

Living Conditions and Well-being of Households in Belarus

Extended abstract

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ABSTRACT

Socio-economic changes emerged in Belarus in the 1990's had dramatically affected the well-being of the households and contributed towards the deterioration of the demographic situation. Until recent years the adverse economic development was accompanied by the unfavorable demographic trends. Nowadays, the official statistics reports a steady progress in population welfare. Yet, such an important indicator of the quality of life as life expectancy at birth does not seem to respond to the improvement in living standards. Based on the data of the "Income and Expenditures of Households" sample survey we evaluate living conditions and welfare of different household types in Belarus for the period 2000-2007. In this study, we use the income-based and food energy intake approaches of measuring poverty, and apply different types of equivalence scales. In addition to money-based indicators, we construct the index of living standards by means of the principal component analysis.

INTRODUCTION

Fundamental political and socio-economic changes emerged in Belarus in the beginning of the 1990s had dramatically affected the welfare of the most of households. In 1995, 31% of them were recognized as the poor and the majority of them stayed in poverty from 4 to 9 months in a year. Households with children were affected at most, 45% of them had the level of per capita income below the poverty line. In the same year, the Gross Domestic Product (GDP) constituted just 65% of its value in 1990; real salaries and real disposable income of the population were 56% and 62%, respectively (Minstat, 2007). The official statistics reports that recently poverty in Belarus is declining, however, according to the World Bank (WB) estimations, the gains in poverty decline are shallow and fragile. A key source of economic vulnerability is the administratively-set real wage growth which was outstripped productivity growth, jeopardizing the sustainability of growth and poverty reduction (WB, 2004). For instance, during 2000-2006 an increase in real income of population constituted 112%, and in real salaries – 142%, while the GDP grew only by 57% during the same period (Minstat, 2007).

The decline of living standards during the first years of the transition period contributed towards the deterioration of the demographic situation in Belarus. During 1990-1995, the crude births rate and the total fertility rate decreased by almost 30% and 27%, respectively, while the crude death rate grew by 21%. During the same period, life expectancy at birth decreased by 3.4 years among men and 1.6 years among women. Since the middle of the 1990s, official statistics has been reporting the steady

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improvement of well-being of the population and households that presumably should lead to some progress in the health situation as well. However, such an important indicator of the quality of life as life expectancy at birth does not seem to have responded to the favourable changes in the socio-economic situation. For example, in 2005 male life expectancy at birth was 62.9 years or by 0.4 year less than it was in 2000 (Minstat, 2007). This contradiction motivated us to evaluate living conditions and welfare of different types of households (single, with and without children) in Belarus using a number of poverty measurement approaches.

DATA

The intended analysis is based upon data of the "Income and Expenditures of the Households" sample survey conducted annually by the Ministry of Statistics and Analysis of Belarus since January 1995.

This survey is a part of the regular operations of the Ministry and represents the major source of information on the socio-economic status of the Belorussian households. Each year a sample of about 6000 households is selected. Every household has an equal possibility to be selected and this allows extending the obtained results over all resident households. The survey covers all types of households with the exclusion of institutionalized people (individuals living in nursing homes, boarding schools, prisons, convents, etc.). The survey is restricted to one calendar year and basically designed as a sequence of four quarterly interviews that cover an entire year for the same sample of households.

In this paper we analyze the changes in the well-being and living conditions of households during 2000-2007 and re-assess the poverty incidence on the basis of the IEHS for 2007.

METHODOLOGY

Along with the widely employed descriptive analysis of the living arrangement of households we construct the index of living standards from the information on household ownership of durable goods and its housing characteristics by means of the principal components analysis. In the present work the housing conditions of the household (presence of central heating, bath or shower, hot-water and telephone), the ownership of durable goods (TV, refrigerator, washing machine and car), the ownership of land-plots, the per capita living space and the percentage of food expenditures in total custom expenditures are used for the computation of this index. Each variable besides the per capita living space and the share of expenditures on food takes the value 1 if true, 0 otherwise. The last two measures are included in the form of comparison with their median levels (1-is less than median level; 0 is median level or above – for the share of food expenditures and 0-is less than median level; 1 is median level or above – for the living space). Scoring factor is the "weight" assigned to each variable (normalized by its mean and standard deviation) in the linear combination of the variables that constitute the first principal component.

While assessing the developments in the welfare of the different types of households, we calculate several poverty and inequality measures (e.g., Gini Index, the Foster-Greer-Thorbecke class of decomposable poverty measures).

Besides the income-based approach of measuring poverty used in Belarus, we apply the food energy intake approach as well as two different types of equivalence scales (based on the OECD formula and Engel's model).

At the final stage of the research we apply the binary logistic regression to analyze the relationship between health and a selected number of the socio-economic variables. Influence of health on ability to work is considered as the dependent variable. Along with the independent variables included in the survey questionnaire (age, sex, and educational level) we construct additional covariates: the index of living standards and income quintile an individual belongs to.

SUMMARY

The main conclusions derived after the application of different methods and approaches of assessing living conditions and measuring poverty can be summarized as follows:

<i>Method/approach</i>	<i>Conclusion</i>
Income-based poverty (official approach)	Decrease in poverty rates during 2000-2007. Poverty is the highest among the households with children.
Living arrangements of households	Slight improvement of living arrangements for all types of households. Households with children have better living conditions.
Poverty based on the share of expenditures devoted to food	Poverty is the highest among the single households. Considerable increase in poverty rates among single households and households without children. Decrease in poverty for households with children.
Caloric intake approach	Significant increase in poverty rates. Households with children affected at most.
Relative poverty	No decline in poverty rates. Poverty incidence is the highest among single households.
Scaling	Poverty level gets lower for all types of households. Almost equal poverty rates for all household types.

Using the different approaches to poverty measurement yields different results. For instance, according to the official approach there is the considerable reduction in poverty rates while following the caloric intake approach poverty in Belarus is increasing. According to the measure of relative poverty, all rates are found to be higher than the official estimations in 2007. The index of living standards indicates the slight improvement of living condition among all types of households. Nonetheless, the analysis of living arrangements can not be based only on this rough summary measure; more detailed assessment and measures are required.

The analysis suggests that the income-based approach used in Belarus is not sufficient for the impartial assessment of welfare and poverty. A number of other outcomes with respect to nutrition and living arrangements should be taken into account to provide a more realistic picture. The application of equivalence scales is necessary for the poverty rate adjustments and revealing population groups most vulnerable to poverty in order to provide them with the priority social support. Our findings also suggest that not only the monetary estimation of the minimum subsistence level but also the set of items covered in this measurement should be regularly reassessed.

The analysis of poverty profiles is crucial in the evaluation of a poverty level since it helps to determine the best type of assistance to households. For instance, for households with children monetary allowances seem to be a serious preference, while any kind of improvement in housing seem to be the priority for the single households.

It is premature to label Belarus “an unusual case” in terms of the response of demographic indicators to improving living standards because the official data indicating such improvement are rather questionable.

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