



Aleh Mazol, BEROC
March 2019

Poverty Dynamics in Belarus from 2009 to 2016

This brief is based on research that studies the incidence and determinants of poverty in Belarus using data from the yearly Household Budget Surveys for 2009-2016. Poverty is evaluated from a consumption perspective applying the cost of basic needs approach. According to the results, in 2015-2016, absolute poverty in Belarus increased twofold and reached 29% of the population. Large household size, high number of children, single mothers and unemployment negatively affect household welfare and increase poverty risk. Moreover, living in rural areas increases the likelihood of being poor and correlates negatively with welfare.



Introduction

Sizeable and increasing poverty poses a threat to social stability and long-term sustainability for every country. Before 2009, Belarus registered over a decade of high and sustainable economic growth that enhanced the average standard of living and raised a substantial number of Belarusians out of poverty. According to the National Statistical Committee of the Republic of Belarus (Belstat), the poverty rate in Belarus (by official definition) has decreased from 41.9% of the population in 2000 down to 6.1% in 2008. The largest reported decline in poverty was in 2001 – from 41.9% to 28.9%.

Since then, Belarus experienced several episodes of economic crises – in 2009, 2011 and 2015-2016 (Kruk and Bornukova, 2014; Mazol, 2017a). Such economic downturns typically introduce considerable survival problems for many households. For example, according to the World Bank, in some countries the poverty rate may reach 50% (World Bank, 2000). In light of this, the small increase (0.3%) in the official poverty measure during these periods casts doubt on the official methodology used for poverty calculations. This brief describes an alternative measure of absolute poverty based on the widely recognized cost of basic needs approach; and summarizes the results of the study of how economic downturns in Belarus influenced welfare and poverty at the household level.

Data and methodology

The data used in this research are pooled cross-sections from 2009 to 2016 of the yearly Belarusian Household Budget Surveys with on average 5000 households in each sample obtained from Belstat. These surveys consist of household and individual questionnaires that contain important data about households including decomposition of expenditures and income by categories, detailed data on consumption of food items, the size, age

and gender composition of households, living conditions, etc.

The analysis applies the cost of basic needs approach (Kakwani, 2003). It first estimates the cost of acquiring enough food for adequate nutrition (nutrition requirements for households of different size and demographic composition) per person (food poverty line) and then adds the cost of non-food essentials (absolute poverty line). The calculated poverty lines for each sampled household are compared with the household consumption per person. All measures are preliminary deflated to take into account differences in purchasing power over time and regions of residence.

In contrast, the official poverty measurement compares per capita disposable income of a household with national (official) poverty line, which is the average per capita subsistence minimum budget of a family with two adults and two children (see Table 1).

Table 1. Consumer budgets and absolute poverty line by year in Belarus, in constant BYN

Year	2009	2010	2011	2012	2013	2014	2015	2016
Subsistence minimum budget ¹	247	258	293	317	332	362	369	373
Minimum consumer budget ²	372	396	367	448	491	517	554	620
Absolute poverty line ³	383	395	437	448	468	475	499	520

Source: ¹ Belstat; ² Ministry of Labour and Social Protection Republic of Belarus; ³ author's own calculations.

The empirical strategy of the analysis assumes setting the food, non-food and absolute poverty lines using the cost of basic needs approach, estimating poverty measures at the level of entire Belarus and its regions based on Foster-Greer-Thorbecke's poverty indices (Foster et al., 1984), and analyzing the determinants of welfare and poverty using OLS and probit regressions.

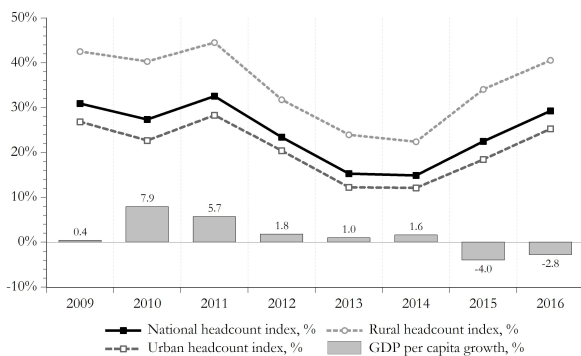


Poverty incidence

The timeline of poverty analysis for Belarus can be subdivided into three periods: crisis of 2009-2011, recovery of 2012-2014, and a crisis of 2015-2016 (see Figure 1).

The results show that during the first period (from 2009 to 2011), absolute poverty at the national level increased from 30.9% to 32.6%. Incidence of absolute poverty for rural and urban areas in 2011 reached 45% and 28% of the population, correspondingly.

Figure 1. Incidence of absolute poverty and GDP per capita growth in Belarus



Source: Author's own calculations.

Note: Estimates reflect weighted household data.

The second period (from 2012 to 2014) was characterized by a sharp poverty reduction. For example, the absolute national poverty headcount ratio has plummeted from 32.6% in 2011 to 14.9% in 2014, rural poverty dropped by 22.1 percentage points or almost by half and urban poverty decreased by 16.2 percentage points.

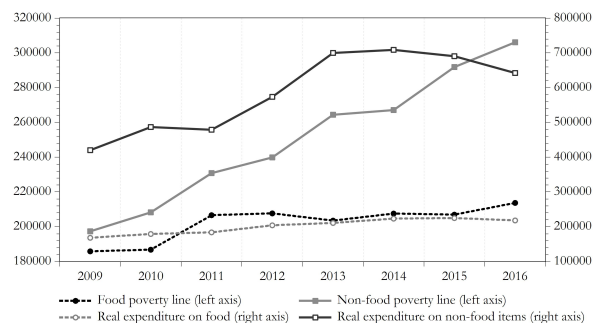
In turn, the third period saw a sharp rise in the incidence of poverty. From 2015 to 2016, the headcount ratio for absolute poverty increased by 14.4 percentage points. As a result, in 2016 absolute poverty in Belarus reached 29.3% or almost the same as in 2009 and 2011 (Mazol, 2017b).

Causes and determinants of poverty

The significant increase in poverty in 2015-2016 was due to a combination of several factors, including the household income decline in comparison with its growth in previous years, the increasing need to spend more on food necessities and the growth in food and especially non-food price levels.

As the Figure 2 shows, starting from 2015 there has been a rapid increase in the real cost of non-food budget for Belarusian households, while the food budget has remained almost the same in real terms. Correspondingly, in 2016 the non-food poverty line increased by 14.6%, while the food poverty line went up only by 2.9%.

Figure 2. Real monthly average per capita household expenditure on food and non-food items and real monthly standardized food and non-food poverty lines, 2009-2016, in BYN



Source: Author's own calculations.

Note: Estimates reflect weighted household data.

Furthermore, as income fell (by 7.2% in 2015-2016), the share of food items in total expenditure increased and real non-food expenditure decreased. This is because household income was not enough to cover both expenditures on food and non-food items. Due to the 2015-2016 economic crisis the cost of meeting the food essentials increased so fast that it has squeezed the non-food budget, leaving insufficient purchasing power for non-food items.



The study also shows that among factors that substantially influence household welfare and poverty at the household level in Belarus are family size, the number of children in a household, presence in the household of economically inactive members. Moreover, single mothers in Belarus appear to be noticeably more vulnerable to macroeconomic shocks than full families both from welfare and poverty perspectives.

Additionally, one of the most important determinants of welfare and poverty in Belarus is spatial location of a household. In particular, poverty highly discriminates against living in rural areas. The poverty incidence for rural areas over 2009-2016 is approximately 10.5 percentage points (or 44%) higher than the national average, while that of the urban areas is nearly 4 percentage points (or 16%) below national average. Moreover, in 2015-2016 urban and rural disparity for poverty widened even more and reached 25.3% for urban vs 40.6% for rural areas.

Finally, two more factors, savings and access to a plot of land, have on average a large positive influence on consumption expenditure and a negative one on the chance of getting poor.

Conclusion

Poverty alleviation and development reflect economic and social progress in any country. While Belarus initially achieved noticeable progress in this dimension, the economic and social development in recent years seems to increase problem of poverty in Belarus. The estimates show that in 2015-2016, absolute poverty in Belarus increased almost twofold. Household size, large numbers of children in a household, the presence in the household of economically inactive members are all factors that decrease household welfare and increase poverty. Single mothers also appear to be substantially more vulnerable to macroeconomic shocks. Finally, one of the most important determinants of welfare and poverty in Belarus is if a household is rural. These

findings are important warning signals for the design of pro-poor policies in Belarus.

References

- Foster, J., J. Greer, and E. Thorbecke. (1984). A Class of Decomposable Poverty Measures. *Econometrica*, 52: 761-766.
- Kakwani, N. (2003). Issues in Setting Absolute Poverty Lines, Poverty and Social Development Papers No. 3, June 2003. Asian Development Bank.
- Kruk, D., Bornukova, K. (2014). Belarusian Economic Growth Decomposition, BERO Working Paper Series, WP no. 24.
- Mazol, A. 2017a. The Influence of Financial Stress on Economic Activity and Monetary Policy in Belarus, BERO Working Paper Series, WP no. 40.
- Mazol, A. 2017b. Determinants of Poverty With and Without Economic Growth. Explaining Belarus's Poverty Dynamics during 2009-2016, BERO Working Paper Series, WP no. 47.
- World Bank (2000). Making Transition Work for Everyone: Poverty and Inequality in Europe and Central Asia. Washington DC, The World Bank.





Aleh Mazol

Belarusian Research and Outreach Center

mazol@beroc.by

<http://www.eng.beroc.by/>

Aleh Mazol received his Bachelor's degree in Economics from the Belarusian State Economic University (2003) and obtained his Master's degree in Economics from Kyiv School of Economics (KSE) in 2013.

Since January 2015, Mazol works at the Belarusian Research and Outreach Center (BEROC) and currently holds the position of researcher. His working and research interests are spatial economics, monetary economics, corporate governance, poverty and inequality.

freepolicybriefs.com

The Forum for Research on Eastern Europe and Emerging Economies is a network of academic experts on economic issues in Eastern Europe and the former Soviet Union at BEROC (Minsk), BICEPS (Riga), CEFIR (Moscow), CenEA (Szczecin), KEI (Kiev) and SITE (Stockholm). The weekly FREE Network Policy Brief Series provides research-based analyses of economic policy issues relevant to Eastern Europe and emerging markets. Opinions expressed in policy briefs and other publications are those of the authors; they do not necessarily reflect those of the FREE Network and its research institutes.

