26

Absolute value of t statistics in parentheses

** significant at 5%; ** significant at 1%; reference 20-39*

Source: Own calculations based on SLS Roma booster dataset

ANNEX 4: European Union and Social Exclusion

The concept of social inclusion has gained a lot of attention in recent years after the European Union began to place a special focus on multidimensional poverty and social exclusion as well as definitions of the concept and its monitoring. At the European Council of Lisbon in 2000 the European Union member states and the European Commission outlined steps “to make a decisive impact on the eradication of poverty by 2010” and adopted a new approach to promoting social cohesion across the EU. Specifically, it laid out six key objectives⁴⁵:

1. promote *employment* and employability through active labor market measures to help those who have the most difficulty in entering the labor market and a mutually reinforcing systems of social protection, lifelong learning and labor market policies,
2. ensure adequate *social protection systems*, including minimum income schemes, for all to have a sufficient income for a life with dignity and effective work incentives for those who can work;
3. increase the *access of the most vulnerable* and those most at risk of social exclusion to decent housing conditions, to quality health and long term care services and to lifelong learning opportunities, including to cultural activities;
4. prevent early exit from *schools and formal education and training* and to facilitate the transition from school to work in particular of young people leaving school with low qualifications;
5. eliminate poverty and social exclusion among *children* as a key step to combat the intergenerational inheritance of poverty with a particular focus on early intervention and early education initiatives which identify and support children and poor families;
6. reduce the levels of poverty and social exclusion and to increase labor market participation of *immigrants and ethnic minorities* to the same levels as the majority population.

European Union Definitions of Poverty and Social Exclusion: For this purpose, the EU also agreed definitions of the concepts of poverty and social exclusion⁴⁶:

- **Poverty:** People are said to be living in poverty if their income and resources are so inadequate as to preclude them from having a standard of living considered acceptable in the society in which they live. Because of their poverty they may experience multiple disadvantages through unemployment, low income, poor housing, inadequate health care and barriers to lifelong learning, culture, sport and recreation. They are often excluded and marginalized from participating in activities (economic, social and cultural) that are the norm for other people and their access to fundamental rights may be restricted.
- **Social exclusion:** Social exclusion is a process whereby certain individuals are pushed to the edge of society and prevented from participating fully by virtue of their poverty, or lack of basic competencies and lifelong learning opportunities, or as a result of discrimination. This distances them from job, income and education opportunities as well as social and community networks and activities. They have little access to power and decision-making bodies and thus often feeling powerless and unable to take control over the decisions that affect their day to day lives.

⁴⁵ Council of the European Union: *Joint report by the Commission and the Council on social exclusion*, March 2004

⁴⁶ Ibid.

- **Social inclusion:** Social inclusion is a process which ensures that those at risk of poverty and social exclusion gain the opportunities and resources necessary to participate fully in economic, social and cultural life and to enjoy a standard of living and well-being that is considered normal in the society in which they live. It ensures that they have greater participation in decision making which affects their lives and access to their fundamental rights (as defined in the Charter of Fundamental Rights of the European Union).

Selected Indicators of Social Inclusion: The European Commission also identified a number of monitorable indicators, their definition and data sources⁴⁷. Every two years each member state must submit a National Action Plan (NAP) to the European Commission, laying out how it intends to fulfill progress on these 18 agreed social inclusion indicators. The European Commission then publishes a joint report summarizing progress and experience across the member states. The indicators include the following:

Primary Indicators:

1. At-risk-of-poverty rate after social transfers;
2. Inequality of income distribution;
3. Persistent risk-of-poverty rate (60% median);
4. relative median at-risk-of-poverty gap;
5. Coefficient of variation of regional employment rates;
6. Long-term unemployment rate;
7. Percentage of people living in jobless households;
8. Early school leavers not in further education/training;
9. Life expectancy at birth
10. Self-defined health status by income level

Secondary Indicators:

11. Dispersion around the risk of poverty threshold
12. At-risk-of-poverty rate anchored at a moment in time
13. At-risk-of-poverty rate before social transfers
14. Gini Coefficient
15. Persistent risk-of-poverty rate
16. Long-term unemployment share
17. Very long-term unemployment rate
18. Persons with low educational attainment

⁴⁷ European Commission (2001), *Report on Indicators in the field of poverty and social exclusion*, Social Protection Committee, Brussels