MOLDOVA POVERTY AND SHARED PROSPERITY UPDATE 2018

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OVERVIEW

Moldova demonstrated strong poverty reduction and shared prosperity over the past 10 years, but progress has slowed down in recent years. Between 2008 and 2016, the poverty headcount, measured at the international $5.5/day threshold, halved from 33 percent of the population to 16.5 percent of the population. Poverty in Moldova is low by the standards of the Lower Middle Income Countries (LMIC) group, of which Moldova is part. During the same period, poverty reduction was accompanied by an impressive reduction in the overall level of inequality, by global comparisons, even though Moldova was starting from a lower level of inequality at the beginning of the period. Yet, poverty reduction has slowed down in recent years, and stalled in 2016 following a recessionary year in 2015, and disposable income growth, while still inclusive, has been much lower in absolute terms during the 2011-2016 period, compared to 2006-2013.

However, the poverty reduction over the past decade has not been associated with an expansion of the middle class. The recent World Bank report on the social contract in Europe notes that the middle class has been expanding over the past decades in transition economies, but this is not the case in Moldova. Using the same definitions, the share of middle class in Moldova in 2016 was roughly the same as in 2007; many people who escaped poverty in the past still remain vulnerable to poverty in the sense of the probability of falling back into poverty in the future.

The asset framework highlights some of these vulnerabilities and difficulties for the expansion of the middle class. shows important areas of non-convergence, despite past poverty reduction. Despite progress in poverty reduction, the earning capacity of the poor and bottom forty percent of the population (B40) groups remains constrained by lower endowments of assets such as education, as well as their less intensive use as observed in differences in employment patterns between poor and non-poor households. Moreover, despite past poverty reduction, there is little visible convergence in recent years on some key dimensions such as educational attainment, or access to key services. B40 households also have more dependents per working age member, and the dependency ratios have increased over time, which is a constraint on the household’s capacity to earn income, in the per capita sense, because of the larger share of young or elderly dependents. Addressing these more structural challenges remains a key factor for the future sustainability of poverty reduction and shared prosperity in Moldova. Those at the bottom of the income distribution also rely more heavily on agricultural income that is volatile, in part because of the low productivity of smallholder agriculture in Moldova.

Population ageing in Moldova presents an additional challenge for future shared prosperity. Remittances and pensions have been the main sources of disposable income growth for the B40 group in the past – a reflection of population ageing, together with social assistance transfers at the bottom of the income distribution. During the 2011-2016 period pensions and remittances together contributed 86 percent of total disposable income growth in the B40 population group. Pensions are also becoming an increasingly important source of income -- among the urban B40, the share of pensions in disposable income increased by 4 percentage points, and among the urban T60 by 5 percentage points between 2011 and 2016. Since 1990 the average age in Moldova has been increasing more rapidly than in the ECA region as a whole, and could reach 47.4 years by 2060, higher than the regional average, or in neighboring countries like Bulgaria and Romania, while the share of elderly could more than double by 2060. The shrinking working age population will put additional strain on the pension system. Emigration remains an important contributor to both the overall population decline and to the population ageing, as are overwhelmingly in the working age group, and many of them are young.
INTRODUCTION

This note provides an update of recent poverty and shared prosperity dynamics, and some of the underlying drivers, as well as introducing the new international poverty thresholds that are currently in use. The purpose of the update is to take advantage of the release of Household Budget Survey (HBS) data for the 2016 survey round. The previous poverty and shared prosperity update, release in 2017, updated poverty and shared prosperity trends up to 2015. The first section discusses the overall progress poverty reduction and shared prosperity up to 2016 – the latest available household budget survey data. Notably, the poverty dynamics are presented, for the first time, using PPP values based on the 2011 ICP exercise, and using the newly adopted Income Class poverty thresholds of $3.2/day and $5.5/day (Box 1). For the purposes of this note, we focus on the $5.5/day threshold, but the section also presents a comparative analysis of poverty dynamics based on old and new thresholds. Because this is the first time when internationally-comparable poverty and shared prosperity statistics for Moldova are presented based on the ICP 2011 PPP conversion factors, and relying on newly defined income-group based thresholds, the introduction has a brief discussion of the reasons behind the change in the World Bank’s poverty methodology used for global poverty monitoring, and the implications of this change for poverty trends over time and for the absolute levels of poverty reported in Moldova. Section 2 discussed the major drivers of shared prosperity during the 2011-2016 period. Section 3 examines the profile of poor and vulnerable populations, their asset endowments, and changes in this profile in recent years.

BOX 1: IMPLICATIONS OF INCOME-GROUP-BASED POVERTY THRESHOLDS WITH NEW PPPS

Until recently, internationally comparable poverty rates for Ukraine and other countries around the globe were measured based on Purchasing Power Parity (PPP) thresholds based on the 2005 round of the International Comparison Program (ICP). The World Bank has now transitioned to the latest 2011 ICP round and the new global poverty line is set at $1.90/day using 2011 prices. This is due to the fact that the new 2011 ICP conversion factors provide a more accurate and up-to-date account of the real cost of living in different countries, vis-à-vis the 2005 ICP conversion factors. The new global threshold is obtained by taking the same national poverty thresholds that were used to define the previous, $1.25/day line, expressed in local currency units in 2005 prices, inflating them to 2011 using national CPIs, and then converting them to USD PPP values using the 2011 PPPs, and taking, as before, a simple average of the resulting values. In Fall 2017, the World Bank also introduced two complementary global poverty lines, at $3.20 and $5.50 per person per day, as a benchmark for countries across the world whose level of development makes the international poverty line less relevant. The introduction of these lines explicitly accounts for the empirical fact that the cost of escaping poverty, and of achieving the same set of capabilities, rises across counties with average incomes. Thus, the new poverty thresholds are obtained by way of partitioning the world’s countries into different income groups, using the World Bank’s classification of low income; lower middle income; upper middle income; and high income, and choosing a poverty line that is typical of each income group, in the same way that the $1.90 line is typical of the poorest countries. The median poverty line for the 32 lower middle income countries is $3.21, and for the 32 upper middle income countries it is $5.48. The resulting changes in poverty rates based on different ICP rounds are small, and trends over time are consistent within each region, including ECA (Figure 1).

The new global lines aim to allow for cross-country comparisons and benchmarking within and across developing regions. The new global lines also aim to help strengthen the WBG’s engagement in middle-income settings, allow countries in different regions to compare themselves to each other, and provide a global poverty line for lower- and upper-middle income countries that is more appropriate for their context.

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1. **Overall Trends in Household Expenditures, Poverty and Inequality**

**Overall Expenditure Dynamics**

The recession of 2015 registered in the space of household welfare with a lag; despite a GDP rebound in 2016, consumption growth was negative, especially in urban areas. Overall, expenditure dynamics were more favorable at the bottom of the welfare distribution, and the overall level of inequality continued to decline. The poverty decline of previous years stalled, but poverty continued becoming less severe, as measured by the poverty gap and the squared poverty gap. Despite these trends, poverty reduction over the past decade was not associated with an expansion of the middle class, in the sense of the population that does not face a significant risk of falling back into poverty; many of the households above the poverty threshold remain in the vulnerable group and could fall back into poverty if faced with negative income shocks.

After a negative economic growth in 2015, GDP growth rebounded in 2016, but consumption growth became negative, highlighting lag effects. The economy registered GDP growth of 4.2 percent yoy in 2016 (Figure 2), following negative performance in 2015 (-0.4 percent yoy), but the recovery was slow, and the economy only grew by 1.3 percent yoy in the first half of 2016. Accompanied by an increase in the unemployment rate in 2015 (Figure 3), despite recovering activity and employment rates, this resulted in household consumption, as registered by the Household Budget Survey data, registering a fall with a lag, in 2016.
The fall in consumption growth was more pronounced in urban areas, and among higher income households. Consumption dynamics were not uniform across geographic areas, or across the welfare distribution. In urban areas consumption rebounded more in 2015 after negative growth in 2014, but have similarly swung back into negative territory in 2016, falling by 5 percent yoy. In rural areas, consumption dynamics have been more stable, and in 2016 consumption growth was only marginally negative. Meanwhile, across the distribution, the swings in consumption growth were more pronounced in the upper part of the welfare distribution -- in the Top 60 percent of the population, or t60 -- in comparison with the bottom 40 percent (b40). Between 2015 and 2016 expenditure growth in the t60 group in urban areas was -5 percent yoy, whereas it was positive for the urban b40 group (1 percent), and in the rural areas expenditures in the b40 group similarly fell only marginally, compared to a 2 percent decline for the rural t60 group.

As the result of more favorable expenditure dynamics at the bottom of the welfare distribution, the overall level of inequality continued to decline. During the period 2008-2016 expenditure growth of the b40 group has generally outpaced that of the t60 group, and similarly, in years in which it was negative, the magnitude of the contraction was more mild in
the b40 group. These distributional changes can also be observed in the dynamics of the overall level of inequality – the Gini index of inequality fell from 0.34 in 2007 to 0.26, or almost by a quarter. A different measure of inequality, the ratio of the expenditure levels of the 90th and 10th percentiles of the distribution has similarly fallen during the same period from 4.7 to 3.1 (Figure 5). In 2015 the Gini index of inequality increased marginally, but it remains very low at 0.22.

**FIGURE 5: DYNAMICS OF INEQUALITY MEASURES (GINI INDEX AND THE P90/P10 RATIO)**

The level of inequality in Moldova remains low by ECA standards, and the decline in inequality over the past decade is impressive when compared to inequality dynamics in other countries. At less than 0.27, Moldova has the 10th lowest recorded level of inequality as measured by the Gini index across all ECA countries (Figure 6, Panel A). For comparison, in Georgia and Russia the Gini index is over 0.37, and in Turkey it is over 0.4. Moreover, if we consider the changes in inequality in Moldova over the 2006-2016 period, the fall in inequality is quite large, by international standards. For instance, Figure 6, Panel B presents a scatterplot of initial inequality levels around 2016, and changes in inequality during the 2006-2016 period. As expected, larger declines in inequality over the past decade (a more positive number on the Y axis) tend to have occurred in countries where the original level of inequality around 2006, as measured by the Gini index, was higher. Across the world, for countries for which data is available, there is a positive relationship between initial inequality and the absolute magnitude of subsequent inequality decline (as suggested by the positively sloping linear fit line). Still, the countries in the ECA region (in orange color), for the most part cluster around the regression line, and have lower levels of inequality (both at the beginning of the period, and at the end, relative to countries in other regions). Moldova, and also Kyrgyzstan, stand out in terms of the magnitude of inequality decline relative to the initial level of inequality. One important caveat, however, is to note that in Moldova, as well as countries like Belarus, Ukraine, and other CIS countries the Gini index is typically computed from data on household expenditures from HBS surveys, whereas among EU Member States inequality indices are computed based on disposable income data from the EU-SILC survey, and inequality levels tend to be higher in the space of incomes (for reasons such as consumption smoothing through borrowing and saving, or greater precision of recording household expenditures when levels of informal employment are high).
FIGURE 6: GINI INDEX, A COMPARATIVE PERSPECTIVE

Panel A: Inequality in ECA, latest data

Panel B: Changes in inequity around the world 2006-2016

Notes: Gini indices of inequality in ECA, as reported in World Bank’s Poverty and Equity data portal.

Notes: The X axis plots the Gini index around 2006 (the value is taken from year 2006 whenever available, and from years 2004-2008 for other countries, with priority given to values closest to 2006); Y axis plots the percentage points reduction between 2006-2016 (negative value means that the Gini index increased), Moldova in red; ECA countries in orange.

Source: Poverty and Equity Data Portal, World Bank.

POVERTY DYNAMICS

The poverty decline stalled in 2015. Despite negative economic growth in 2015, the poverty headcount measured at the international Upper Middle Income poverty threshold of PPP $5.5/day fell from 18.4 percent in 2014 to 16.2 percent in 2015. It should be noted, that Moldova is currently classified by the World Bank as a Lower Middle Income Country, for which the newly adopted poverty threshold is $3.2/day, and at that level the incidence of poverty is below 1 percent in 2016. For this reason, this note looks at the dynamics of poverty based on the Upper Middle Income Country threshold of $5.5/day. As can be seen from Figure 7, the dynamics of poverty over the past decade across different PPP poverty thresholds, and also in comparison with the national poverty rate, have been consistent over the past decade.

FIGURE 7: EVOLUTION OF POVERTY BASED ON INTERNATIONAL AND NATIONAL POVERTY THRESHOLDS: 2000-2016

Source: Moldova Poverty and Equity Data Portal, World Bank.
By ECA standards, poverty in Moldova is relatively high, but low for its income grouping. Based on the Upper Middle Income poverty threshold of $5.5/day, poverty in Moldova is relatively high, at 16.5 percent of the population in 2016, and compared to other countries in the ECCEE group (Belarus and Ukraine) which have poverty rates of less than 1 percent and 6.4 percent respectively. Poverty in Moldova is still less prevalent than in countries like Armenia and Georgia, where it is in excess of 40 percent of population, or Tajikistan and Kyrgyz Republic, where more than half of the country’s population lives on less than $5.5/day, or even in Balkan countries like Kosovo and FYR Macedonia, where poverty incidence is in excess of 20 percent of population.

**FIGURE 8: POVERTY HEADCOUNT AT THE INTERNATIONAL UPPER MIDDLE INCOME COUNTRY THRESHOLD OF $5.5/DAY, ECA REGION**

Source: Poverty and Equity Portal, World Bank.

Moldova does well with respect to poverty incidence against other LMIC countries, and some UMIC countries. While the incidence of poverty in Moldova may be relatively high by ECA standards, if we compare Moldova with other Lower Middle Income Countries (LMIC), the poverty incidence in Moldova is very low (Figure 9). A regression based estimate, given the level of GNI per capita in Moldova in PPP terms would suggest a poverty estimate in excess of 60 percent of population – much higher than the actual poverty headcount of 16.5 percent. Even when compared with Upper Middle Income Countries (UMIC), the incidence of $5.5/day poverty in Moldova is lower than what would have been predicted by its GNI per capita (Figure 10).

**FIGURE 9: POVERTY IN LOWER MIDDLE INCOME COUNTRIES**

**FIGURE 10: POVERTY IN UPPER MIDDLE INCOME COUNTRIES**

Notes: Moldova is presented alongside UMICs for comparison purposes. Source: Povcalnet and WDI, World Bank.
The year 2016 registered the lag effect of the recession on poverty headcount, with the poverty rate being marginally higher at 16.5 percent, despite a rebound in the GDP growth to over 4 percent yoy. At the subnational level, poverty remained stable in rural areas and increased by 0.7 percentage points in urban areas (Figure 11). This can also be observed in regional poverty dynamics, with the more urbanized North, and the capital city registering increases in the poverty rate in 2016 (3 percentage points in the Northern region), whereas in the more rural South poverty continued declining (Figure 12).

**Other measures of poverty demonstrate that poverty became less deep.** Together with the headcount rate, the poverty gap and the squared poverty gap continued declining until 2015, and have remained constant during the 2015-2016 period. This implies that not only the incidence of poverty in Moldova declined over time, but the degree of poverty among those below the poverty line has similarly improved. This is particularly the case in rural areas, where the indicators of poverty depth and severity were both much higher in 2010 and fell much faster during 2010-2016 compared to urban areas. The relatively low depth of poverty can make it easier to make further progress in reducing the poverty headcount in the future, in light of the smaller distance between the welfare levels of poor households and the poverty line. At the same time, this only account for households crossing the poverty threshold from below (i.e. transitioning out of poverty); a high concentration of households just above the poverty threshold can also lead to many households transitioning into poverty in the event of negative income shocks or other adverse events.
The population below the poverty line remains overwhelmingly older, and is becoming older and consisting of households with larger dependency ratios. Some key characteristics of the poverty profile are provided in Annex 1 of this update. Notably, poverty in Moldova remains overwhelmingly rural, with 80 percent of the poor from rural areas in 2016 (1 percentage point higher than in 2011). Poverty is also becoming more concentrated among the non-working age population, this is evident in particular from the higher dependency ratios among the poor, particularly young-age dependency ratios, as compared with non-poor households. While poverty rates declined faster among pensioners during the 2007-2016 period, compared to poverty rates among working age adults, or among children (Figure 14), the result of general population ageing and emigration patterns is resulting in an increase in the share of pensioners in the population below the poverty line overtime (Figure 34); the share of pensioners in the non-poor population increased even more over time. The population below the poverty threshold also continues to have lower educational attainment than the non-poor population, with little visible progress overtime (Figure 36), and continues to have less secure employment, with greater reliance on agricultural self-employment (Figure 38).

**FIGURE 14: EVOLUTION OF POVERTY RATES FOR MAIN AGE GROUPS**

![Graph showing evolution of poverty rates for main age groups.](image)

Source: Staff estimates based on HBS data.

The decline in poverty was not accompanied by an expansion of the middle class, and many of those who escaped poverty remain vulnerable to falling back into poverty. A complementary way of visualizing what happened to the distribution is through the lens of economic class (See Box 2 for definitions). As Figure 15 shows, while the share of population below the poverty threshold of $5.5/day has been declining steadily over the past decade, the share of the middle class (those in the $11-28 group, as consistent with the recent Flagship report the Social Contract in the ECA region) has remained stable at just below a quarter of the population. The key transition over the past decade has been from the group below the poverty threshold to the group that is above the poverty threshold, but still vulnerable to falling below the poverty threshold with a probability exceeding 5 percent. Thus, three quarters of the population of Moldova were either poor or vulnerable to falling into poverty in 2009, and three quarters of population still remain so in 2016. Furthermore, it can be seen that while poverty has remained broadly stable despite the recession in 2015, there was a notable increase in the share of the vulnerable population between 2014 and 2016 (5 percentage points).
FIGURE 15: THE EVOLUTION OF ECONOMIC CLASS OVER TIME IN MOLDOVA

Source: Poverty and Equity Data Portal, World Bank.

BOX 2: LOOKING AT THE INCOME DISTRIBUTION THROUGH THE LENS OF ECONOMIC CLASS

The growing attention to inequality and to the role that the middle class can play in growth and development process, have led to a renewed focus on the concept of economic class. Partitioning the income distribution into several economic classes has the advantage of broadening distributional concerns from the key distinction between poor and non-poor, while reflecting concerns for mobility and economic security which are voiced in opinion surveys.

One of the ways to define the economic classes, and one explored in the recent ECA Flagship Report on the Social Contract (World Bank, 2018) is to look at the middle class in absolute terms, which means defining a threshold that is fixed in purchasing power parity terms, and which thus allows comparisons of individuals with the same levels of welfare across countries. The absolute thresholds in that study are based on the vulnerability approach based on the predicted probability of poverty (here, 5 percent probability) based on panel data, over a four-year period, and calculated on the basis of observed household characteristics, including household’s assets. This approach results in the following income classes:

- **Poor**, defined as those living below PPP US$5.5/day based on 2011 ICP.
- **Vulnerable**, defined as those living of USD 5.5 – 11/day.
- **Middle class**, defined as those living on USD 11 – 28/day.
- **Upper class**, defined as those living on more than USD 28/day.


2. MAIN DRIVERS OF SHARED PROSPERITY IN 2011-2016

Growth patterns in Moldova remained inclusive, but the rate of per capita expenditure growth slowed down in recent years. For the most recent window (2011-2016) the growth of per capita expenditures in the B40 group slowed down to less than 3 percent on an annualized basis. As in previous years, the main sources of disposable income growth, particularly at the bottom of the income distribution, were pensions and remittances. Moreover, pensions are increasing in importance over time as a source in income, consistent with the changing age profile of the population. Combined with the continued outmigration of primarily working age population, this presents challenges for shared prosperity in the future, as many households derive livelihoods from income sources that are difficult to sustain in the existing demographic and economic environment.
The growth of expenditures of the bottom 40 percent has slowed down over time in absolute terms, but the shared prosperity premium remains positive. During the 2006-2013 window per capita expenditures of the bottom 40 percent group were growing at close to 5 percent on an annualized basis – better than the majority of ECA countries which were much more affected by the earlier financial crisis. For the most recent window (2011-2016) the growth of per capita expenditures in the B40 group slowed down to less than 3 percent on an annualized basis. At the same time, the overall growth rate for the same period in Moldova was just above zero, such that welfare at the bottom of the distribution still grew at a faster pace, despite the overall absolute slow down (Figure 16).

FIGURE 16: SHARED PROSPERITY IN ECA COUNTRIES OVER TIME

Pensions and remittances remain the main contributors to disposable income growth in both the B40 and T60 groups. The World Bank poverty assessment (World Bank, 2016)\(^2\) noted the importance of both pensions and remittances as key contributors to overall income growth. This continues to be the case in Moldova – the Shapley decomposition of disposable income growth during the 2011-2016 period shows that pensions and remittances together contributed 86 percent of total disposable income growth in the B40 population group. In the T60 group all of the growth was on account of pensions and remittances, as other income sources registered a decline during this period. Both pensions and remittances grew faster in rural areas (and so did overall disposable incomes), although it should be noted that in rural areas pensions and remittances grew faster among the T60 population, whereas in urban areas B40 experience faster growth rates of these income components in relative terms, even though absolute annualized growth rates were lower than in rural areas. One notable caveat about the Shapley decomposition has to do with the fact that it is based on growth rates of disposable incomes, whereas the headline shared prosperity figures are based on growth rates of household expenditures. Figure 17, Panel A plots the comparative dynamics of growth rates of expenditures and incomes for the B40 and T60 groups for the 2007-2016 period. We can observe that the growth rates of incomes and expenditures in the B40 group are very tightly correlated throughout the whole period. The dynamics of incomes and expenditures in the T60 group also display similar patterns throughout the period, with incomes growing at a somewhat higher pace. The congruence between the dynamics of consumption and income provides additional confidence in the usefulness of the Shapley decomposition in explaining not only the dynamics of income growth, but of expenditures as well.

Social assistance supported disposable income growth at the bottom of the distribution. While the main sources of income growth were pensions and remittances throughout the welfare distribution, specifically for the population in the bottom quintile social assistance also contributed one fifth of the total disposable income growth, whereas for the 2nd-5th quintiles the contribution of social assistance was negligible (Figure 18). As discussed in the 2016 poverty assessment (World Bank, 2016), this is consistent with design of the SA system – the main targeted programs (Ajutorul Social) and the heating allowance, which aim to aid households most in need, are relatively well targeted but their coverage is not wide.

The main sources of disposable income growth are a reflection of household income composition, which registered an increase in the importance of remittances, especially for the B40 group, and a fall in the importance of labor income. Rural households, both in the B40 and in the T60 groups, continue to depend much more heavily on agricultural income compared to urban households, where the contribution of agricultural income to overall household livelihoods remains marginal. The high share of agricultural incomes (19 percent of total for rural B40 in 2016) make their incomes more volatile and vulnerable to external factors such as weather conditions. Another notable difference between 2011 and 2016 is the increase in the share of remittances among the rural B40 – among the urban B40 the share of pensions increased from 9
percent to 11 percent on average during 2011-2016, and among the rural B40 from 14 percent to 21 percent of total. The contribution of labor income to household livelihoods fell by 5 percentage points among the urban B40 (from 55 percent to 50 percent of total), and by 2 percentage points among the rural B40 (from 33 percent to 31 percent).

Pensions are becoming an increasingly important source of income, consistent with the changing profile of the population. Among the urban B40, the share of pensions in disposable income increased by 4 percentage points from 23 percent to 27 percent, and among the urban T60 by 5 percentage points (from 11 percent to 16 percent). In rural areas the importance of pensions in household livelihoods also increase in the upper half of the (rural) distribution. The increasing share of pensions is in part a reflection of population ageing – the age pyramids for 2011 and 2016 show a visible shift of the population up in the age distribution. Since 1990 the average age in Moldova has been increasing more rapidly than in the ECA region as a whole, and could reach 47.4 years by 2060, higher than the regional average, or in neighboring
countries like Bulgaria and Romania, while the share of elderly could more than double by 2060, reaching 27 percent (World Bank, 2017). Emigration remains an important contributor to both the overall population decline and to the population ageing, as are overwhelmingly in the working age group, and many of them are young.


![Chart showing changes in population age profile between 2011 and 2016](chart.png)

Source: Staff estimates based on HBS data.

### 3. SUSTAINING SHARED PROSPERITY: AN ASSETS PERSPECTIVE

The population in the two quintiles in Moldova differs significantly from top 60 population in several key respects related to their income-earning capacity. In particular, they have higher dependency ratios, lower levels of education, and more insecure employment among those who work. Being overwhelmingly rural, they also continue to have lower access to key services. Worryingly, there is little observable convergence over the past 5 years across many of these dimensions.

The sustainability of shared prosperity over time depends on fostering the earning capacity of households at the lower end of the income distribution. Moldova has made considerable progress in reducing poverty and sustaining inclusive growth over the past decade. However, as the previous sections noted, poverty reduction slowed down in recent years, and income growth, while still stronger for low income households, has been much lower in absolute terms in recent years. Add to this the challenges of an aging population, and this raises questions about the future sustainability of shared prosperity. In order to get some insight into this question, this section, guided in part by the recently proposed asset framework (see Box 3), looks at whether some structural disadvantages of low income households related to their ability to generate incomes have been improving over time.

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BOX 3: EVALUATING SHARED PROSPERITY: THE ASSET FRAMEWORK

Bussolo and Lopez-Calva (2014) propose a unified framework for evaluating shared prosperity in the Europe and Central Asia region (and elsewhere). In this framework, called the *asset framework*, a household’s ability to earn an income is determined a set of assets (human, social, financial, physical), and how these assets are used. More specifically, the following components can be identified:

- **Assets**: The capacity of households to contribute productively to overall growth depends on the stock assets that they own (e.g. human capital such as education and health, land, financial assets).
- **Intensity of use**: It depends on the use of those assets to produce income (e.g. education and health used for employment as a way to generate labor income).
- **Prices**: It also depends on the returns to the use of those assets (e.g. wages, rental income).
- **Transfers**: It is complement by “non-market income” from both from private (e.g remittances) and public (e.g. social assistance) sources.


The B40 population remains primarily rural, and as such, continues to have lower access to key services. Almost three quarters of the B40 population were located in rural areas, and only 10 percent were in big cities. In comparison, only 45 percent of the T60 population were rural, and a third came from big cities according to data from 2016. This implies a limited access to markets, jobs and modern services. Indeed, access to key services such as water, sewerage, hot water and central gas remains lower for the B40 group, in comparison with the T60 population. More importantly, there is only partial convergence in access to services over time, mostly related to improvements in access to water and sewerage. Also due to the higher concentration in rural areas, the B40 and the poor are more likely, on average, to have land plots (the share of population who have any land in property), but the size of the land plots is not higher, and in per capita terms, the amount of land used for agriculture is lower on average for the B40 group than for the T60. The recent assessment of Moldovan smallholder agriculture (World Bank, 2016b) notes that for smallholders it is more difficult to commercialize and also to overcome the various existing market failures, such that the B40 face greater challenges with respect to subsistence agriculture becoming more important and viable livelihood source in the future.

**FIGURE 22: SPATIAL DISTRIBUTION OF B40 AND T60 POPULATIONS**

**FIGURE 23: ACCESS TO KEY SERVICES**

*Source: World Bank staff calculations based on Moldova HBS*

**B40 households have more dependents per working age member, and the dependency ratios have increased.** The household’s ability to earn an income depends crucially on the share of household members who are, in principle, able to earn an income. In other words, households with a higher share of working age members, and lower shares of dependents (either children or elderly) would have a greater ability to earn incomes, in the per capita sense, if those of working age are able to secure paid employment. The survey data reveal that B40 household are characterized by lower shares of

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working age adults, compared to T60 group, and by higher young-age dependency ratios (0.79 in B40 in 2016, compared to 0.42 for the T60 group). Moreover, while the young-age dependency ratio declined in the T60 group between 2011 and 2016, for the B40 population the young-age dependency ratio increased during the same period, resulting in a divergence between these two groups during 2011 and 2016 (Figure 25), and presenting a challenge for inclusive growth, at least in the “market income space”, using CEQ terminology.

The poor and B40 populations have much lower levels of education than the T60 group. Although the average levels of education in Moldova (and other post-soviet countries) are quite high (only 1 percent of those 12 years of age and older report not having primary education); the level of education varies across the distribution. The B40 and poor populations tend to have primary or secondary education levels, while the T60 and non-poor populations more commonly report tertiary education. The share of people with university degrees in the T60 group is almost three times higher than among the B40. Moreover, there is no obvious convergence in education levels between B40 and T60 groups during the 2011-2016 period. This lower educational endowment continues to constrain the competitiveness of the B40 group on the labor market.

Source: World Bank staff calculations based on Moldova HBS

Source: World Bank staff calculations based on Moldova HBS

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**FIGURE 24. SHARE OF POPULATION BY AGE GROUPS, PERCENT**

**FIGURE 25. DEPENDENCY RATIO**

**FIGURE 26. SHARE OF POPULATION BY LEVEL OF EDUCATION (22+), PERCENT**

Source: World Bank staff calculations based on Moldova HBS
Self-reported health assessments of B40 and T60 are similar, but a larger share of the former do not have health insurance. Health is an important asset, alongside education, as poor health can affect one’s productivity, or one’s chances of employment altogether. According to HBS survey data those in the bottom two quintiles have similar self-assessments of their health as those in the T60 group (in fact, the share of B40 who claim their health to be good is somewhat higher in 2016 compared to the T60 population (Figure 27)), but at the same time, a quarter of those in the B40 report either having no health insurance or not being able to say if they have health insurance (17 percent in the T60 group), such that for a larger share of B40 their welfare is vulnerable to health shocks that may involve non-trivial out-of-pocket payments.

**FIGURE 27: SHARE OF POPULATION BY HEALTH STATUS, PERCENT**

Source: World Bank staff calculations based on Moldova HBS

On account of lower educational attainment, B40 and poor households have fewer opportunities in the labor market, and worse outcomes. The structure of employment is quite different for people at the top and the bottom of the distribution, although the aggregate employment and unemployment rates are similar. B40 and poor households are less often employed and more often self-employed, especially in the agricultural sector, which is associated with lower quality jobs (Figure 29, Figure 30). People employed in agriculture are more vulnerable to various shocks, including bad harvests and volatility of food prices. This is relevant not only for rural households, but also for urban households.

**FIGURE 29. SHARE OF POPULATION BY TYPE OF EMPLOYMENT, RURAL**

Source: World Bank staff calculations based on Moldova HBS

**FIGURE 30. SHARE OF POPULATION BY TYPE OF EMPLOYMENT, URBAN**

Source: World Bank staff calculations based on Moldova HBS
Objective deprivation, both monetary and non-monetary, is also reflected in self-reported well-being measures. Only 7 percent of those in B40 consider the financial situation of their household to be good or very good, compared to 14 percent in the T60 (and only 5 percent among the poor). Almost a quarter of the B40, and almost a third of the poor consider their household’s financial situation to be poor or very poor in 2016. There is some improvement in the perceptions of financial situation between 2011 and 2016, consistent with the fall in poverty during the same period.

**CONCLUSION**

Moldova demonstrated strong poverty reduction and shared prosperity over the past 10 years. However, poverty reduction has slowed down in recent years, and stalled in 2016 following a recessionary year in 2015, and disposable income growth, while still inclusive, has been much lower in absolute terms during the 2011-2016 period, compared to 2006-2013. Further progress in poverty reduction will be challenging, in part because inequality is already low. Furthermore, the poverty reduction over the past decade has not been associated with an expansion of the middle class – many people who escaped poverty in the past still remain vulnerable to poverty in the sense of the probability of falling back into poverty in the future. Population ageing in Moldova presents an additional challenge for future shared prosperity, as main sources of disposable income growth for the B40 group in the past have been remittances and pensions, as well as social assistance transfers at the bottom of the income distribution. The shrinking working age population (in part due to continued emigration) will put additional strain on the pension system. Those at the bottom of the income distribution also rely more heavily on agricultural income that is volatile, in part because of the low productivity of smallholder agriculture in Moldova. Finally, the asset framework highlights the fact that despite progress in poverty reduction, the earning capacity of the poor and B40 groups remains constrained by lower asset endowments and their less intensive use, with little visible convergence in recent years. Addressing these more structural challenges remains a key factor for the future sustainability of poverty reduction and shared prosperity in Moldova.

Source: World Bank staff calculations based on Moldova HBS.
ANNEX 1: MAIN CHARACTERISTICS OF THE POVERTY PROFILE

FIGURE 33: GEOGRAPHIC COMPOSITION OF POOR AND NON-POOR POPULATIONS

FIGURE 34: AGE COMPOSITION OF POOR/NON-POOR POPULATIONS

FIGURE 35: HOUSEHOLD STRUCTURES OF POOR AND NON-POOR POPULATIONS

FIGURE 36: EDUCATIONAL STRUCTURE OF POOR AND NON-POOR POPULATIONS

FIGURE 37: DEPENDENCY RATIOS AMONG POOR AND NON-POOR POPULATIONS

FIGURE 38: EMPLOYMENT TYPE COMPOSITION OF POOR AND NON-POOR POPULATIONS

Source: Staff estimates based on HBS data.