

Chapter I. Profile and Dynamics of Poverty and Living Standards*



This chapter constructs a profile of poverty in Belarus and hence is the bed-rock on which the rest of this poverty assessment is based. The information refers to 2002, the most recent year for which such information was available. The dynamics of poverty and inequality are analyzed over the period 1997 to 2002.

The MOSA and the poverty assessment team developed and applied certain modifications to the poverty measurement methodology, which permits greater confidence in the comparability of household welfare across different types of households, in different parts of the country, and across the last few years. We find that compared to other transition countries in the region, Belarus has one of the lowest rates of poverty (18.5% in 2002). Poverty has declined significantly over time, while income inequality has increased only marginally. Location appears to be one of the most important factors associated with the poverty status of the household. The analysis finds that rural people face the highest poverty risk and represent the largest share of poor people (39% of the total poor). Poverty (and extreme poverty) risk is highest in Brest, Gomel and Mogilev oblasts, and lowest in Minsk City. Another key factor is the level of education of the household head—higher education levels have a strong correlation with higher household incomes. Households headed by collective farmers, pensioners and blue-collar workers are the largest groups in poverty. Despite these findings of poverty differentials, targeting of social protection transfers using geographical or household criteria will entail substantial inclusion and exclusion errors. This is because groups with the highest risk of poverty represent a small share of the total poor, while the largest share of the poor is found among large groups such as workers or pensioners, which include households that are not necessarily poor.

1.1 Measuring Poverty in Belarus

Belarus has a long tradition of collecting household consumption data and monitoring living standards. After independence, the country used a household budget survey primarily to estimate the weights for the CPI index, and produce a limited analysis of the distribution of income and consumption. The data collection process improved considerably after 1995, when the household budget survey was redesigned as a nationally representative multi-topic household survey: the Household Income and Expenditure Survey (HIES). The survey has been implemented continuously since 1995, thus building a comparable database for monitoring living standards and poverty. Eight rounds of annual cross-section surveys are now available to measure poverty, to analyze changes in living standard over time and to assess the distributional impact of various programs and policies over the period 1995-2002. This report is focused on the period 1997-2002.

Inconsistencies between GDP vs. poverty measures. In 1995 the Government and World Bank produced a first poverty assessment, and since then, the MOSA has conducted annual and quarterly assessments. However, the poverty trends reported in these assessments are inconsistent with the dynamics of GDP and inequality, and with the trends in private consumption as reported in the System of National Accounts. Despite a cumulative growth of 22% between 1995 and 1998, for example, the official poverty headcount ratio was reported to have fallen only marginally, from 38% to 33%. Furthermore, poverty was reported to have increased substantially in 1999 (to 47%), despite a 3.8% per capita GDP growth and unchanged inequality, partly due to a methodological change in the definition of the poverty line. The largest reported decline in poverty reported in 2001, from 42% in 2000 to 29%, occurs on the background of a rather modest

* This chapter is based on the findings reported in Tesliuc (2003).

growth performance (4.7% per annum). The current poverty assessment recommends a methodology that corrects previous inconsistencies (Box 1).

Box 1: Developing a Methodology to Measure Poverty

The inconsistencies between poverty and macro (GDP) trends reported in Belarus are thought to be due to a combination of factors: (i) the poverty line has changed over time due to normative considerations; (ii) intra-annual inflation was not properly accounted for; and (iii) the composition of the income aggregate used to track poverty over time - "total disposable resources" - was not constant over time.

Methodology. This assessment recommends a poverty measurement methodology that introduces advances consistent with international good practice and constructs a household welfare aggregate which is strictly comparable over the years and across different regions within Belarus. This welfare measure is (i) based on household consumption, (ii) deflated to account for differences in purchasing power over time, areas of residence, and regions, and (iii) adjusted per adult equivalence (AE) to account for the differences in needs among households of different size and demographic composition. Sensitivity analysis was conducted to ensure that the specific choice of AE scale did not influence the results. Further details on the methodology used to measure poverty in this assessment are presented in the technical background paper on the topic.

Data utilized. (i) The main source of data for the poverty analysis is the Household Income and Consumption Survey (HIES) conducted by the Ministry of Statistics and Analysis on a quarterly basis. The 6 years of HIES survey data (1997-2002) were made comparable using the methods described above. (ii) Given the limitations of the HIES in terms of the coverage of non-income dimensions of poverty, a special survey module on education, health and social protection was fielded by the MOSA (and financed by the UNDP) for the poverty assessment in early 2003, linked to the 2002 survey. (iii) The Ministry of Finance also provided customized, detailed information on public expenditures (local and Republican) on different levels of education and health services. (iv) In order to validate and supplement the quantitative data, an informal qualitative exercise was also fielded in June 2003 to record people's perceptions on poverty and living conditions in Belarus in 5 regions. (v) Finally, institutional data was combined with household and public spending data to analyze socio-economic differences in service coverage and utilization.

Two poverty lines are used to distinguish the poor and the extremely poor from the rest of the population.¹ In this report, a poor person is defined as an individual living in a household with a per adult equivalent consumption less than BYR 59,792 per month at national fourth quarter 2001 prices². The *poverty line* is determined by the cost of a minimum food basket that guarantees the consumption of 2,700 calories per equivalent adult (with a cost of 36,402 BYR) and an allowance for non-food expenditure of 39% of the total consumption. An *extreme poverty line* (of BYR 47,100 per month) that incorporates a smaller allowance of non food expenditure (23% of total consumption) plus full allowance for the cost of the required caloric content per adult equivalent, is used to sharpen the profile of the poorest strata of the population.

1.2 Poverty and Inequality Levels in 2002

In 2002 almost 1.8 million people—about one fifth of the population of Belarus—lived in poverty. These people failed to earn enough to cover the costs of at least 2,700 calories per adult per day plus an additional amount to cover other non-food needs. Furthermore, about 700,000 persons or 7% of the total population lived in extreme poverty (Table 1).

¹ The construction of the poverty lines follows the methodological recommendations from Ravallion (1994, 1998) and Deaton and Zaidi (1999).

² This amount is equivalent to \$38 per month.

Table 1. Poverty Headcount and Poverty Gap in Belarus, 2002

	Poverty using consumption per equivalent adult		Poverty using consumption per capita	
	Extreme Poor	Total Poor	Extreme Poor	Total Poor
Number of poor	697,063	1,836,178	1,214,316	2,510,872
Poverty headcount, %	7.0%	18.5%	12.3%	25.4%
Poverty gap as:				
Percentage of poverty line, %	17%	20%	19%	23%
Average Consumption Deficit of the Poor, Rubels per month	8,088	11,786	8,413	12,485
Aggregate Poverty Gap as Share of GDP, %	0.34%	1.30%	0.61%	1.89%
Aggregate Poverty Gap, billion of Rubels (June 2002)	87	332	157	481
Memo:				
Poverty line, Rubels (IV Q-2001 Prices)	47,100	59,792	43,727	55,390
GDP, billions of Rubels (2002 average)	25,518	25,518	25,518	25,518
Population, '000s (2002)	9,899	9,899	9,899	9,899

Source: Belarus HIES, 2002

Table 2. Poverty Rates in Transition Economies

	Survey year	Poverty Headcount	
		\$PPP 2.15/day	\$PPP 4.30/day
Belarus (income)	1999	1.0	10.4
(consumption)	2002	1.6	26.6
Russian Federation	1998	18.8	50.3
Ukraine	1999	3.0	29.4
Lithuania	1999	3.1	22.5
Estonia	1998	2.1	19.3
Latvia	1998	6.6	34.8
Moldova	1999	55.4	84.6
Bulgaria	1995	3.1	18.2
Romania	1998	6.8	44.5
Hungary	1997	1.3	15.4
Poland	1998	1.2	18.4
Azerbaijan	1999	23.5	64.2
Armenia	1999	43.5	86.2
Georgia	1999	18.9	54.2
Tajikistan	1999	68.3	95.8
Kyrgyz Rep.	1998	49.1	84.1
Turkmenistan	1998	7.0	34.4
Kazakhstan	1996	5.7	30.9

Source and notes: Making Transition Work for Everyone, World Bank (2000) and WB staff estimations for Belarus 2002.

Notes: The \$PPP is expressed in US 1996 prices. The results presented here should be interpreted with caution, as many indicators refer to different time periods, or may be affected by methodological differences in the welfare measure used to measure poverty, in the survey design, or in the conversion factor used to estimate the international line.

Compared to other transition economies, Belarus has one of the lowest poverty rates (Table 2). A compressed income distribution succeeds in bringing almost all the Belarusian population above the lower regional poverty line: in 2002 less than 1.6% of the population was living on less than \$2.15 a day on a purchasing power parity basis (PPP). These results are due, among other factors, to the low level of inequality in Belarus compared to other transition economies. At the upper regional line of PPP \$4.30 a day, slightly more than one quarter of the population is poor. This places Belarus towards the middle of the distribution, where it fares less well than Central and Eastern Europe and the Baltics.

The poverty gap is relatively small but... On average the consumption of the poor household is 20% lower than the poverty line. Given average consumption of the poor, it is estimated that the minimum annual cost of eradicating poverty represents about BYR 262 billion or 1.3% of GDP.

This amount is low enough to fall within the realm of possibility. It should be borne in mind,

however, that this estimate assumes perfect targeting or, in other words, excludes administrative costs or leakage to the non-poor. Should the administrative costs and leakage be included, the total cost of these redistributive measures can be three times as high as the cost under a perfect targeting assumption.

...Poverty gains are “shallow” and hence fragile. Relatively small losses or gains in average incomes can lead to large shifts up or down in poverty levels. Most poor people have incomes which are clustered close to the poverty line; moreover, a substantial share of the non-poor are clustered just above the poverty line. The latter category faces a substantial risk of becoming poor. Economic shocks can push a large number of individuals into poverty. A 5% reduction in real consumption, for example, will raise total poverty levels from 18.5% to 21.9%, pushing about 340,000 people below the poverty line. A larger shock that reduces consumption by 10% may increase total poverty headcount to 25.3%. On the other hand, even modest growth may have a substantial poverty reduction impact. A 20% increase in consumption will *halve* poverty.

Inequality is low in Belarus. In 2002 the Gini index of consumption per adult equivalent was only 0.228. During the six years covered in the analysis, the level of consumption inequality was stable, ranging from a low of 0.225 in 1997-98 to a high of 0.236 in 2001. In other Central and

Eastern European transition countries, consumption inequality as measured by the Gini ratio range from 0.3 to 0.4, with a tendency to increase from the low level inherited at the beginning of the transition from socialism. Although the most recent data suggests that inequality in Belarus has declined after a slight increase, public perception of whether inequality has been rising or not is more mixed (Box 2).

Box 2: Inequality Low but On the Rise

And it seems to me that in the last ten years life has improved on the whole. There have appeared really rich people. Though there are examples of quite the opposite.

I think that life in our town has changed: there have appeared very rich and very poor people. The gap between the rich and the poor is increasing. I can see it when communicating with the town people in my office and in the streets.

Source: Interviews (Minsk Oblast), June 2003

The sources of consumption inequality were explored and were found to be most strongly related to: (i) the education of the household head (12% of total inequality of per adult equivalent consumption); (ii) area of residence; (iii) region; (iv) occupation of the household head; (v) household size; (vi) number of children under 18 years old; and (vii) ownership of a telephone. Surprisingly, the number of earners per household and the gender of the household head have low explanatory power, as well as ownership of land, livestock or house.

Substantial inequality exists within groups that share a characteristic. This is true, for example, among households with the same level of education of the household head. This “within-group” inequality also suggests that targeting based on categorical characteristics will be inefficient and have large inclusion and exclusion errors.

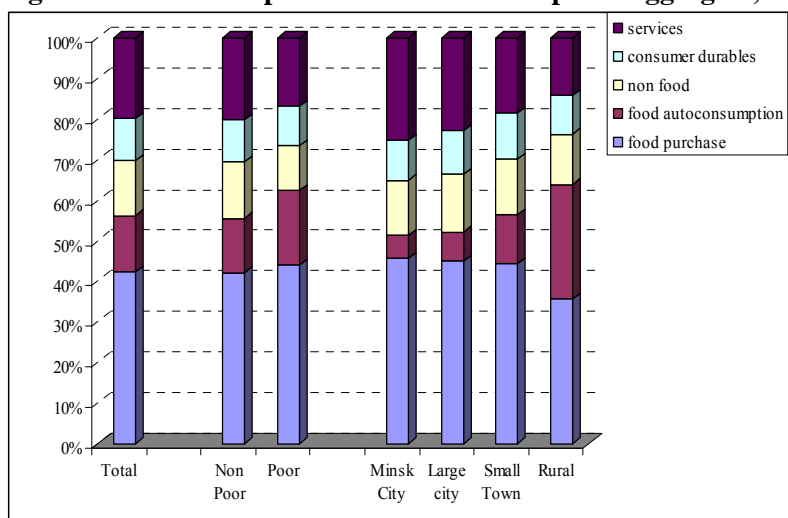
1.3 Sources of Income and Patterns of Consumption

There are important differences between poor and non-poor people in the structure of income sources. Poor households have a smaller share of wage income (44% compared to 54% for the non-poor) and rely more on social protection transfers (child allowances, other social assistance and privileges). Pensions constitute an important source of income for poor and non-poor alike, but particularly for poor people. Poor people also depend more on subsistence

agriculture for their livelihoods, and less on sales of agricultural products. The rural population depends more on agriculture, but do have a substantial share of wage incomes (from collective farms). Compared to other countries from Central and Eastern Europe, rural livelihoods in Belarus are less dependent on self-employment income from farming, either from sales or home produced/consumed goods, a reflection of the preservation of large cooperative farms using salaried labor.

Poor people devote a larger share of their consumption budget to food (especially home produced) than do non-poor people. As we would expect, the share of food items in total consumption tends to be more important for rural households and for the poor. Households residing in Minsk city have the lowest share of food in total consumption, while rural households and extremely poor households dedicate almost three quarters of their consumption to food. The relative importance of purchased and home produced food items in the food-consumption sub-aggregate also varies considerably between different groups. The share of home-production in food consumption tends to be higher in rural area where relatively fewer transactions take place through the market place and households rely heavily on their plot. For extremely poor households, home produced food constitutes more than 30% of food consumption, while for the non poor it comprises less than 23%.

Figure 1. Main Components of the Consumption Aggregate, 2001



Note: services include - heating, rent and utilities, health care, education, public transport, maintenance of vehicles, culture, recreation, sport, communication and personal care.

stable over 1997-2002, will start to change in the future showing a high burden of services. This may not necessarily reflect an increase in physical consumption but an increase in their relative prices. For example, it is clear that health services in the public health facilities are becoming increasingly subject to co-payment, official and under-the-table.

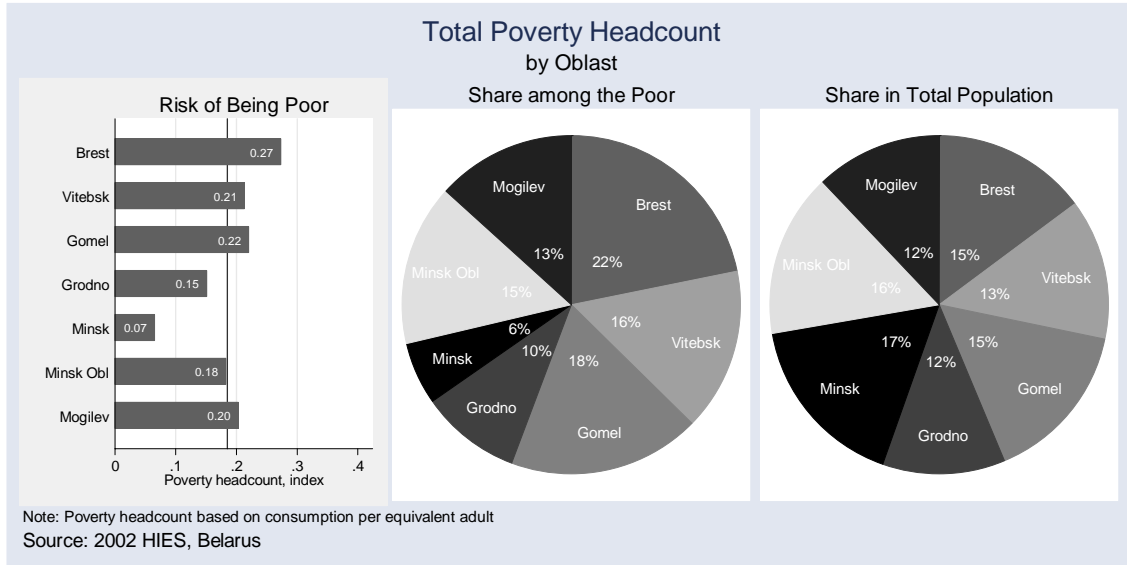
1.4 Who Are the Poor?

The incidence of poverty in Belarus varies little across the country, with the exception of the capital city. This pattern is similar to that of other Central and Eastern European countries. In Minsk city the risk of poverty is just one third of the national average. In the rest of the country, rural inhabitants face the highest poverty risk (23% of them are poor), and represent the largest

The share of consumption devoted to services (Figure 1) is low in general and especially for poor people, despite the multitude of items lumped together under this class: health, education, utilities, public transport, communication, recreation and sport. This finding may increasingly reflect issues of affordability, as we shall examine in subsequent parts of this poverty assessment. It is also very likely that household consumption composition, relatively

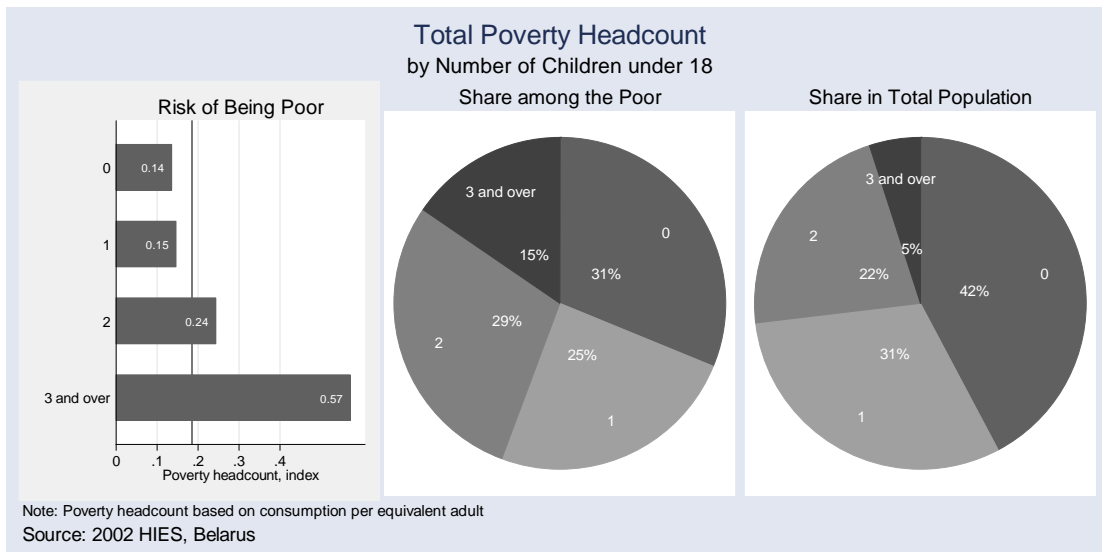
pool of poverty (39% of the total number of poor people). Only 2% of the people in Minsk city face extreme poverty, compared to 7-9% in the other cities or the rural areas. Poverty and extreme poverty risk is higher in Brest, Gomel, and Mogilev oblast, where 53% of the poor live (Figure 2). Brest and Gomel regions are confronted with the highest risk of extreme poverty, and have the largest number of poor people. Minsk City has the lowest poverty rate (7%).

Figure 2. Regional Differences in Poverty Rates



Larger households have a higher poverty risk. This is true even after accounting for economies of scale in consumption and the differential cost of children compared to adults. This relationship is highly robust to the choice of poverty line (holds for any poverty line) and year. We do not find statistically significant differences in the risk of being poor for families of one, two or three persons. Four-person families have the same poverty risk as the nationwide average (19%). For larger families of 5 people or more, poverty risk doubles (38%). They also represent the group with the largest contribution to total poverty, together with households with 4 members.

Figure 3. Deep Poverty Pocket: Households with 3 or More Children



Risk of poverty is very high for families with 3 or more children, but they represent a small share of the total number of people living in poverty. About 58% of the households in Belarus have children. The risk of being poor increases with the number of children, moderately up to two children but steeply thereafter (Figure 3). This difference is observed even after accounting for the lower cost of children compared to adults. Although families with 3 or more children do not represent a large fraction of the population (only 9% of the population), they are a deep pocket of poverty: this group accounts for 15% of the total number of poor, but faces a risk of poverty that is three times higher than the average. For families with two or three children, the risk of poverty is further associated with single-parenting. Single-parent families face significantly higher poverty risk than families with two parents if they have two or more children. These mono-parental families are a deep pocket of poverty. They are only 4% of the total number of poor (or extreme poor), but face 55-60% higher risk of poverty than other households.

Old age is associated with a higher risk of poverty, but the relationship is not straightforward. Households headed by elderly account for 1/3rd of all Belarus households. The risk of poverty between families with and without elderly is similar. This finding may not be so surprising when taking into consideration two sets of factors. *First*, both the pensions system, whose grid is automatically indexed to the average wage, and a large number of privileges, are targeted towards the elderly. *Second*, families which contain elderly members—compared to

families headed by elderly people—may also contain working age members who contribute incomes. Nonetheless we also find (see below, Figure 5) that pensioner-headed households have a higher than average risk of being poor in Belarus; that this risk has worsened over the last few years; and that pensioner-headed households constitute a large share of the population in poverty and extreme poverty. These latter findings are consistent with widely held perceptions that the living conditions of the elderly are particularly meager (Box 3).

Box 3: Old Age and Poverty

At our trading center I have witnessed many of such elderly women who have to live on bread, milk and porridge alone for weeks. (Minsk Oblast)

The village life has worsened in the last ten years, especially for elderly people. The amount of the pension is not enough to pay even for utilities and food. An individual plot is of great support and we have to keep it. Young people go to cities as there are more opportunities there to earn some money. (Gomel)

I think that elderly people are poor because they get small pensions while younger people live in poverty because they cannot find a well-paid job. I have a young great-great-granddaughter, she has just graduated from the institute, she is married and has a baby. She is poorer than me, all the time I want to help her and give her something to eat. (Gomel)

Source: Interviews, June 2003.

The relationship between age and poverty is thus U-shaped, with higher risk of poverty associated with both the life-cycle stage when people have young children *and* when people are elderly heads of households. This life-cycle pattern of poverty—and the differing factors that contribute to old age poverty and poverty in young families—is also captured in public perception (e.g. see last quote in Box above).

Female-headed households face higher risk of poverty compared to male-headed households. This is due to the higher share of single parent households and old widows living on low survivorship pensions that are found in this category. Male-headed households still constitute the larger share of the poor population, however (56%).

The risk of poverty drops substantially with better education, for any poverty line. Figure 4 above illustrates this relationship for the year 2002, for total poverty. A deep poverty pocket (poverty risk near 34%) is represented by households whose head has incomplete primary

education. This group represents 4% of the total poor. The majority of the poor, however, are to be found in households whose head finished at most middle or vocational schooling.

Figure 4. Better Education is Key to Poverty Reduction

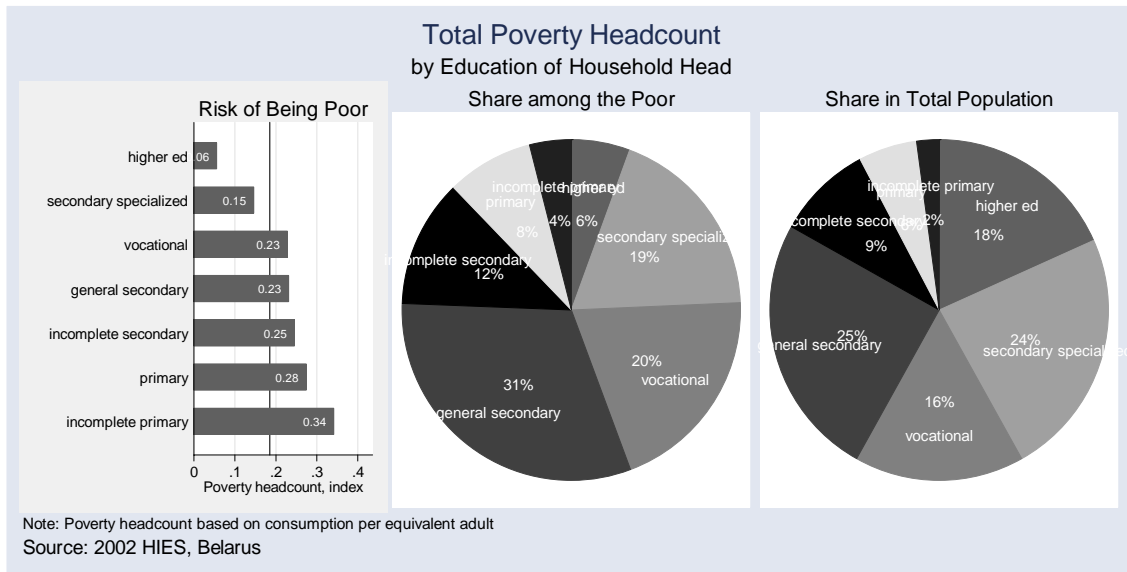
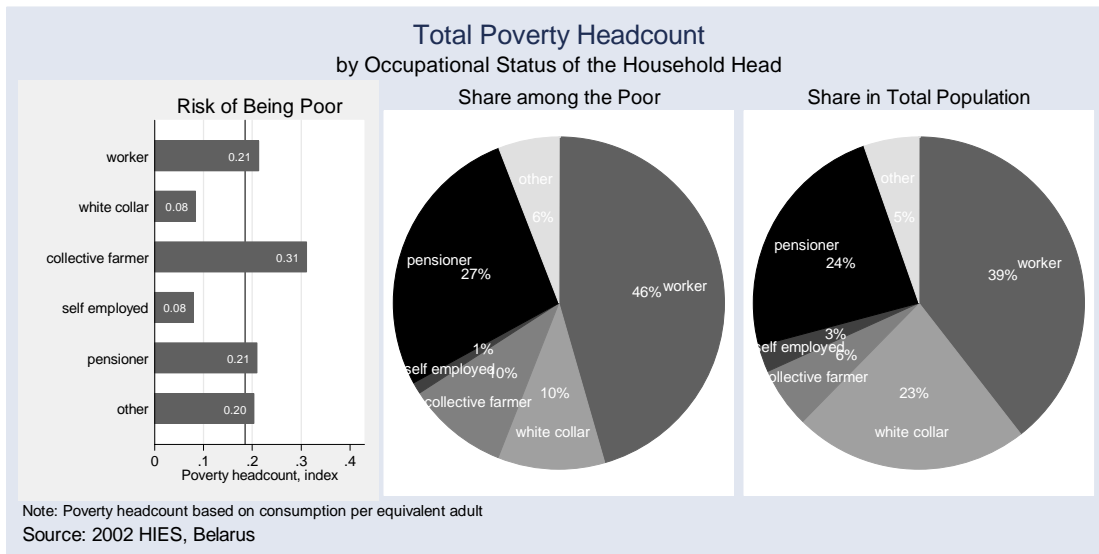


Figure 5. Poverty is higher among Collective Farmers



Poverty is significantly higher for households headed by collective farmers and lower for those headed by white collar workers and the self-employed (Figure 5). Collective farmers face the highest risk of poverty/extreme poverty while blue-collar workers and pensioners contribute over 70% to the extreme poor population.

This pattern is also confirmed by the analysis across individuals who are active on the labor market. The risk of poverty is similar across economic sectors, with two notable exceptions. People living in households where the head is in public administration (6% of the population) are considerably better off: their risk of poverty is one third the national average. At the other

extreme are those living in households where the breadwinner has an agricultural job (30% of the population), for whom the poverty risk is 54% higher than the national average.

Despite the ability of rural households to produce some of their own food on their individual land plot (*dacha*)—which may keep many households out of extreme poverty—conditions in rural areas remain difficult. Households tend to have low cash liquidity and, with few opportunities to obtain credit, these households are unable to cultivate more profitable crops because they cannot afford equipment, fertilizer, pesticides, seeds or irrigation, and often are elderly households lacking able-bodied adults (Box 4).

Box 4: Collective Farmers' Poverty

Village people try to survive using all possible means. And the government? The government pays 15 - 20 USD for heavy agricultural work. Wages are delayed for 3-4 months. In the meantime we are given "in-kind" wage i.e. food products, hygienic goods. By the time you are finally supposed to receive your money, it turns out that there's nothing to receive or you even owe the collective farm because you have eaten "too much". Because of such "government care" people leave villages, many of them go abroad to earn some money because they have families to support. There are only closed houses and old people in the villages who have nowhere to go.

The land, tractors, agricultural machines are the property of collective farms. If you openly say what you think, or if you make a decent proposal, you become out of favor immediately and you will get no machines, no crops, no additional land plots. Think and make a choice.

There's a saying: "Cultivating land you will not become rich, but you will not die of hunger either".

The collective farm charges for a horse or a tractor to cultivate land (the price for an individual, who is not a member of the collective farm, is 220000 BYR for 1 ha). This includes transportation of dung, plowing and planting. One needs to pay in cash. The price for the members of the collective farm is lower, but they need to find and pay cash, anyway wages and child allowances are delayed for 3-4 months.

Source: Interviews (Grodno), June 2003

Who is employed? The household survey data further reveals major differences in employment rates among the poor and the non-poor. Employment rates among poor males are almost 13% lower than among non-poor males. In the third and fourth quarter of 2002, however, the employment rate among the extreme poor was *higher* than among the poor. This indicates that households in extreme poverty agreed to accept any job, even seasonal and low paid as a coping strategy, but this was not sufficient to escape scarcity of means for living.

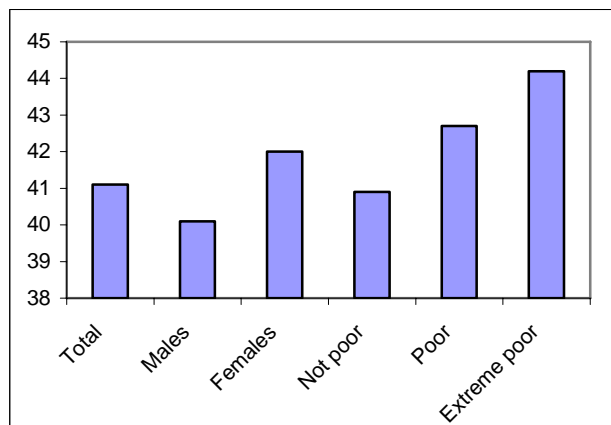
Box 5: Women in the Labor Force

A numerical gender equality in labor force participation was reached in Belarus by the high share of females especially in public services. Women participate mostly in medical occupations, teaching and administrative service jobs. For example, 90.1% of medical personnel, including 71.7% of doctors; 84.1% of pedagogical staff and 77.0% of employees engaged in culture which usually require high education attainment, are females (2001). On the other hand, these are among the lowest paid sectors in the economy (see below). This may explain the high poverty rates among female headed households. Furthermore, even though educational attainment of females is much higher than for males, they are less represented among the top managers. For example in 2001, among managers of organizations or their deputies, 40.7% were females (42.5% in 1995). This is still a very high indicator of female representation among the top layer of management, compared to most other countries in the world.

The 1999 population census data also confirms that there is a close correlation between the level of education, and the level of employment. For example, the employment rate of individuals with

higher education level is 14 percentage points higher (88%) than the average of 74%, and 19 percentage points higher than for graduates of secondary education establishments (69%).

Figure 6. Number of Hours Worked Per Week in the Main Job, 2002



Poorer workers tend to work longer hours. Work hours were surveyed in the 2002 household survey (Figure 6). As a coping strategy, the poor and extreme poor in most cases tend to have much longer work hours which was still not sufficient to offset the differences in remuneration between different categories of workers. Especially high working hours were experienced by workers and employees in extreme poverty in joint and foreign companies, but also in state enterprises and organizations, and in collective farms. Females also tend to have 2 hours longer work week than males.

1.5 What Factors Contribute *Most* to Poverty?

The picture of poverty presented by the poverty profile in the previous section is that poverty is higher in rural area, varies across regions, and is related to education, life-cycle factors, dependency, gender of the household head, and occupation. However, many of these characteristics are interrelated. This section analyses *the relationship between each of these characteristics and consumption, taking the effect of other characteristics into account*. The analysis is useful to verify the *relative role* of various factors in determining the level of consumption, and also to assess the potential impact on poverty of policy changes in these factors, holding other factors constant. In summary, the factors most strongly associated with poverty are location, the occupation and education level of the household head, the household size, dependency ratio and gender of the household head .

- **Even after controlling for other household characteristics, location remains powerful in explaining poverty.** This means that households with the same characteristics are more likely to be poor if located in a peripheral area than in the capital city. In other words, poverty in poor areas is not only due to an agglomeration of low-endowed households (with characteristics that are related to poverty: large size family, lower education, etc.), but directly linked to the low average income of the area. This finding points toward the importance of regional development policies. In 2002, the consumption of households living in rural and urban areas other than the capital city is 25% less than in Minsk City. The gap in economic opportunities between Minsk and the rest of the country has a push-pull effect, leading to the younger, most skilled and entrepreneurial residents migrating to the capital city or to Russia. Improving opportunities in rural areas is contingent on the continuation of the reform in the agricultural sector. From 1997 to 2002, regional disparities widened gradually, both between the capital city and the rest of the regions, and between the regions themselves.
- **Human capital appears to be a key lever for poverty reduction.** The higher the educational attainment of the household head, the higher the household consumption, and hence lower the chances a household lives in poverty. In 2002, having someone in the

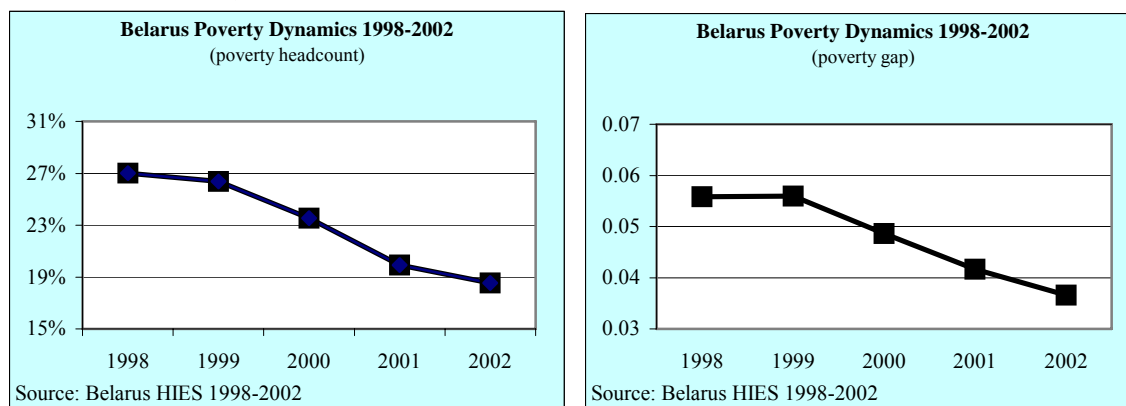
household who has completed secondary or vocational schooling raises consumption by about 8-11% compared with similar households with primary education. The premium for technical education is 17%, and for higher education (completed university studies) is 30%.

- **Only households headed by self-employed or white-collar workers enjoy occupational premiums, while pensioner-headed households are facing increased hardship.** *Private entrepreneurs* enjoy the largest returns to occupation. Their consumption is, on average, 23% higher than of a similar household headed by a blue-collar worker. Both the average level and the spread of these returns are falling in 2002 compared to earlier years. The situation of *pensioner-headed households* deteriorated continuously. While in 1997 the consumption of a pensioner-headed household would have been 6% lower than that of a similar household headed by a blue-collar worker, in 2002 their consumption was 10% lower.
- **Household size is strongly correlated with household consumption.** An increase in the household size by one member is associated, on average in 2002, with a 10% decrease in consumption. Furthermore, an increase in the number of children, controlling for household size, human capital and location, would further lower consumption by 6% in 2002, by worsening the household dependency ratio. However, the disadvantage faced by single parent households decreased over time from -5% in 1998 to -4% in 2002 (also losing its statistical significance). This positive outcome can be associated with the improvement of single-parent policies.
- **Belarus poverty has a strong gender dimension which accentuated from 1998 to 2002.** In 2002, female-headed households consume 10% less than similar households headed by men, up from -4.5% in 1998.
- Despite its strong policy to integrate and protect the living standards for **disabled** individuals and their households, households with disabled individuals tend to consume 7-8% less than similar households without disabled. This gap is both significant and stubbornly open at this level from 1998 to 2002.

1.6 Poverty Dynamics, 1997-2002

Over the last five years, poverty has fallen substantially in Belarus. In 2002, the poverty headcount was only 47% of the 1997 level, while the poverty gap and severity have fallen even more, representing 34% and 38% of their respective levels in 1997. The dent in extreme poverty was even greater: extreme poverty headcount fell to 37% of level in 1997, while extreme poverty gap and severity have fallen by about two thirds.

Despite continuous progress in alleviating poverty, the reduction in poverty was uneven. The largest dent in poverty was achieved during 1997-98, triggered by high growth rates (real GDP grew by 11% in 1997, followed by another 8% in 1998). Unlike the other countries in the region, Belarus succeeded in maintaining a small positive growth during the Russian crisis in 1999 (3% in real terms), which preserved poverty reduction gains during that difficult year. Again, during 1998-2000, changes in poverty levels are small and statistically insignificant. Efforts to stimulate demand in the economy, mainly through wage and pension increases before the 2001 elections, secured a continued but modest poverty reduction during 2000-2002 (Figure 7).

Figure 7. Poverty Headcount and Poverty Gap, 1998-2002³

These results are consistent with what would be expected given i) seven years of positive growth and relatively low inequality; ii) administrative wage increases, iii) availability of cheap sources of calories and, iv) high redistribution efforts (see later chapters).

- During 1996-2002 the GDP rose on average by 5% every year, after a sharp decline in the early 1990s. The new economic strategy launched in 1994 by the government of newly elected President Lukashenka focused on the administrative mobilization of resources to restore linkages in production and enforce greater discipline, while keeping the vast majority of the economy under state control.
- Real wages increased by 61% during 2000-2002 as a result of a controlled income policy, contrasting with only 16% growth in real output. Most of the increase in wages were promised before the presidential elections, and were legislated in December 2001 (31% real increase in wages only in 2001, to fulfill a pledge of \$100 average wage). As pensions were to be indexed anytime the average wage in the economy rose by 10% or more, the administrative increase in wages spilled over into pensions. As wages and pensions account for three quarters of total incomes in Belarus, such policies resulted in a high increase in the living standard of the population in 2001 and 2002.
- The Belarusian diet derives a large share (over 60%) of calories from rye-bread, cereals, fresh milk, dairy products, eggs and fat, which are also the cheapest source of calories. The consumption of the *poorest three deciles* of households depends heavily on cheap sources of calories: about 50% of their required nutritional intake is derived from bread, potatoes, sugar and sunflower oil. The relatively low incidence of extreme poverty suggests that the population is able to use cheap calories to satisfy a minimum caloric requirement.
- The low levels of poverty are also the results of substantial redistribution, through the state budget as well as through state-owned enterprises. Overall, budgeted social protection transfers represented about 14% of GDP in 2002. Quasi-fiscal transfers are also important in Belarus. Industrial and agriculture state companies continue to finance a large share of social assets (housing, utilities, schools), a policy inherited from the Soviet period. The value of the various social expenditures carried out by enterprises according to explicit or implicit Government mandates is estimated at about 2-3% of GDP in 2002 (World Bank 2003).

³ The trend in poverty reduction observed during 1998-2002 is robust to the choice of poverty line. In other words, the same storyline emerges, irrespective of the poverty line to be chosen.

1.7 Are These Findings Consistent With Public Perception?

As a way of validating the preceding results, this poverty assessment also explored whether this picture of declining poverty as a result of public efforts to generate growth and redistribution is reflected in public perception. Based on the findings of an informal participatory survey conducted in June 2003, this does not appear to be the case (Box 6). While the qualitative exercise cannot be considered representative and should be followed up by a more systematic participatory poverty assessment, the consistency found in the observations of deteriorating poverty and living conditions cannot be dismissed.

Box 6: Perceptions of Poverty and Inequality

You can conceal anything but poverty. It peeps out of all holes in the public and private aspects of life. Today it is definitely seen in the streets and in the shops. I give out clothing to many people from our Orthodox church community. People immediately take whatever I bring - old clothes of my family members and relatives. What would you say if you put out a box with shoes which you had been wearing for 15 years and all of it disappeared within one hour. Everywhere you can see signs of poverty and worsening of the living standards. (Minsk Oblast)

Both my life and the life of many people has changed for the worse in the last ten years. Prices have gone up, food is less affordable...Redundancy is a common thing everywhere. (Gomel)

I consider myself poor. Being poor means for me when my children work six days a week in our vegetable garden during the summer holidays. I cannot allow them to have two days off because summer and spring are the seasons when we make the most profit. Poverty means not being able to go for at least a week's holiday once a year. It is expensive. The maximum that we can afford is to send our children to spend their time with the granny. Poverty means that being the only woman in the family I try to give the best pieces of the chicken to my husband and the growing boys and myself have to eat the remains off the bones. (Minsk Oblast)

Good food is out of the question, we cannot afford to buy fruits or juices. (Grodno)

Yes, I am poor. Poverty, however, is a relative concept, it depends on how you make a comparison. If I lived without a granddaughter, I would manage, but it is very difficult for two people to live on one pension though we have a subsidiary plot. (Minsk oblast)

Only my sister and myself are still alive. My sister lives in Tatarstan. I cannot afford to call her for two years already. One minute of a distance call costs 2000 BYR. Sending a parcel to her (8 kg) would cost me 53 000 BYR while my pension is 70 000 BYR. (Gomel)

Source: Interviews, June 2003

The preceding analysis already provides some clues as to what might be the basis for this gap in findings.

- *First*, there have indeed been large consumption shocks in Belarus, especially in the initial years after independence.
- *Second*, the household survey data itself indicates that improvements in poverty have been uneven across different regions and groups, and that even the average improvement observed has slowed in recent years. The data confirm that some groups are worse-off today than they were in the mid-1990s despite public efforts to protect them, e.g. pensioner-headed households. The limited enterprise restructuring that has taken place also means that unemployment levels are higher than in the past.
- *Third*, income inequality (albeit starting and staying in a relatively low range) has increased in the 1990s, likely reinforcing a sense of *relative* deprivation or poverty.

- *Fourth*, as the household data analysis also suggests, one way that many households have managed to stay above the poverty line is through the adoption of coping strategies that are less preferred or “inferior”, for example, reliance on cheaper sources of calories, foregoing consumption of leisure (vacations), relying heavily on own-production of food on *dacha*-plots, and so on.
- *Fifth*, while the quantitative measures of poverty above record incomes and consumption levels during the year—which may place the household above the poverty line—they do not capture the strain and vulnerability created by *arrears in payment* of those incomes, which many households suffer. This issue is taken up in the next chapter.
- *Sixth*, the data also suggests that many households have income levels that may be above—but very close to—the poverty lines used here. These households have similar characteristics to households “formally” considered poor, and indeed, with a small income or consumption shock they may easily fall below the poverty line, swelling the ranks of the poor.
- Furthermore, people describe their poverty not only in terms of incomes but also their access to services—such as education, health, heating—as well as quality of these services and value for money. In the following chapters we demonstrate that services are under increasing strain in Belarus and that there are significant shares of the population who face difficulty in affording services, and even greater difficulty in being able to afford *good quality* services.

Actual cost-of-living for the poor may be increasing faster than average inflation. One other reason why people’s perceptions of well-being are less buoyant than the quantitative trends in poverty would suggest, may be related to the measurement of inflation via the CPI, which affects the real value of transfers and wages. In constructing a cost-of-living index to make household consumption levels comparable across regions and over time, this poverty assessment finds significant differences between the official food consumer price index (food CPI) and the cost-of-living deflator developed for this assessment using detailed household consumption data collected by the household survey. Significant differences are registered for the 1997-2001 period, with a systematic bias from 1999 onwards: starting with 1999 the official food CPI seems to underestimate cost-of-living increases compared to the survey-based price indices, by 20% each year. In other countries a similar pattern was found. In the United States, for example, the Cost of Living Adjustment (COLA) used for pension indexation systematically underestimates the actual cost of living of the elderly because of raising health care costs. In Poland, the cost of living for the poor did not follow the CPI because of different inflation rates for food products and their different relative weight in the consumption basket of the poor (World Bank, 2004). This suggests a need to establish a price index for social transfers that incorporates differences due to price collection practices, which may need to include a larger share of transactions from unofficial marketing channels. Since the CPI is used to index various transfer programs and wages, a significant deviation of the CPI measure from actual cost-of-living trends in the country will have implications for the ability of wage earners and social transfer beneficiaries to maintain their living standards at adequate levels.

1.8 Policy Recommendations

Belarus has made tremendous achievements in reducing national poverty without triggering sharp increases in income inequality. This achievement, however, has been uneven over time and for different groups of people despite large redistributive transfers and a strong incomes policy. There are a few policy issues that emerge as a result of the analysis presented in this chapter:

- Given the importance of location in determining poverty status of households, the role of regional or area-based development policies may be examined further, particularly in Brest, Gomel and Mogilev oblasts where poverty is found to be the highest.
- Real wage growth has played a central role in reducing poverty in Belarus. A key policy area for further analysis is to ascertain the medium-to-long term sustainability of the real wage growth and redistributive social transfers which appear to constitute the central pillars of government's strategy to uphold the living standards of the Belarusian population.
- Given the huge GDP share being redistributed via multiple programs, moreover, the government needs to ensure their administrative efficiency and targeting.
- All of the analysis indicates that human capital is a key asset that prevents people from falling into poverty and in ensuring labor market mobility. What else needs to be done to further ensure that families in rural areas and the poorest strata of the population anywhere have equal access to good quality education and health?
- Education is not sufficient to prevent deprivation, unless employment opportunities are available in the economy. Barriers to growth of employment opportunities in the economy, particularly outside Minsk City, need to be identified and addressed.
- The CPI is an important factor determining the value of both wages and social transfers. Further analysis is warranted as to whether the basket of goods and price collection methods used to measure inflation, adequately capture current household behavior – particularly among the poor-- and emerging non-formal marketing structures.

This chapter sets the stage for a fuller discussion of the distributional dimensions of Belarus' policies and programs, undertaken in the subsequent chapters of this poverty assessment.