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POVERTY ANALYSIS IN MONTENEGRO
IN 2012

Podgorica, December 2013

CONTENT

Tables and figures

1. Introduction

Statistical Office of Montenegro – MONSTAT has published for the first time in 2008 results of the poverty analysis for 2005 and 2006 in cooperation with World Bank and with support of Ministry of Health, Labor and Social Welfare. In this publication there are presented results of poverty analysis in Montenegro for 2012 with presentation of basic trends for period 2010-2012.

Poverty estimations are based on national absolute poverty line which was made according to the methodology recommended by World Bank. In the period 2006-2012 for estimations the same methods and procedures are used that provides good comparison of results over the time and observation of the main poverty trends.

Main data source for estimation of poverty in the observed period is Household Budget Survey which is regularly done on annual basis by MONSTAT. Main indicator of living standard it was selected consumption of household. In order to have better comparison of standards by household it was done correction for differences in household size by using of modified OECD scale and correction for regional differences in price level.

2. Poverty in Montenegro in period 2010 - 2012

Absolute poverty line for Montenegro in 2012 was €182.43 per equivalent adult, which is approximately €7 more than in 2011. In 2012 11.3% of the population had equivalent consumption below the absolute poverty line.

Table 1: Poverty Estimation for Montenegro, 2012

	2010	2011	2012	Change 2011-2012
National absolute poverty line (in €, monthly, per adult equivalent)	169.98	175.25	182.43	7.18
Poverty rate (%)	6.6	9.3	11.3	2.0
Poverty gap (%)	1.1	2.0	2.8	0.8
Poverty severity (%)	0.3	0.7	1.4	0.7

Total poverty rate in 2012 is increased, while depth and severity were also increased (Table 1). Portion of persons in the poverty was increased from 9.3% in 2011 to 11.3% in 2012. The available indicators of trends in average earnings and consumption show in 2012 that the increase of poverty rate expected the results of these economic trends[1]. Poverty gap, as an indicator of the depth of poverty, increased from 2.0% in 2011 to 2.8% in 2012. Poverty gap is the product of poverty rate and the average deviation of consumption of the poor from the poverty line, presented as a percentage of poverty line[2].

Data on poverty gap from 2.8% in 2012 says that for escaping from poverty of all the poor society should provide means amounting 2.8% from poverty line per each citizen and afterwards that sum to allocate to the every poor in the exact amount which is needed so that their total consumption reach poverty line. Poverty severity is also increasing, and it amounted 1.4% in 2012. Poverty severity also has relative deviation of the consumption of the poor from poverty line but it takes into consideration inequality among the poor because bigger weight in calculation is given to the poorest people, i.e. to those whose consumption is further than poverty line.

In 2012 poverty increased in urban and decreased in rural areas. Observing urban areas, poverty rate was 8.1 % in 2012, while in 2011 it was 4.4%, in other words the rate was increased for 3.7 percentage points (Table 2). In rural areas the minimum poverty rate was in 2010 (11.3%), while in 2011 was 18.4%. In 2012 compared to 2011 poverty rate in rural areas decreased for 0.3 percentage points and it was 18.1%.

Rural population has much higher poverty risk in comparison with urban population. Depth of poverty is higher in rural areas, while severity of poverty is higher in urban areas.

Table 2: Poverty According to Location, 2010-2012 (%)

	Poverty rate			Poverty gap			Poverty severity		
	2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Urban areas	4.0	4.4	8.1	0.7	1.0	2.7	0.2	0.4	1.6
Rural areas	11.3	18.4	18.1	1.7	3.8	3.1	0.4	1.1	0.9

Between 2011 and 2012 it was decreased a share of 20% of the poorest population in total consumption from 8.9% on 8.5% (Table 3). On the opposite, 20% of the richest increased their share in the total consumption distribution, from 36.5% to 37.1%. In 2012, 20% of the richest people had consumption which was for 4.3 times bigger than consumption of 20% of the poorest citizens. Gini coefficient confirms increase of inequality in Montenegro in 2012. The coefficient increased from 25.9% to 26.5%.

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[1] Real decline of GDP in 2012 is 2.5%, while real average earnings without taxes and contributions decreased by 3.3%. Total personal consumption (according to HBS monthly, average in households) increased by 4.3 %, while consumer prices were 4.1 %.

[2] For short description of poverty measures and their interpretation see annexes at the end of the study.

Table 3: Indices of Inequality, 2010-2012

	2010	**2011**	**2012**
Share in total consumption of the poorest 20% (S20)	9.4%	8.9%	8.5%
Share in total consumption of the richest 20% (S80)	34.5%	36.5%	37.1%
Relation of quintal shares (S80/S20)	3.7	4.1	4.3
Gini coefficient	24.3%	25.9%	26.5%

Gini coefficient shows that in rural areas came to increase of inequality in 2012 compared to 2011 (Table 4), thus Gini coefficient increased from 24.2% to 26.3%. In 2012 there was an increase of inequality in urban areas, Gini coefficient increased from 24.6% to 25.7%. Gini coefficient in 2012 was higher in rural than in urban areas.

Table 4: Gini Coefficient in Urban and Rural Areas, 2010-2012

	2010	**2011**	**2012**
Urban areas	23.1%	24.6%	25.7%
Rural areas	22.0%	24.2%	26.3%

3. Poverty Profile in 2012

There are significant differences in the extent of poverty in the region between the North and other parts of the country. Table 5 shows that the poverty rate in North region is almost two times higher than poverty rate in Central region and Southern region. Poverty rate in North region was 18.3% in 2012. In that region there is 30.9% of the total population of Montenegro, but there is also 50.2% of all the poor. Poverty rate in Central region is 7.9%, and in South 9.0%.

Table 5: Poverty Estimations by Geographic Areas, 2012

Regions	**Poverty rate**	**Relative poverty risk**	**Share of the poor**	**Share of total population**
North	18.3%	1.62	50.2%	30.9%
Center	7.9%	0.70	35.9%	51.6%
South	9.0%	0.80	13.9%	17.4%

Table 6 shows that the poverty rate in rural areas of Montenegro is much higher than in urban areas. In urban areas poverty rate in 2012 was 8.1%, while in rural areas it was 18.1%. In Montenegro in rural areas live 51.8% of poor persons, while in urban areas there is 48.2%.

Table 6: Poverty Risk by Location, 2012

	Poverty rate	Relative poverty risk	Share of the poor	Share of total population
Urban areas	8.1%	0.72	48.2%	67.6%
Rural areas	18.1%	1.60	51.8%	32.4%

Rural population faces a greater risk of poverty compared to urban population. In rural areas the poverty rate in 2012 has amounted to 18.1%, while in Podgorica was 11.2% and in other urban areas 5.7% (Table 7). There is 32.4% of the total population lives in rural areas, of which the share of poor is 51.8%.

Table 7: Poverty Risk by Location and Region, 2012

	Poverty rate	Relative poverty risk	Share of the poor	Share of total population
Podgorica	11.2%	0.99	28.2%	28.3%
Other urban areas	5.7%	0.50	20.0%	39.3%
Rural areas	18.1%	1.60	51.8%	32.4%

Poverty is strongly connected with labor market status. The greatest risk of poverty has persons who are self-employed (pursuing agriculture for their own needs or managing small private businesses) and unemployed (Table 8). Poverty rate is biggest for persons who are self-employed and unemployed and it is 18.8%. With other inactive persons from total population (19.9%) portion of the poor is 25.4% and poverty rate 14.4%. With children up to 15 years old poverty rate was 16.1%. The lowest poverty rate is among pensioners (6.3%) and employed persons (3.6%).

Table 8: Poverty According to Activity Status, 2012

	Poverty rate	Relative poverty risk	Share of the poor	Share of total population
Less than 15	16.1%	1.42	27.3%	19.1%
Employed person	3.6%	0.32	7.9%	24.6%
Self-employed person	18.8%	1.66	6.0%	3.6%
Unemployed person	18.8%	1.66	22.8%	13.7%
Retired persons	6.3%	0.56	10.7%	19.0%
Other inactive persons	14.4%	1.27	25.4%	19.9%

According to the number of children in households, the higher poverty rates have families with three and more children aged up to 6 years (Figure 1). The lowest poverty rates have households without children (8.4%) and households with one child (16.4%). However, in households with two children poverty risk is double bigger than national average.

Figure 1: Poverty Rate According to Number of Children (0-6 years) in Household, 2012
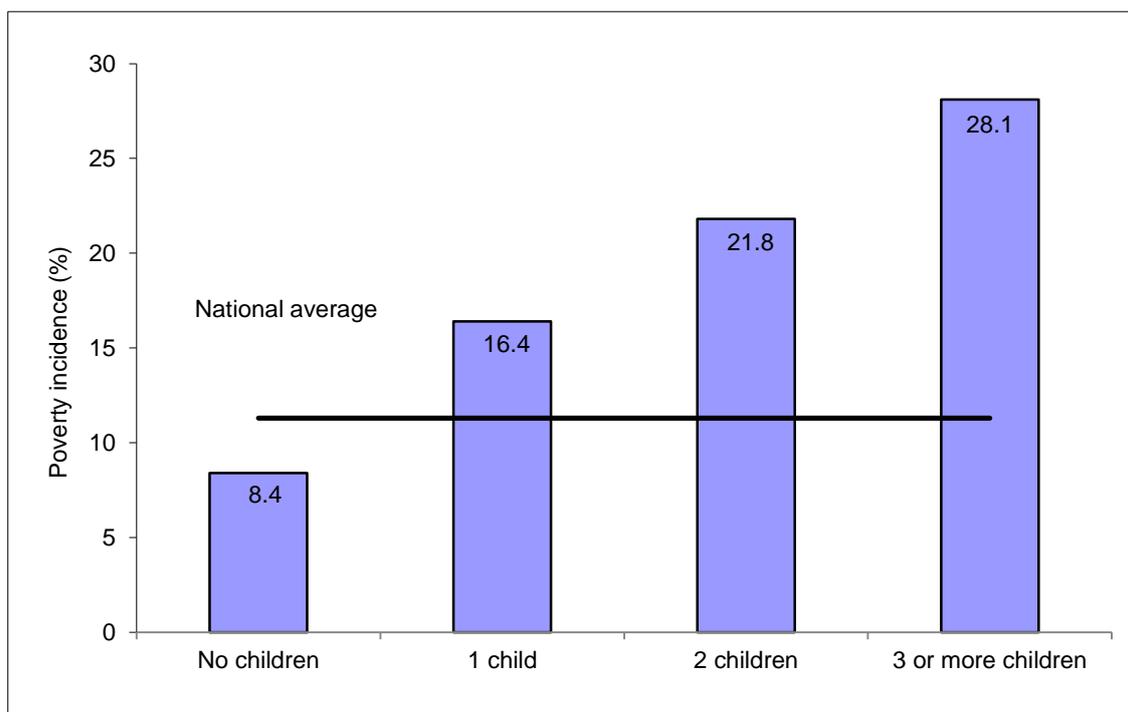
Status activity of the household head affects on poverty risk of all household members. Poverty risk is biggest in households whose heads are other inactive persons (3.40), and the least in households where head is employed person (0.49) and pensioner (0.81) (Table 9). In households whose heads are other self-employed persons poverty risk is 1.98 times bigger than average and poverty rate was 22.4%. Household heads who are unemployed from total population (11.9%) make portion of the poor is 28.0% with poverty rate 26.5%.

Table 9: Poverty According to Activity Status of Household Head, 2012

	Poverty rate	Relative poverty risk	Share of the poor	Share of total population
Employed person	5.5%	0.49	19.5%	40.1%
Self-employed person	22.4%	1.98	15.9%	8.0%
Unemployed person	26.5%	2.35	28.0%	11.9%
Retired persons	9.1%	0.81	30.8%	38.2%
Other inactive persons	38.4%	3.40	5.8%	1.7%

Influence of the activity status of household head on living conditions is confirmed by structure of the poor observed according to this criterion (Figure 2). In 2012 30.8% of the poor lived in households whose head was pensioner and 28.0% lived in households whose heads were unemployed person while in households whose heads are other inactive persons live 5.8% of the poor.

Figure 2: Structure of Poverty by Status of Household Head, 2012
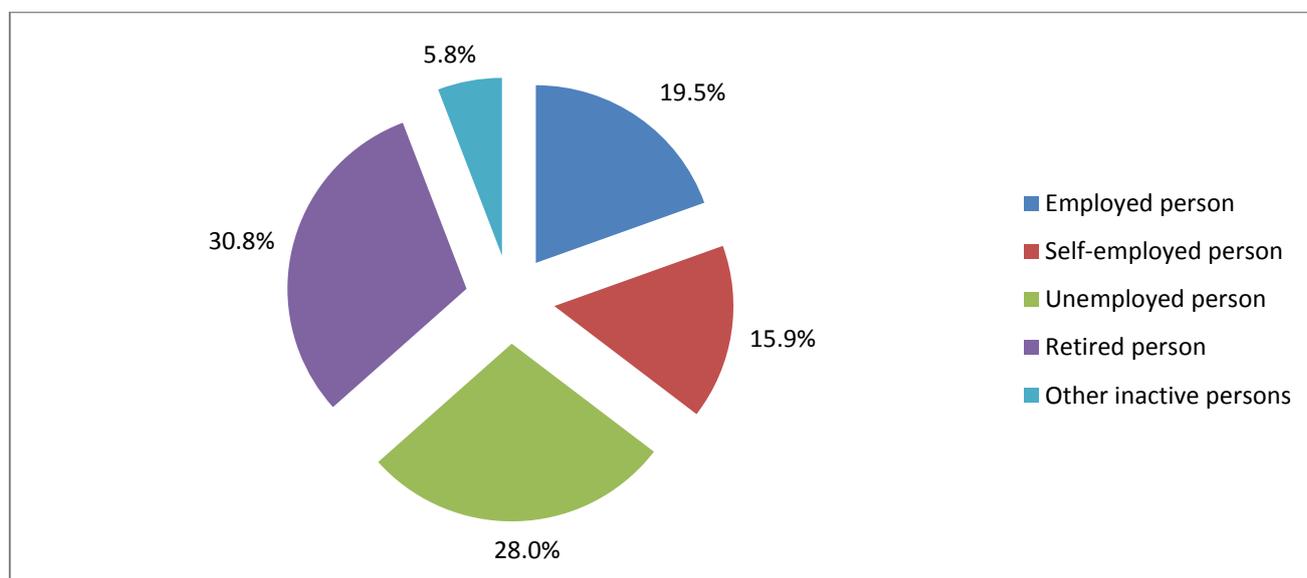
The level of education has also strong influence on the poverty status. Having higher level of education, the poverty rate is less (Table 10). The highest poverty rates (19.0%) have persons with incompleted and complete primary school (68% above average). Persons with three years secondary school are in slightly better position regarding poverty rate of 11.1%, and poverty risk is for 98% above average.

Table 10 : Poverty by Education Level, 2012

	Poverty rate	Relative poverty risk	Share of the poor	Share of total population
Incomplete primary school	19.0%	1.68	42.1%	25.0%
Primary school	19.0%	1.68	28.7%	17.1%
Secondary school (1-3 years)	11.1%	0.98	14.5%	14.7%
Secondary school(4 year) and grammar school	4.3%	0.38	11.7%	30.9%
Higher and high education	2.8%	0.25	3.0%	12.3%

Education of the household head is important influence on the poverty status. The biggest poverty rate have households whose head is person who incomplete primary school 39.2%. Although, 7.4% of the total population live in these households, 25.7% of those are poor people (Table 11). The poverty risk to individuals who live in households whose head has at least with three years secondary school is below the national average. Thus, there are 9.0% of such individuals who are poor. The poverty rate lower than the average exists in households whose heads are persons with four years secondary school or grammar school (5.3%). Of the total poor, there are 17.2% living in such households (Figure 3).

Table 11: Poverty by Education of Household Head, 2012

	Poverty rate	Relative poverty risk	Share of the poor	Share of total population
Incomplete primary school	39.2%	3.47	25.7%	7.4%
Primary school	23.4%	2.07	34.7%	16.7%
Secondary school (1-3 years)	9.0%	0.80	18.7%	23.3%
Secondary school(4 year) and grammar school	5.3%	0.47	17.2%	36.5%
Higher and high education	2.6%	0.23	3.7%	16.0%

Figure 3: Poverty Structure by Education of Household Head, 2012
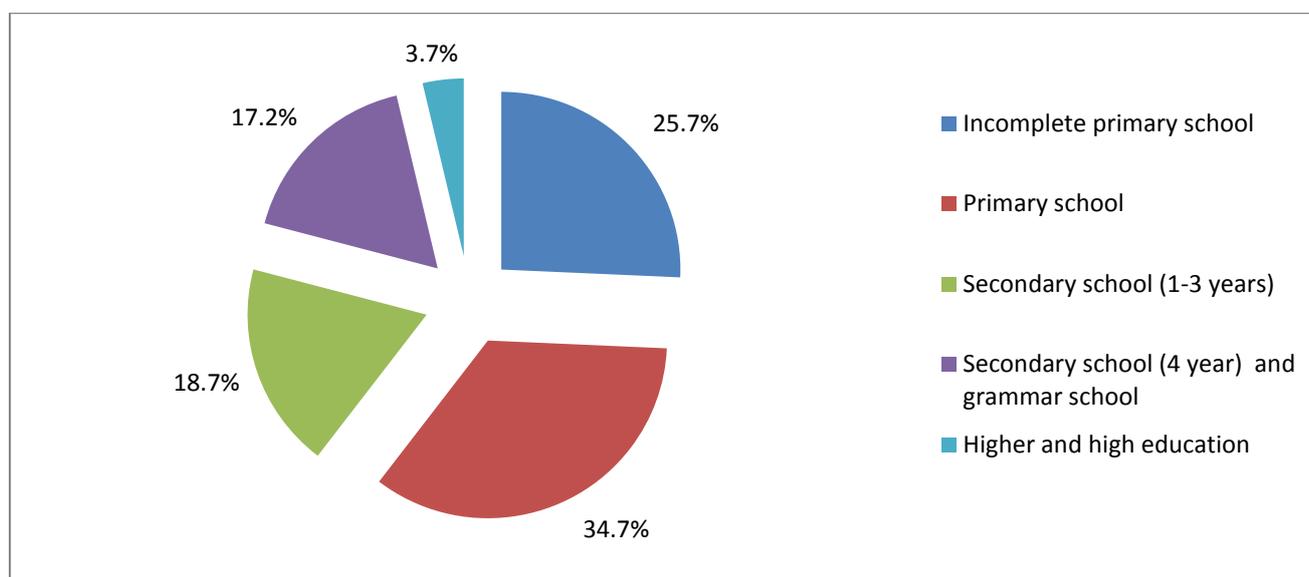
Size of household has influence on poverty, too. Poverty rate was in 2012 above average in households with six and more members (Table 12). The biggest poverty rates have households with seven and more members 44.4%. Their poverty risk is almost four times bigger related to average. The lowest poverty risks have two-member households and households with four members.

Table 12: Poverty Risk According to Size of Household , 2012

Household size	Poverty rate	Relative poverty risk	Share of the poor	Share of total population
One person	5.8%	0.51	3.3%	6.4%
Two persons	5.1%	0.45	5.8%	12.8%
Three persons	6.5%	0.58	8.3%	14.4%
Four persons	5.0%	0.44	11.3%	25.8%
Five persons	11.0%	0.97	21.7%	22.3%
Six persons	19.8%	1.75	18.0%	10.3%
Seven and more	44.4%	3.93	31.6%	8.0%

Regular wages provide low level of poverty risk. In 2012 the lowest poverty rate was in households which had as main sources of income wages from private sector (4.1%), and is slightly bigger in households which main source of income are wages from public sector (Table 13). The biggest poverty rate was in households where "transfers and other "are main source of incomes 42.5%. Although it is relatively small group of citizens (6.6%), they make 24.9% of all poor (Figure 4). Households where income from agriculture and business are main source of income have poverty risk above the average. There are 8.6% of the population living in households whose main source of income is agriculture and business. In those households live 19.3% of the poor.

Table 13: Poverty Risk by Main Household Income, 2012

|	Poverty rate	Relative poverty risk	Share of the poor	Share of total population
Wages (public sector)	8.0%	0.71	18.9%	26.5%
Wages (private sector)	4.1%	0.36	11.1%	30.5%
Agriculture and household business	25.2%	2.23	19.3%	8.6%
Pensions	10.5%	0.93	25.8%	27.7%
Transfer and other	42.5%	3.76	24.9%	6.6%

Figure 4: Structure of the Poor by the Main Household Income Source, 2012
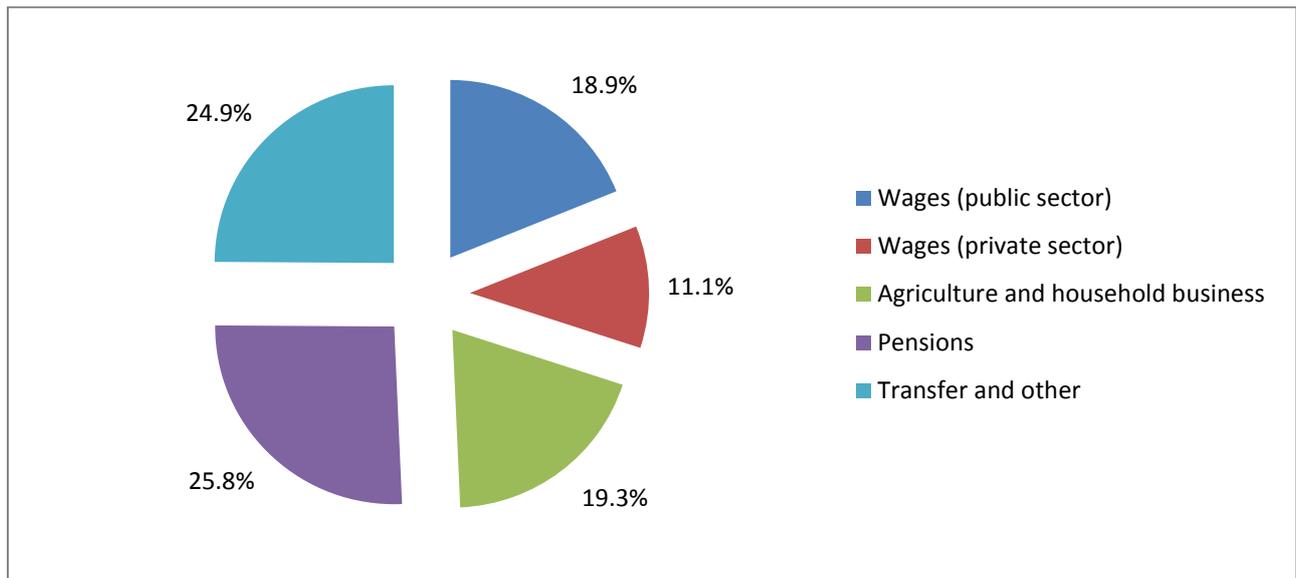
4. Results review

In 2012 poverty rate is significantly increased. It was also contribution of available indicators on real GDP, movement of average real wages without taxes and contribution, consumption and index of consumer prices. Rural population faces higher poverty risk comparing to urban population. Poverty rate in Northern region is almost two times higher from poverty rate in Southern and Central region.

Increasing of poverty happened along with increase of inequality. Gini coefficient has increased from 25.9% in 2011 to 26.5% u 2012, actually it increased by 0.6 percent.

Poverty profile presented in the third part of the study identified the following characteristics of the poor in Montenegro:

- Comparing to the other parts of country poverty frequency is significantly bigger in Northern region.
- The poor usually lives in large households. The biggest poverty rates have households with seven and more members.
- In household with three and more children poverty risk is 2.5 time bigger that national average.

- The poverty risk is the least in households which have as head employed persons or pensioner.
- Wages, whether from private or public sector, provide in most cases enough resources for households so that their members can avoid absolute poverty.

ANNEX 1:

METHODOLOGY OF POVERTY ESTIMATION IN MONTENEGRO

Poverty estimation in Montenegro presented in this study is based on the absolute poverty line constructed using key parts of the World Bank methodology described in Ravallion (1994)[1] . Absolute poverty line was calculated in details by Statistical Office of Montenegro (MONSTAT) based on Household Budget Survey (HBS) data for 2006. Poverty line for 2006 was estimated at €144.68 per equivalent adult. This poverty line serves as "anchor" to which the poverty line estimations and all poverty indicators are connected in the entire period 2006-2012. For purpose of poverty estimation for 2010 up to 2012 absolute poverty line from 2006 is modified for inflation rate, i.e. with average annual price that is shown by index of consumer prices.

Main data for poverty analysis is taken from HBS. It is nationally representative survey carried out regularly by MONSTAT since 2005 and harmonized with international standards and EUROSTAT recommendations. The data on income and expenditures of households, supply with permanent consumer goods, demographic and socio-economic characteristics of households and other are collected by the HBS questionnaire filled in by every selected household.

Methodology for providing absolute poverty line for 2006 is consisted of four main steps: (i) calculation of total consumption from HBS data, (ii) adjustment to differences in the household size and structure, (iii) adjustment to differences in regional prices; (iv) constructing of absolute poverty line for 2006.

(i) The consumption is used as the main indicator for living standards estimation in Montenegro. It was taken into account that within mutual comparison higher consumption value indicates higher living standard for certain households. For this reason the first step in poverty estimation was construction of consumption indicators compliant with this request. Consumption is estimated based on HBS with certain modifications in relation to standard calculation of household consumption. The aggregate of household consumption needed for poverty estimation includes the following categories:

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[1] See at Ravallion, M. 1994. *Poverty Comparisons*, Fundamentals of Pure and Applied Economics 56. Chur, Switzerland: Harwood Academic Press.

- Food, alcohol and tobacco: expenses related to purchase of food products are included together with estimated consumption value from own production and estimated value of gift. Only consumption for personal use of household is taken into account, while products purchased for business or agriculture are excluded. Also, expenses from giving gifts are excluded.

- Non-food products: there are included expenses of (a) clothes and footwear, (b) housing, water, electricity, gas, and other fuels, (c) small household appliances and regular maintenance of dwelling, (d) health, (e) transport, (f) communication, (g) leisure and culture, (h) education, (i) restaurants, café bars and hotels, and (j) other goods and services.

It should be said that expenses from purchase of large permanent goods in this study <u>are not</u> included in total household consumption because they happened occasionally and in large amounts, and because of this they are not connected consistently with household financial state. Namely, large expense in one month for purchase of certain permanent consumption product (for ex. refrigerator) does not need to mean that this household has high living standard.

(ii) For purpose of better comparison of living standards between households of different number of members and their age, total consumption calculated at the household level is adapted to these differences by using of modified OECD scale. Modified OECD scale has been selected because of its simplicity and harmonization with current Eurostat practice. The same scale is prevailing in most of studies on living standards across Europe.
Accordingly, equivalent household size is firstly calculated as a weighted sum of number of household members, where first adult in household is calculated as 1, second adult as 0,5, and each child up to 14 years as 0,3. Total consumption in household is divided with equivalent household size so that consumption by adult equivalent (or equivalent consumption) can be received. This consumption measure is used for all comparisons of living standards by households. The higher equivalent consumption of certain household is, it is considered that household has higher living standard. It is considered that all members within one household have the same living standards.

(iii) Consumption of households is adapted to price differences between regions. For this purpose there are constructed special indices for three main regions in Montenegro (North, Central, and South region) in this study on the basis of price information collected by HBS. Regional price indices indicate that price level in the South region is, for example, higher than price level in the North region. Total consumption of each household is divided by regional price index, and that index has average prices in Montenegro as a basis (Montenegro=100). In this way it is possible that certain amount of consumption (for ex. €100) gives possibility purchasing of equal goods and services quantity no matter in which part of Montenegro a household is situated.

(iv) Absolute poverty line has been constructed in compliance with the method „expenses for basic living needs" and it is consisted of main components: (a) poverty line for food (i.e. expenses of minimal consumption basket) and (b) appropriate expenses for purchase of basic non-food products. Both components summed up together give total absolute poverty line. Minimal food basket was selected to satisfy basic nutrition needs of population in this part of the world (2288 kcal/daily per person) under FAO proposal (Food and Agriculture Organization). Composition of minimal food basket reflects population nutrition of lower material welfare. Expenses of minimal food basket are calculated by multiplying quantities from minimal food basket with appropriate prices. Expenses of minimal food basket are the basis for total poverty line calculation. The idea is that those households spending on food exactly as expenses of minimal food basket are, actually they spend on all other products as much as minimum of basic needs is. Linear regression model was used for practical estimation in the study so that minimal expenses for other products can be estimated on the basis of expenses of minimal food basket, and in this way to calculate total poverty line as a sum of minimal expenses for food and minimal expenses for other products. Regression method was used in estimation of absolute poverty line and in other countries in the region.

Appliance of methodological steps (i)-(iv) on the data from HBS for 2006 gave the poverty line of €144.68 by equivalent adult per month (see Monstat and World Bank, 2008). Thus relatively complicated method for absolute poverty line estimation is not repeated every year, and the poverty line for 2006 can be used for other years too, but it has to be adapted for inflation compared to base 2006. As inflation measure there should be taken total price changes of goods and services for personal consumption. Appropriate measure in Montenegro is average annual index of consumer prices. Poverty line for 2011 has been increased with consumer prices of 4.1% in 2012 so that the absolute poverty line for 2012 can be calculated amounted now €182.43 per equivalent adult.

When comparing poverty in the period 2006-2012 Monstat ensured that (i) the same method for calculation of consumption aggregate is applied, (ii) the same equivalence scale and comparable regional price indices are applied, and that (iii) data sources that are used (HBS) as well as all estimation procedures are comparable during the years observed.

Absolute poverty line used by Monstat for poverty analysis is nationally specific line and cannot be used for international comparisons, only for monitoring of state and change of poverty in Montenegro.

ANNEX 2:

MEASURES INEQUALITY AND POVERTY INEQUALITY

Poverty measures

Indicators (or measures) of poverty are statistical functions that convert the relation between consumption and poverty line for observed households and persons into one number representing perceived poverty status.

Nowadays, three poverty measures from so called FGT measure group (Foster, Greer and Thorbecke, 1984)[1] are used for purpose of absolute poverty researches, and these are poverty rate P(0), poverty gap P(1), and squared poverty gap P(2).

Poverty Rate – P (0)

Poverty rate (poverty index, poverty incidence) is the simplest and the most often used measure calculated as a share (percentage) in total population of persons with equivalent consumption less than poverty line:

$$P(0) = \frac{q}{n} , \qquad\qquad (1)$$

q is number of the poor, in other words, persons living in households with equivalent consumption c less than poverty line z. Thus, *P (0)* simply measures proportion of population (persons) living in the poverty.

Basic information on poverty is provided by the poverty rate, but are the poor equally poor or are some extremely poor, and are other very close to poverty line is information not provided by the poverty rate. Because of this, also other indicators are used in the poverty analysis.

Poverty gap – P (1)

Poverty gap is the product of poverty rate and the average deviation of consumption of the poor from poverty line, shown as a percentige of poverty line. Poverty gap is calculated using formula:

$$P(1) = \frac{1}{n} \sum_{i=1}^{q} \frac{z - c_i}{z} , \qquad\qquad (2)$$

z is poverty line, c_i is equivalent consumption of persons i, q is number of poor persons, and n is total number of person in population. Measure P(1) is sum of relative difference between equivalent consumption and poverty line and that difference is counted only for poor persons and it is divided with total population ,actually it is shown " per citizen" and " comparing to poverty line ". For measure *P (1)* is often said that it indicates **poverty depth**.

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[1] See in Foster, James, Joel Greer and Erik Thorbecke (1984) "A Class of Decomposable Poverty Measures," *Econometrics,* 52(3), p. 761-766.

Poverty gap is a useful indicator for estimation of resources needed to deliver the poor from poverty by means of money transfers perfectly directed to the poor with unchanged other conditions. For example, poverty gap of 0.10 (or 10%) means that money transfers in the amount of 10% are needed for delivering of all persons, in average per inhabitant, from poverty.

Poverty severity – P (2)

Measure under name poverty severity is received as squared poverty gap:

$$P(2) = \frac{1}{n} \sum_{i=1}^{q} \left[\frac{z - c_i}{z} \right]^2, \qquad (3)$$

By squaring of relative deviation from poverty line, higher weight is given to the poorest persons, in other words, to those whose consumption is more distant from poverty line. In this way also inequality among the poor is taken into account.

Inequality measures

Share in consumption of x% is simple direct measure of inequality, useful when attention is to be directed only to the poorest, for example the poorest, 10% or 20%. When share of the poorest in distribution of total consumption decreases we can say that inequality in society increase observed from position of the poorest citizens.

Ratio of quintal shares (s80/s20) is relation of average consumption of 20% the richest and 20% the poorest citizens. Bigger ratio is, the differences are bigger among rich and poor, actually bigger is inequality in society.

Gini coefficient is the most popular measure of inequality. Comparing to the measures based on the shares in consumption of the poorest and the richest citizens, Gini coefficient takes into consideration all elements of distribution, actually consumption of all persons in society. Coefficient takes value between 0 and 1. Bigger coefficient indicates bigger inequality. Value 0 indicates situation of complete equality (all persons have equal consumption or income), while value 1 indicates situation of complete inequality (one person has entire income or consumption in the society, all others have nothing).

There is number of mathematics expressions for calculation Gini coefficient. One of the most practical is:

$$G = \frac{2}{n^2 \mu} \sum_{i=1}^{n} i c_i - \left(\frac{n+1}{n} \right), \qquad (4)$$

all persons are marked with index i in compliance with order in non-decreasing series of their equivalent consumption $c_1 \le c_2 \le ... \le c_i \le ... \le c_n$ (in other words i is ordinal number of place ordered by consumption size), average consumption is marked $\square$, and n is number of persons in population.

ANNEX 3:

SENSIBILITY OF ESTIMATION OF POVERTY ON ELECTION OF POVERTY LINE

Estimation of poverty is always connected with possibility that poverty line is not completely defined. Thus, it is useful to show main results with presumption that poverty line is slightly bigger, i.e. slightly less than line that was used in order to see whether results significantly change.

Sensibility of poverty rate on poverty line is shown in table P1. If poverty line would be bigger for 5% than those used in this study, then poverty rate in 2012 would be 14.1% instead of 11.3%. It is possible to come to such deviation because of error in measure of the price change rat that the poorest are faced with. If the poverty line for 25%, higher than national absolute poverty line then will be recorded a higher rate of poverty in all years, 17.4% in 2010, 20.2% in 2011 and 23.1% in 2012. It should be noted that the poverty rate in 2012 increased compared to 2011 in the case of using such "general" poverty line. This would happen even if the poverty line increased by only 5% compared with the national absolute poverty line. This result shows that an increasing proportion of the population has a consumption that is only slightly higher than the absolute poverty line, and that there is a danger that they become poor in case of further decline in living conditions. In the case that the poverty line is lower than the one used in this study, the poverty rate would be significantly less.

Table P1: Sensibility of Poverty Rate on Poverty Line, 2010 – 2012 (%)

	Poverty rate		
	2010	**2011**	**2012**
Estimated poverty rate	6.6	9.3	11.3
+5%	8.8	11.6	14.1
+10%	10.8	13.7	15.7
+20%	14.4	18.0	19.8
+25%	17.4	20.2	23.1
-5%	5.4	7.4	9.3
-10%	3.8	6.0	7.5
-20%	2.2	4.0	4.9
-25%	1.5	3.3	3.6