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Methods of poverty assessment in the Republic of Belarus (Belarus)

Prepared by the National Statistical Committee of the Republic of
Belarus[1]

Abstract

The paper presents the national experience in poverty measurement in the Republic of Belarus. The main source of information about poverty for both the population as a whole and households in the country and specific social and demographic groups is a sample household living standards survey. The report provides a definition of the national poverty line (an absolute poverty line set as official poverty measure) as well as the methodology for calculation of the main indicator of well-being – average per capita household disposable resources, including the use of the national equivalence scale. It also presents relative and subjective approaches to poverty assessment, as well as main approaches to understanding the nature of poverty using the material deprivation theory.

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1. Poverty is a multidimensional phenomenon with different poverty interpretations implying different measuring approaches. Poverty measurement in the Republic of Belarus is carried out by the National Statistical Committee of the Republic of Belarus based on a sample household living standards survey. The survey is conducted regularly to monitor the levels, quality and conditions of living standards and is the only source of information to provide an objective and reliable poverty estimates in the country and to use for research on population distribution and social differentiation based on material well-being.

2. The survey sample consists of 6,000 households or 0.2% of the general population. The general population for the sampling procedure includes the total number of households residing in the Republic of Belarus, excluding institutional households and homeless persons. The sampled households are surveyed during a year with a subsequent rotation of 75% households.

3. The sample design is based on a multi-stage stratified probability sampling approach using a territorial sampling principle. The selection is carried out separately for urban and rural areas to ensure consistency of the sample distribution. Three-stage stratified probability sampling is used to select households at each stage of the sampling process.

4. The sample household living standards survey is built on the principles of voluntary participation and private information confidentiality for selected households. Households are incentivized to respond to the survey.

5. Poverty can be defined in both narrow and broader terms. The narrow definition of poverty focuses on monetary components alone. The broad definition results from the research of this phenomenon since poverty is an effect of economic, political and social processes that interact and often mutually reinforce thus aggravating deprivation and disadvantages experienced by the poor.

6. Statistical measurement of poverty in the Republic of Belarus is in line with common international approaches. A number of methods are used to measure poverty. At present, the National Statistical Committee of the Republic of Belarus estimates poverty based on absolute, relative and subjective approaches as well as material deprivation. At the same time, the official poverty measurement methodology employs an absolute poverty approach that assumes a pre-defined threshold to distinguish between the poor and the non-poor. This threshold is called a poverty line, a level below which an individual or a household is not able to satisfy basic needs.

7. Official poverty rates in the Republic of Belarus are estimated based on the data on the number and proportion of population with income below the minimum subsistence budget. Disposable resources such as household cash assets, cost of consumed food products that are produced by household net of material production costs, as well as the value in-kind transfers received are used as an income measure for absolute poverty estimates. Assessment of material well-being in terms of disposable resources makes it possible to consider all possible factors determining population income potential and give a more objective characteristics of well-being and social and economic differentiation.

A household is used as a unit of analysis in the assessment of disposable resources as it is assumed that even household members with zero cash assets possess certain resources.

8. Poverty identification is officially performed based on per capita household disposable resources. A per capita minimum subsistence budget is used as a poverty line.

9. The minimum subsistence budget is a value of a minimum set of food products and non-food goods and services necessary for a person to maintain health and to support life; its cost is determined as a fixed share in a value of a minimum food set, as well mandatory payments and contributions. It is calculated per capita for main social and demographic groups.

The value of minimum subsistence is regulated by the Law. The minimum subsistence is revised at least once every five years; the minimum subsistence level is approved on a quarterly basis by a resolution of the Ministry of Labour and Social Protection of the Republic of Belarus.

Starting from 2015, the minimum subsistence includes the following items:
- A minimum set of food products;
- Non-food goods and services the value of which is defined as a fixed share (77 %) of the value of a minimum food set.

Food sets for all age groups are regulated by the physiological needs in nutrients and calorie intake, and take into account social and economic situation and long traditions of population in the use of certain products, provided they do not contradict rational nutrition rules. The minimum food basket value is around 55% of the total minimum subsistence budget and includes the set of food products ensuring a necessary composition of nutrients (average 2473 kcal per capita).

10. Household disposable resources include not only money but in-kind components as well. These are:

    − consumed home-grown food products;

    − different transfers (both from the public budget and institutions) to purchase goods or services in the form of full or partial reimbursement of their actual costs.

Household disposable resources

(Data of sample household living standard survey;
% of the total)

	2005	2010	2011	2012	2013	2014	2015
Disposable resources – total	100	100	100	100	100	100	100
including:							
Cash	91.3	95.0	95.1	95.3	96.5	95.4	95.1
Value of consumed home-grown food products	6.9	4.2	4.2	3.9	2.9	3.9	4.1
Value of in-kind transfers	1.8	0.8	0.7	0.8	0.6	0.7	0.8

11. The assessment of value of home-grown and consumed by the household food products is based on average food products purchase prices for households.

Benefits and transfers ae evaluated as reported by household members.

As compared to urban households in-kind income in the form of food products is a more significant source for rural households. On average, in 2015 in-kind income in rural area amounted to 8.2% of disposable resources (2.9% in urban areas).

12. According to Article 1 of the Law of the Republic of Belarus on the minimum subsistence level in the Republic of Belarus of January 6, 1999, low-income citizens (families) are citizens (families) with average per capita income below the minimum subsistence budget[1].

Low-income level of households
(absolute poverty)

(Data of sample household living standard survey;
% of the total households in a respective group)

	2005	2010	2011	2012	2013	2014	2015
All households	9.3	3.4	5.8	4.6	4.0	3.4	3.6
including:							
Urban households	8.2	2.7	4.8	3.8	3.3	2.7	2.8
Rural households	11.4	5.4	8.3	6.7	5.9	5.2	5.7

13. It should be noted that for rural households access allowing subsistence farming is seen as more significant material support than for urban households.

Consumption of food products produced by household in 2015

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[1] The term 'low income' is used in the Republic of Belarus to denote poverty.

(Data of sample household living standard survey;
% of total household consumption by main food products groups)

	All households	Urban households	Rural households
Milk and dairy products	4.1	1.6	11.7
Meat and meat products	10.9	4.9	28.7
Eggs	30.4	15.0	69.0
Potatoes	64.3	48.1	92.0
Vegetables and cucurbitaceous	50.9	41.9	73.7
Fruit and berries	26.1	21.2	45.5

14. In 2015 in-kind income in rural areas decreased the poverty risk for households almost by1.7 times while in urban areas only by 1.3 times.

Low income household rate
(not including value of consumed home-grown produce)

(Data of sample household living standard survey;
% of the total households in a respective group)

	2005	2010	2011	2012	2013	2014	2015
All households	14.3	4.5	7.3	6.3	4.8	4.3	5.2
including:							
Urban households	10.1	3.3	5.5	5.1	3.7	3.3	3.6
Rural households	22.6	7.9	12.2	9.5	7.6	7.0	9.5

The share of in-kind income in total disposable resources in 2015 for low income rural households comprised 12%, and for low income urban households – less than 6%.

15. In order to ensure international comparability of poverty data Belstat measures poverty using a relative approach. Relative poverty line is defined as 60% of median national disposable resources per capita, using the equivalence scale.

In contrast to the absolute poverty approach which aims to define an absolute level of means that help to meet basic biological needs of a person, relative poverty definition is based on regular revisions of the poverty line depending on the well-being level achieved by the society. According to this approach individuals or households are classified as poor if their disposable means are not enough to ensure the living standard accepted in the society where they live. Relative poverty line is defined relative to the overall national distribution of income or expenditures.

16. Well-being measurement using the equivalence scale (based on equivalised consumption) is based on the consideration of differences in the size and demographic composition of households which impacts the actual consumption of each household member.

The adjustment for household composition is done to take into account the economy of scale so the household income or expenditures could be used as a reliable indicator of the well-being. Economy of scale has many reasons to happen, for example due to sharing certain expenditures. It is taken into consideration by altering the household size using the equivalence scale. The process of equivalence considers both the age structure of a household and the number of members in it.

At present, the Republic of Belarus applies the equivalence scale revised in 2012. Equivalence scale coefficients were developed by comparing minimum subsistence budgets defined for different population groups. The national equivalence scale has the following weight coefficients:
1.0 – the first adult in the household aged 18 and above;
0.8 – all other household members aged 18 and above;
0.9 – children aged 6 to 18;

0.7 – children aged 3 to 6;
0.5 – children aged under 3.

Relative poverty

(Data of sample household living standard survey;
% of the total households in a respective group)

	2013	2014	2015
All households	12.0	9.6	9.8
including:			
Urban households	10.2	8.1	7.7
Rural households	16.5	13.5	15.3

Relative poverty line exceeds the absolute poverty line by 1.5-1.6 times.

17. Concepts of absolute and relative poverty in the country are supplemented by subjective poverty concept. One of the methods to measure it is to draw on the question on person's satisfaction with the level of his/her cash income.

Such self-evaluation of poverty is based both on the real situation and possible poverty perception caused by the inability to meet the needs in certain goods or services which are subjectively considered to be necessary.

18. From 2013, the National Statistical Committee of the Republic of Belarus started exploring subjective poverty not only in terms of satisfaction with cash income, but also through household evaluation of the level of their material status as a whole. In fact, the population well-being is measured not only by monetary component and the ability to purchase goods necessary to satisfy basic needs, but also has a material aspect implying living conditions, availability of real estate, car, durable goods and etc.

The responses received definitely do not provide a precise estimation of poverty levels, since population's subjective views are often discrepant and not comparable, however, such estimation is psychologically important.

Subjective poverty

(Data of sample household living standard survey;
% of the total households in a respective group)

	2013		2014		2015	
	In terms of monetary income level	In terms of material well-being	In terms of monetary income level	In terms of material well-being	In terms of monetary income level	In terms of material well-being
All households	13.2	4.8	15.8	4.5	13.7	4.5
including:						
Urban households	13.2	3.7	15.4	4.1	14.7	4.5
Rural households	13.4	7.6	16.9	5.4	11.0	4.6

Subjective poverty measured in terms of cash income level is significantly higher than of material well-being. Indeed, in 2015 less than 5% households estimated their material well-being as "very low", while the percentage of households who were "completely unsatisfied with the level of cash income" was 14%.

19. Estimation of poverty from the perspective of inability to meet minimum basic needs gives a slightly different picture. Defining poverty in terms of deprivation is an official poverty measurement methodology in the republic.

A list of material deprivation items covering various aspects of life was elaborated for this purpose.

Material deprivation items from the basic list elaborated by Belstat experts based on the best international practice taking into account the national context were selected on the basis of results from 2012 and 2013 sample household living standards surveys. The material deprivation list includes the needs the inability to meet which is identified as poverty indications in the country by the majority of respondents (at least, 85%). All deprivation items can be divided in 3 groups reflecting:

- housing conditions deprivations (living in poor housing conditions; unavailability of central heating and lack of money to purchase fuel; lack of money to pay utility bills);
- material well-being deprivations (lack of money to buy meat and fish products, new outerwear and footwear, durable goods, vitally important medicines and medical equipment; inability to face unexpected expenses);
- deprivations of households with children (lack of money to buy new clothes and footwear, to pay for cultural events, extracurricular activities).

At present, the list comprising of 14 material deprivation items is finalized. The level of material deprivations of households (poverty by deprivation) is measured by dividing the number of households with 4 or more deprivation items by the total number of households.

20. The official list of deprivation items definitely does not correspond to the EU list; still the data derived from sample household living standards surveys help measure material deprivation in the Republic of Belarus as compared with EU countries.

21. All poverty measurement approaches applied in the Republic of Belarus complement each other and jointly help identify the poorest families: if a family is poor by 4 poverty indicators then it is classified as being among the poorest.

Share of poor households by different poverty indicators in 2015

(Data of sample household living standard survey;
% of total households in respective groups)

	Poor by at least one indicator				Poor by mixed criterion
	Absolute poverty	Relative poverty	Subjective poverty	Deprivation poverty	
All households including:	3.6	9.8	13.7	1.7	0.2
Urban households	2.8	7.7	14.7	1.4	0.2
Rural households	5.7	15.3	11.0	2.5	0.2

22. In overall, poverty measurement system in the Republic of Belarus allows an integrated assessment of this phenomenon and research into the patterns of the impact that social and economic processes have on the living standards. It should be noted, however, that poverty rate is very sensitive to the poverty line definition applied.

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