Economic Mobility in Europe and Central Asia

Exploring Patterns and Uncovering Puzzles

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Abstract

Substantial upward economic mobility in the majority of countries in Europe and Central Asia in the 2000s translated into achievements in reducing poverty and boosting shared prosperity. Although factors associated with upward mobility vary significantly by country, education and jobs undoubtedly play an important role in lifting households out of poverty and helping them to improve their living standards. This study finds there is a puzzling mismatch between the objective economic mobility patterns observed in survey data and people's subjective perception of their mobility. A majority of people in the region perceives they

are worse off economically than in the past and voice frustration over limited opportunities to improve their lives. This disconnect is partly explained by increased inequality in the region, an increasing sense of unfairness in the processes to move up, and a more marked sense of insecurity and vulnerability. Although the region has been making headway in lifting households out of poverty, ensuring sustainable progress toward poverty reduction and shared prosperity requires policies that promote human capital accumulation, foster job creation, and offer adequate protection to improve households' resilience to shocks.

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Economic Mobility in Europe and Central Asia: Exploring Patterns and Uncovering Puzzles¹

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Introduction

The Europe and Central Asia region has achieved substantial poverty reduction and economic expansion in the past decade, but many challenges remain for sustained economic growth – particularly following the crisis - and eliminating poverty, expanding the middle class, and promoting inclusion. As millions of people remain in extreme poverty in the region (around 16 million in 2011 with the extreme poverty regional threshold²) and with economic growth prospects less robust than in pre-crisis years in many countries, it is key to better understand what are the pathways that allow individuals and households to improve their living standards over time.

The adoption of the World Bank twin goals adds to policy makers’ increased attention to inclusive growth. Specifically, the institution has committed to: (i) ending extreme global poverty, by reducing the percentage of people living on less than \$1.25 a day globally to 3 percent by 2030, and (ii) promoting shared prosperity, by fostering income growth of the bottom 40 percent of the population. The new goal on shared prosperity, in particular, emphasizes the need not only for boosting economic growth, but also ensuring that growth benefits all segments of the population. In other words, it calls for “expanding the size of the pie continuously and sharing it in such a way that the welfare of those at the lower end of the income distribution rises as quickly as possible” (WBG Strategy, 2013). Both the goal and the indicator are, therefore, relevant to countries across all income-levels and as they prosper over time.

Economic mobility analysis can inform policy making on the factors that contribute to lifting people out of poverty, reducing their vulnerability and enabling them to benefit from opportunities as economies prosper, all in line with the achievement of the twin goals of the World Bank. Economic mobility - the ability of individuals to improve their living standards over time or across generations - is central to better understanding the dynamic processes that set countries in the path towards improving living standards for all (see Box 1). Such an analysis can inform policy making by exploring the factors associated with movements out of poverty and into the middle class within and across generations, as well as the characteristics of households and individuals that remain stuck or fall behind. A policy agenda shaped by economic mobility work can contribute to reducing poverty and inequality of opportunities, as well as to ensuring the social sustainability of the gains.

A research agenda on economic mobility is particularly relevant for Europe and Central Asia. The region has undergone deep and unique socioeconomic transformations in the past decades and remains highly heterogeneous. Furthermore, it was the most affected by the economic crisis of 2009 and one in which challenges remain to eliminate poverty and, particularly, promote shared prosperity.

From FY12 to FY14, the poverty team in the Europe and Central Asia region of the World Bank implemented an extensive regional work program on economic mobility to understand the patterns and associated factors of mobility across countries – within and across generations – and whether these patterns are socially sustainable. Work was organized around two inter-related topics: analysis of economic mobility patterns and their drivers in ECA during the 2000s; analysis of subjective perceptions

² Using the \$2.5/day regional poverty line. With the \$5/day regional poverty line, around 69 million people would be considered poor. These are World Bank estimates for 26 countries in developing Europe and Central Asia for 2011, including observed and projected poverty numbers.

of economic mobility and investigation of apparent disconnect between actual and subjective patterns of economic mobility, and formulation. Results in both areas are based on both secondary quantitative data (from country-specific household surveys for multiple years and the Life-in-Transition Survey 2006 and 2010) and primary qualitative information collected for this study. See Box 2 for concepts and definitions of economic mobility used for the analysis.

Box 1. Economic mobility and the World Bank Twin Goals

Although the World Bank indicator on shared prosperity is “anonymous”, meaning that it focuses on whoever is in the bottom 40 percent at each moment in time, analysis on economic mobility provides relevant information for policymakers on poverty reduction and on whether and how welfare gains have been achieved by individuals in the region. Whether a mobility analysis focuses on how many individuals or households are able to improve their wellbeing over time (intra-generational mobility) or how much does a child’s economic status depend on that of her parents (inter-generational mobility, see Box 2 for definitions), it can help identify patterns, act upon the pathways that help people “move up”, and shed light on whether these pathways are sustainable or not in the long-term.

Indeed, a lot can be said on the twin goals and their sustainability through an economic mobility lens: are observed poverty numbers masking significant churning? In other words, do households that escape poverty remain vulnerable to setbacks, while others escape? Are some households systematically stuck? What characteristics do those households have that are different from those that are better-off? In sum, economic mobility analyses provide a dynamic view of trends in reducing poverty and promoting shared prosperity, and can contribute to the discussion on how to increase opportunities and channels for prosperity to be shared.

One way to think about these potential factors is through disentangling the elements which determine the capacity of individuals and households to generate income: does the individual own assets, such as human capital, land or savings? Does the individual use those assets to produce income by, for instance, participating in the labor market or putting land to productive use? What return does the individual receive for these assets either through wages, rental income or interest rates? Does the individual or household receive public or private transfers to supplement market income? Are opportunities to succeed equal across groups in society, or are there factors that make the playing field uneven, systematically leaving some people out of the game? As the term ‘shared prosperity’ suggests, these processes are dynamic ones.

Box 2. Key mobility concepts

The concept of mobility can be interpreted and studied from many different perspectives. In general, the concept of economic mobility may be understood as the transformation of an initial “non-anonymous” welfare distribution—income or consumption, for instance—into another. However, even within mobility as an economic notion, several concepts refer to mobility in very distinct ways. Following the taxonomy of concepts of mobility described in Fields (2008), we can measure economic mobility of, for

example, income, as (i) *movement between two distributions*, either movements in income levels (gross or net movements, or non-directional and directional movements, respectively), in income shares or in rankings (position), (ii) *mobility as equalizer* of long term incomes levels; and (iii) *as time independence*, looking at how the final welfare distribution is predetermined by the initial one (see for example Cuesta, Ñopo and Pizzolitto, 2011; Ferreira and Gignoux, 2011). In addition, measures of mobility can be studied in the intra- or inter-generational domain, depending on whether we are focusing on distributions of welfare for a parent and a child (inter-generational mobility) or for the same individual in two time periods (intra-generational mobility).

This work will focus on two main concepts of mobility. First, the work studies intra-generational mobility by analyzing consumption movements for households over time, particularly net changes and positional movements along the distribution. Directional mobility (net changes) captures movements from upwards changes in consumption (considered “good” mobility), as well as downward changes. This concept of mobility allows for the construction of poverty transition matrices that can be associated with other relevant and interrelated household or individual dynamics, such as labor market profiles. In addition, the analysis goes beyond a poverty focus to provide insights into the complete welfare distribution, particularly movements into the middle class. As more people graduate out of poverty, research on the middle class, its trends and characteristics has been growing in recent years, particularly for regions with a large number of middle income countries such as Latin America and the Caribbean (e.g., Lopez-Calva and Ortiz-Juarez, 2011; Lopez-Calva, Rigolini and Torche, 2011). Data availability is one of the main limitations of studying intra-generational mobility. Recently the methodology developed by Dang et al. (2014) is increasingly being used to address data challenges. This methodology, adopted for this research agenda, is based on a variant of small-area estimation techniques, which creates synthetic panels out of repeated cross-sectional data (see also Cruces et al. 2011).

Second, the work also includes inter-generational mobility under the concept of mobility as time independence. The more independent these two distributions are from one another, the more mobile the society is, as children’s outcomes are not largely determined by circumstances out of their control, such as their parents’ educational attainment or earnings. Mobility as time independence is commonly assessed by either looking at the coefficient (β) of a regression of a child’s outcome on parental outcome, where $(1-\beta)$ would be a measure of mobility, or at the R-squared of such a regression.

To study economic mobility in ECA four economic classes are defined. The thresholds that divide the groups follow regionally standardized concepts: individuals living on less than \$2.5 PPP per day (the regional extreme poverty line); individuals living on US\$2.5 to \$5 PPP per day (the regional moderate poverty line); individuals living on \$5 to \$10 PPP per day and individuals living with \$10 PPP or more per day. Following regional standards and income-based mobility work done in Latin America, another middle-income region, households with consumption levels between \$5 and \$10 are considered to be vulnerable to falling back into poverty, and those over \$10 as the middle class.

The choice of the US\$2.5 to \$5 PPP per day cut-offs for extreme and moderate poverty reflects the current practice in the ECA region of the World Bank where these two standardized poverty lines are used in all countries in the region, allowing for comparisons across countries. For the \$10/day middle

class cut-off the choice is not arbitrary, but rather draws from a growing body of work by World Bank teams and others. For instance, this cut-off has been used in Latin America and the Caribbean (Ferreira et al, 2013), and increasingly in other regions, to identify the middle class (in middle income countries). This was also the value chosen for the discussion on middle class societies during the MIC Forum at the 2012 Annual Meetings. Furthermore, tests carried out for Russia and Moldova (countries at opposite sides of the income classification spectrum in ECA) using the methodology developed by Lopez-Calva and Ortiz (2011) suggests that a \$10/day threshold would provide a mid-point cut-off that would be relevant to and allow comparisons across all countries in the region (and to other middle income countries). Although the threshold does not have an upper bound – separating the middle class to the rich – this is less of a concern as households surveys typically do not capture the higher parts of the income distribution.

This overview paper summarizes the key findings that emerge from this research program, while details on the data and methodology underlying the analysis as well as a more in-depth discussion of the results and policy implications can be found in the different background papers and analysis. A brief panoramic of the different background papers prepared under the task is provided below, details on methods and data used are provided in Annex 1:

- (i) **Regional patterns of economic mobility in ECA in the 2000s.** This analysis focuses on intra-generational mobility - tracking households' changes in welfare over time - and its associated factors. The paper explores 34 household surveys for 17 different countries during the pre-crisis period with available data, and the post-crisis period for a subset of countries with recent available surveys (Annex Table A1). Given the usual lack of panel data across countries, the work employs the synthetic panel methodology of Dang et al. (2014) that relies on using cross-sectional data and imputation methods to study mobility patterns over time. More details on key findings can be found in *Dávalos, Maria E., Moritz Meyer and Carolina Sanchez Páramo (2013). "Regional patterns of economic mobility in ECA in the 2000s" (power point presentation with key findings).*
- (ii) **Case studies: Moldova and Russia.** As an extension to the regional work, more in-depth analysis on the factors associated with upward economic mobility was conducted for two countries in the region: Moldova and Russia. The choice of countries was motivated by the fact that both countries experienced significant economic mobility during the 2000s, as well as by data availability (i.e. existence of panel data). While both case studies examine overall patterns of mobility and their drivers, examining commonalities and differences across countries, the discussion for Moldova, a low-income country, focuses on transitions in and out of poverty and the discussion for Russia, a high-middle income country focuses in transitions in and out of the middle class. As with the regional analysis, the analysis for Moldova is based on the synthetic panel methodology of Dang et al. (2014) using cross-sectional samples from the Moldova Household Budget Survey for 1999-2004 and 2006-2011. Using this methodology allows for a longer-term view of economic mobility patterns in the country, which would be limited to shorter periods with the available panels. As part of the work and as an additional contribution to the literature on this method, the methodology

was validated for the case of Moldova using the available Household Budget Survey (HBS) panel data (results in Annex 2). The analysis for Russia is based on the panel sample of the Russia Living Monitoring Survey for 2001-2010 and was carried out as part of the “Social Mobility and Opportunities” program for Russia. More details for both countries can be found in *Dávalos, Maria E. and Moritz Meyer (2013). “Moldova: A Story of Upward Economic Mobility”* and *Meyer, Moritz and Carolina Sanchez Páramo (2014). “Economic Mobility and the Emergence of the Middle Class in Russia”*.

- (iii) **Regional patterns of subjective economic mobility:** using the Life in Transition Surveys for 2006 and 2010 (EBRD and World Bank), the analysis describes subjective patterns of mobility covering all countries in the region based on retrospective questions about positioning in a ten-step ladder in the present and in 1989. Using multivariate regression analysis, the paper also explores the factors associated with these perceptions going beyond demographics and income, to include issues of fairness, trust and inequality. More details can be found in the background paper *Cancho, Cesar, Maria E. Dávalos, and Carolina Sanchez Páramo (2013). “Perceptions of Economic Mobility in ECA: Looking into the Disconnect between Objective and Subjective Economic Mobility”*.
- (iv) **Qualitative analysis on economic mobility:** Qualitative surveys were conducted in 37 communities across eight ECA countries (Georgia, Kazakhstan, Kosovo, Kyrgyz Republic, FYR Macedonia, Serbia, Tajikistan, and Turkey), in coordination between HD and PREM and financially supported by various cross-sectoral programs, including this program on economic mobility. This work captures men and women’s perceptions of mobility and of key associated factors, as explored in particular during focus group discussions. Preliminary findings are presented here, although systematic coding of the data will be conducted in the coming months with alternative sources of funding. These preliminary findings are compiled in the draft paper *Demarchi, Giorgia, and Patti Petesch (2013) “Economic Mobility in ECA - Insights from Qualitative Analysis”*. National reports for each country are also available for further details.

Four key messages emerge from this research. First, there has been substantial upward economic mobility in the majority of countries in ECA in the 2000s, translated into achievements in reducing poverty and boosting shared prosperity; however, many households remain vulnerable to setbacks jeopardizing the sustainability of the gains. Second, factors associated with upward mobility vary significantly by country, but education and jobs undoubtedly play an important role in lifting households out of poverty and helping them improve their living standards. More in-depth analysis for Moldova, a low-income country in the region, suggests that the large upward mobility experienced by the country in the 2000s, was linked to households with higher educational achievement, labor market transitions into manufacturing and services sectors and, in the crisis period in particular, to remittances and pensions. A similar story of upward movements linked to factors such as higher education and stronger labor market engagement is found in Russia, with the difference – related to its higher economic development compared to Moldova - of a very rapid expansion of the middle class in the 2000s. Third, there is a puzzling mismatch between objective economic mobility patterns observed in the survey data, and

people's perceptions of economic mobility and improvements in their living conditions. Specifically, a majority of people in most countries in ECA perceive that they are worse off than pre-transition – expressed even in a boom year as 2006 was – and voice frustration over the limited opportunities to improve their lives. Fourth, the disconnect between objective and subjective economic mobility is partly explained by increased inequality in the region, an increasing sense of unfairness in the processes to “move up” and a more marked sense of insecurity and vulnerability. These findings suggest that, although the region has been making headway in lifting households out of poverty, ensuring sustainable progress towards the twin goals requires policies that improve governance, increase government transparency and accountability, tackle inequalities of access to opportunities through improved access to quality services and institutions, and offer adequate protection to improve households' resilience to shocks.

The rest of the paper is organized as follows. The next section provides an overview of regional patterns of economic mobility and its associated factors, followed by a closer look to the cases of Moldova and Russia. A discussion follows on the disconnect between objective and subjective mobility patterns, exploring some of the hypotheses behind this mismatch. The paper ends with brief conclusions and broad policy areas.

The 2000s: Nearly a full decade of high upward economic mobility in ECA

Robust economic growth and substantial gains in poverty reduction accompanied the dawn of the twenty-first century in ECA. Transition countries in the region grew at around 6 percent, on average, from 2000 up to the 2008 global financial crisis; overall, the majority of countries experienced strong growth (Figure 1). Reductions in poverty in the 2000s have been impressive, with extreme and moderate poverty declining significantly (Figure 2): extreme regional poverty declined from 17 percent to 4 percent between 2000 and 2012, and moderate poverty from 33 percent to 14 percent over the same period. At the same time, the middle class has expanded in the region going from 17 percent in 2000 to 46 percent in 2012.

Performance on shared prosperity was overall remarkable as well, with the majority of countries in the region experiencing high growth rates for the bottom 40 percent (Figure 3). The global crisis of 2008 hit ECA harshly— GDP per capita in the region shrank by 5.5 percent in 2009 (WDI)—exposing underlying structural vulnerabilities in some countries and slowing down poverty reduction.

Figure 1. GDP growth in the 2000s across the region

Source: ECA Team for Statistical Development's calculations based on WDI data.

Figure 2. Poverty rate changes, at regional poverty lines

Source: World Bank staff calculations using regional ECAPOV data, population weighted averages.

Figure 3. Shared prosperity indicator in ECA, relevant periods per country

Source: World Bank staff calculations using regional ECAPOV data. Notes: Periods vary by country depending on data availability and World Bank criteria for the shared prosperity indicator. See Annex Table A2.

Compared to other regions, the reduction in poverty observed in ECA has also been considerable. GDP-poverty elasticities in an interval of strong economic growth as it was between 2000 and 2008 are estimated at 2.6³. In contrast, in the Latin America and Caribbean (LAC) region, this estimate reaches only 1.4. For the 2008-2010 interval, when the global financial crisis hit the ECA region, the elasticities obtained are smaller, but still larger in the ECA region (1.5) than in LAC (0.7). Even when the initial conditions in each region differ considerably, the overall intuition resulting from this analysis is that growth in ECA has lift a large amount of people out of poverty, in a similar or even more inclusive way than in LAC.

In line with these findings, poverty reduction in the region was mainly driven by changes in mean welfare, i.e. by a complete shift of the income/consumption distributions, rather than changes in the inequality levels in the region. A Datt-Ravallion decomposition on the sources of poverty changes between 2000 and 2008 shows that for 15 countries in the region (which include the biggest in population: Russia, Turkey, Ukraine and Poland) the fall in poverty is associated almost entirely with income growth (99%), leaving only a marginal effect of redistribution (1%). This aggregate effect

³ The econometric estimation followed the specification suggested by Ravallion and Chen (1997).

certainly hides some disparities among countries, but still the main message holds across countries, that the observed poverty reduction is driven mostly by growth rather than by redistribution.

Behind these poverty and shared prosperity trends lie upward economic mobility patterns in ECA.

Specifically, the observed trends in the twin goals mask relevant underlying dynamics. For poverty, for example, the above trends show the net of movements in and out of poverty; as such, they do not reveal churning and vulnerability that is exposed when studying economic mobility. Similarly, for the shared prosperity indicator, an analysis on economic mobility can show whether a certain achievement reflects an economy in which everyone is growing along with overall economic growth, or one in which some see their welfare increase very fast while others are lag behind. In sum, an economic mobility lens uncovers these hidden patterns lost in aggregate figures and gives way to relevant policy implications through identifying the associated factors of these patterns such as demographics, education and labor markets. The following section explores economic mobility patterns, as well as the factors associated with mobility across countries in the region. The analysis relies on the synthetic panel methodology of Dang et al. (2014), with full methodological details in Box 3.

Box 3. The synthetic panel methodology: description and application to this regional work

Economic mobility has gained relevance in academic and wider policy discussion over the last years.

Despite significant reductions of economic poverty during the early 2000s in most countries in Europe and Central Asia, few studies currently exist on this process. Did poverty rates decrease as poverty reduction was a one- way street with households predominantly escaping poverty? Or is there significant churning with large numbers of households falling back into poverty offsetting transitions out of poverty? From a policy perspective it makes a large difference if a country which reduced poverty by 5 per cent experiences either of these scenarios since each requires very different policy responses. Here, estimates of economic mobility allow for a better design of policies that can support economic development in a sustainable and inclusive way.

Data requirements to analyze patterns of economic mobility are not trivial and require the use of innovative methodologies. A proper study requires household- level information for one and the same household for at least two periods, not only for income or consumption, but also for other variables that can affect changes in income or consumption. Unfortunately, the availability of panel surveys that contain this type of information is quite limited, and even when existent, many times they suffer from high attrition rates and relatively short survey periods.

The synthetic panel methodology overcomes these shortcomings and builds on an imputation methodology to construct synthetic panel data with predicted consumption using two different rounds of cross sections (Figure 1). This way a new data set is created which provides information on consumption for one and the same household in two different time periods. The approach relies on time- invariant individual and household characteristics. Consumption in each period is modeled as the sum of two components: a first one associated with **time- invariant characteristics**, and a second one capturing non-observable factors. To create the predicted consumption in the second round ($\hat{C}_2$) for households whose consumption were only observed in the first round (C_1), we generate a new component based on how their

time- invariant characteristics are associated with consumption, but in the second round ($F2(X1)$). Adding this new component to the non-observable factors ($\hat{e}2$), we obtain the predicted consumption in round two. With these two consumption measures ($C1$ and $\hat{C}2$) we construct transition matrices to analyze patterns of economic mobility between the two rounds.

Figure 1. Synthetic panel approach in a nutshell

Depending on the assumptions made about the non- observable characteristics, the method generates a high and a low mobility scenario. For the low mobility scenario, non-observable characteristics do not change in time (such that the correlation of $\hat{e}2$ and $e1$ is 1), whereas for the high mobility scenario they change between rounds (i.e., the correlation of $\hat{e}2$ and $e1$ is 0). More intuitively, low mobility implies that if a shock or unobservable characteristics affect consumption in the first period, it continues to do so in the second one, and in the same direction. For instance if the existence of social networks (friends and relatives) allows households to find better jobs and generate higher incomes and consumption levels and this positive impact remains constant over time such that social networks also increase consumption levels in the second period, the country experiences a low mobility scenario. High mobility implies that there is no relationship between shocks in time. **Dang et al. (2014)** show that these two boundaries sandwich the true estimate of economic mobility.

The quality of the imputation improves as time-invariant characteristics capture more variation in consumption. In particular the distance between the lower and the upper bound decreases if the functional component increases relative to the non- observable factors. Yet the empirical model is only supposed to include information which does not change over time. More specifically, the empirical model uses the logarithm of consumption as dependent variable and then explores a set of independent variables which mostly relate to the household head. For instance, information on gender, birth cohort and educational attainment but also the region of residence and the location (urban and rural) are assumed to be time-

invariant. Furthermore the model only includes households with household heads who were between 25 and 55 years of age in the first period; this way behavioral changes due to life events such as retirement do not complicate the construction of a consumption measure for the second period. Notwithstanding these limitations, synthetic panels allow the use of existing data in a novel way to better understand patterns of economic mobility and its determinants.

Findings in this study mostly relate to the low mobility scenario and describe a more conservative view of economic mobility. Under the assumption that returns to non-observable factors such as social networks or non-cognitive ability are highly correlated over time, the low mobility scenario underestimates true economic mobility but overestimates immobility in society (those who remain in the same welfare status over time including chronic poverty). As a result and similar to the work pursued by the LAC team, the lower mobility bound generates poverty transition matrixes which describe a conservative view of economic mobility.

The identification of determinants correlated to transitions out of poverty is based on actual household consumption for the first period and imputed consumption for the second period. Here, the imputed consumption level for the second period relates to the low mobility scenario which assumes perfect correlation in error terms between the first and second period (more specifically $\hat{C}_2 = F_2(X_1) + e_1$). The regression model then distinguishes between two different groups of household: first, households which remained in poverty for the first and second period; and second, households which managed to escape poverty between the first and second period. Using a set of time- invariant and time- variant individual and household characteristics as independent variables the analysis highlights systematic differences between the first and second group of households which can be used to better understand poverty dynamics on the level of households.

Estimates of economic mobility are also possible during the crisis period. The synthetic panel methodology identifies the functional relationship between consumption and time- invariant characteristics for each period separately. Thus structural changes during the crisis period are well accounted for when determining patterns of economic mobility. Yet, uncertainty about non- observable factors during the crisis period increases. Do social networks still allow for higher incomes and consumption or do friends and relatives loose in importance as economic or political instability impact the structure of society? Under the second scenario the economy moves to a high(er) mobility scenario and the true estimate of economic mobility will be relatively closer to the upper bound.

In response to methodological challenges, Dang and Lanjouw (2013) introduce a new approach to determine bounds of economic mobility based on point estimates and confidence intervals. Compared to the lower and upper bound estimates, point estimates have the potential to generate a more precise measure of mobility which accounts explicitly for sampling and modelling errors. For the lower bound approach, the degree of bias depends on how far the true correlation between the error terms in both periods is from 0. If the true correlation term is close to 0, we have better estimates, and vice versa. Here, the point estimates approach incorporates the true correlation of error terms. One of the key caveats behind the point estimates approach is that the current framework can be used to obtain the profiling of household poverty mobility (i.e., classifying households into different socio- economic groups), but cannot be used to estimate mobility measures that are constructed based on the continuous variable of imputed consumption level.

Patterns of economic mobility in ECA

During the pre-crisis period, there was high upward economic mobility in ECA, with little churning. Figure 4 shows the share of households in extreme and moderate poverty that escaped poverty both in the pre-crisis and crisis periods, using the lower bound (conservative mobility scenario) of the synthetic panel methodology.⁴ Results show that households across countries experienced significant movements out of extreme (panel a) and moderate poverty (panel b) from (circa) 2001 to 2008. In Romania and Armenia, for example, around 20 percent and 15 percent of households in extreme poverty in the pre-crisis period, respectively, crossed the \$2.5/day threshold.

During and following the global economic crisis, from (circa) 2008 to 2010, economic mobility slowed down, with higher churning. The share of “stayers” increased substantially following the crisis and, as Figure 4 suggests, economic mobility stopped going only upwards and a significant number of households experienced downward movements, particularly in reference to the moderate poverty line. Relying once more on the Romania and Armenia examples, the crisis period saw around 8 and 7 percent of non-poor households, respectively, fall into moderate poverty; at the same time, the share of households escaping poverty was small, and more than offset by movements downwards. World Bank (2011), which studied the impact of the global economic crisis on households, found that the crisis mostly affected households through labor markets. Across countries in the region and during both the pre-crisis and crisis periods, most households moving up climbed only one economic class higher.

Large movements out of poverty in ECA have translated into increases in the middle class. Measuring the middle class as individuals living on \$10 PPP per day or more, and as Figure 2 showed, indeed, that the share of households belonging to the middle class rose during the 2000s in many countries in the region. A GDP-middle class elasticity estimation shows a coefficient of 1.7, which speaks of an actual entire shift of the distribution and not only movements just above the poverty line to those below⁵. This speaks to the sustainability of the gains – as middle class households count on more assets to maintain and improve welfare – although a large share of vulnerable households remain in the region. Interestingly, qualitative surveys reveal that notions of what the middle class is – encompassing more than income or consumption related measures - are somewhat consistent across countries (Box 4).

⁴ The paper is adopting the lower bound of the Dang et al. (2014) methodology, which is a more conservative scenario of economic mobility. Therefore, these numbers could be underestimating true economic mobility in the countries, particularly downwards.

⁵ Middle class defined as the share of the population living between 10 and 50 dollars a day for the estimation.

Figure 4. Large movements in and out of poverty, and into the middle class, especially before the global economic crisis

a. Poverty line: \$2.5 PPP/ day: share of households in extreme poverty who escaped poverty – orange bar – or non-extreme poor who fell into extreme poverty – blue bar.

b. Poverty line: \$5 PPP/day: share of households in moderate poverty who escaped poverty – orange bar – or non-moderate poor who fell into moderate poverty – blue bar.

c. Middle class line: \$10 PPP/day: share of non-middle class households who joined the middle class – orange bar – or middle class households who fell downwards – blue bar.

Source: Authors' calculations using harmonized regional consumption data (excluding health, housing and durables) and the synthetic panel methodology (lower mobility scenario) of Dang et al (2014).

Box 4. What does it mean to be middle class in ECA?

Qualitative surveys find that notions of the middle class depend to a large extent on the conditions of their localities, but regularly encompass much more than economic standing. The narratives portray the middle class as including professionals with stable salaries, public sector workers and families with multiple income earners. Further, in less well-off contexts, the middle class is perceived to include also those who can cover necessities and pay the bills, and can accumulate assets: “*All people having a house, car, phone [...] and living without much difficulty.*” (unemployed man in Kyrgyz Republic), but also people who can enjoy entertainment activities and holidays. Even values are attached to the middle class as people who “live honestly” and “work hard”. Many of these traits point to a notion of security and resilience as characteristics of the middle class. Defining the middle class in broader and relative terms, however, people in several ECA countries perceive it as losing ground, in the face of growing inequality. “*Maybe there is a middle class, but they are much poorer than they used to be,*” claims a man from Vrsac (Serbia), summarizing the views of many other respondents throughout the region.

Factors associated with economic mobility in ECA

Given the significant upward economic mobility experienced during the last decade in the region, it is important to explore the factors associated with it. Regression analysis compared the initial characteristics of those moving up and out of poverty, and of those staying who are “stuck”. More specifically, we explore the associated factors to (i) escaping extreme poverty, (ii) escaping moderate poverty and, more generally, (iii) moving upwards by crossing any of the thresholds, including to the middle class. Characteristics explored include location, gender of head of household, education, labor market status. Education and labor market, in particular, drive the ability of households’ to generate labor market income, the main source of income for most households across countries. Specifically, education captures the level of assets – human capital endowments – available to individuals, and labor market status captures the capacity to use those endowments to generate income in the labor market.

Although mobility patterns are closely influenced by country circumstances, education and labor markets emerge as key elements of upward mobility across countries. Regression results indeed show that while pathways to improving living standards can be different across countries, and even more so during the crisis period, education and jobs matter for upward mobility. The higher the share of adults with primary education in the households, the lower probability the probability is of the household moving upwards. Particularly in the pre-crisis period the role of education in lifting people out of poverty in the region was strong (Figure 5), and the effect was more common in moving out of moderate poverty and overall upward mobility, than for moving out of extreme poverty. Similarly, labor markets provided a channel that allowed households to escape poverty, and are particularly important for moderate poverty. A larger number of employed working-age members in the household increased the probability of either moving up—particularly during the pre-crisis period and for those crossing the moderate-poverty threshold (Figure 6); the size of the effect differs across countries. In other words, labor markets are a weaker pathway for the poorest as they might face more pronounced barriers to jobs and are likely more reliant, in some countries, on transfers. Demographic factors also matter: in the majority of countries, larger households and those with more children (characteristics associated with the poor and the bottom 40 percent) had a lower probability of moving out of poverty or into the middle class during the 2000s in ECA.

Figure 5. Education: Changes in probability of upward mobility (regression coefficients) of increasing the household share of primary-educated members

Probability of escaping extreme poverty (\$2.5/day)

Probability of escaping moderate poverty (\$5/day)

Probability of moving up across any threshold (\$2.5, \$5 or \$10/ day)

Source: Authors' calculations using ECAPOV datasets. Notes: based on a linear probability model with the dependent variable equal to one if the household experienced upward mobility (cross any threshold) and zero otherwise. Significance evaluate at 10 percent level.

Figure 6. Employment: Changes in probability of upward mobility out of moderate poverty (regression coefficients) of increasing the household share of employed members

Probability of escaping extreme poverty (\$2.5/day)

Probability of escaping moderate poverty (\$5/day)

Probability of moving up across any threshold (\$2.5, \$5 or \$10/ day)

Source: Authors' calculations using ECAPOV datasets. Notes: based on a linear probability model with the dependent variable equal to one if the household experienced upward mobility (cross any threshold) and zero otherwise. Significance evaluate at 10 percent level.

The importance of education and labor markets is corroborated by qualitative evidence. The role of education and training in promoting upward mobility was strongly perceived as key in qualitative surveys across countries (Figure 7), mainly for its role in increasing access to good jobs. At the same time, these surveys revealed widespread frustration with the failure of education to lead to a good job. *“You have to get educated. It’s not a guarantee of success but it is a prerequisite”* said an unemployed man in Serbia. Further, the role of labor markets also came out strongly in people’s perceptions about factors for upward mobility. Qualitative data reveals that a high share of focus group participants, both men and women, cited “new or better job” as the main pathway to move up, both in urban and rural areas (Figure 7). *“Work. Work. Work... It is all about working”* said a man in Kyrgyz Republic when asked about improving his household’s living standards. As in the quantitative data, participants recognize the role of having a larger number of employed members in the household *“In most of the families only one person has a job and they are not capable of pulling the family out of poverty. If all the family members worked the problem would be solved”* (unemployed woman from Kutaisi, Georgia). This suggests a significant agenda for including second-earners into the labor market, which are usually women. Other factors also associated with labor market engagement – such as new or growing business, good connections and migration- led the list of factors helping people move up. At the same time, losing a job or business is perceived as even more relevant for economic mobility, this time for downward mobility, in both rural and urban areas. Around 63 percent of urban participants chose this among their top two risk factors, suggesting a policy agenda to promote smooth labor market transitions and provide adequate protection for vulnerable households. *“No job, no money... You fall immediately. It takes time to find another job. Some never manage”* indicates a working woman from Skopje, FYR Macedonia. In Serbia losing a job was perceived as a tragic event for a 47-year old man: *“Loss of job and loss of close people, that’s the most severe misfortune in life.”* Inconsistent work is also perceived as an important factor for downward mobility, linked to preferences for stable work.

Gender and urban/rural differences appear in terms of what people perceive to be the critical factors for mobility. In rural areas, in particular, having a supportive family and family financial planning (budgeting/saving) is perceived as particularly important for women to move up their households. For men findings suggest that migration and attitudes are more important. In urban areas, women see a stronger role for jobs in moving ahead, likely reflecting the lower labor market engagement of women in many countries compared to men. For downward mobility, rural communities differ from urban in that they express vulnerability to a wider range of risk: natural disasters, depression, loss of public assistance, and wedding and death costs. Although all groups mention it frequently, urban men identify in larger numbers vices like alcohol, gambling and drugs as one of the top reasons why men in their communities bring their households down, normally as a result of frustration with the inability to fulfil their breadwinners’ roles. These triggers to downward mobility too, are generally connected to loss of work, especially in urban areas: *“Many men started drinking, they fell into depression after job loss”* explained a woman from urban Shymkent, Kazakhstan. In both rural and urban communities, family illness and death are cited more often as vulnerability factors for women, likely reflecting their higher dependency on male earners.

Figure 7. Upward and downward mobility factors in urban and rural communities, by gender
Share of men and women rating a factor among top-two factors (8 countries)

Source: Authors' calculations based on qualitative surveys.

A closer look at mobility patterns: Moldova and Russia

This section provides a more thorough analysis of economic mobility in Moldova, a low-income country, and Russia, an upper-middle-income country. These countries provide interesting case studies as they both experienced high upward economic mobility during the past decade, but with very different income levels as starting points. Therefore, the analysis provides a basis for comparison and contrast about the different transitions that the countries experienced (focused on movements out of poverty in Moldova and movements into the middle class in Russia). Overall, this more in-depth diagnostic of economic mobility following the regional patterns allows for a more detailed analysis of the transitions that these countries experienced, and of the role of different factors in making these transitions happen. The selected countries also have adequate data for the analysis, using the synthetic panel methodology of Dang et al. (2014) with cross-sectional samples from the Moldova Household Budget Survey for 1999-2004 and 2006-2011 (with the methodology validated using panel data for available years), and the panel sample of the Russia Living Monitoring Survey for 2001-2010 for Russia.

The following sections describe the patterns of economic mobility in these two countries and, more importantly, they seek to explore what are the dynamic processes that are associated with upward and downward economic mobility, and that have put the countries in a path of poverty reduction, middle class expansion and shared prosperity. Analyses for these countries follow the same regional thresholds of \$2.5 PPP per day (relevant for Moldova only), \$5 PPP per day and \$10 PPP or more per day. Findings are relevant to policy-making in that they signal sources of vulnerability or immobility for households, and provide entry points for more inclusive and sustainable growth.

Moldova: A remarkable story of economic mobility

Within ECA, the experience of Moldova over the past decade constitutes a case study of high economic mobility. While still one of the poorest countries in the region, Moldova has experienced important progress in social indicators in the past 10 years, achieving remarkable improvements in living standards. Poverty declined significantly, particularly during the first half of the decade. Between 1999 and 2004, poverty fell by 31 percentage points (from 78 to 47 percent, at the \$2.5/day poverty line); continuing to decline, albeit at a slower pace, from 2006 to 2011 (from 23 to 18 percent) (see Figure 8). The country has also had a good record in promoting shared prosperity from 2006 to 2011. Over the period, the consumption growth of the bottom 40 percent was high at 5.7 percent, and higher than mean consumption growth at 2.9 percent; growth incidence curves show that growth benefited the less well-off in both periods (Figure 9). The Gini coefficient, declined in both periods, and in both urban and rural areas. Inequality, measured by this coefficient, fell from 0.42 in 1999 to 0.33 in 2004; and from 0.33 to 0.28, between 2006 and 2011. Other related measures, including consumption ratios at various percentiles of the distribution, also tell a story of declining inequality.

Figure 8. Poverty declined significantly in Moldova, particularly in the early 2000s

Regional lines, 1998-2004 and 2006-2011

Source: Authors' calculations based on harmonized regional HBS data (consumption aggregate excludes housing, durables and health expenditures). Notes: The Household Budget Survey for Moldova had a substantial change in methodology between 2005 and 2006. Changes included improvements to the questionnaire and the sampling. As a result, the poverty series for Moldova cannot be used to assess long-term poverty changes, but the analysis is divided into two periods: pre 2006 and post 2006.

The performance of Moldova on poverty and shared prosperity reflects its economic mobility patterns. Moldova is a high performer within the regional context, presenting one of the highest upward economic movements across ECA countries. The country experienced high upward mobility in the 2000s—particularly in the first half of the decade—with very few households experiencing downward movements. The transition matrix in Table 1 shows the percentage of households that moved across consumption categories during the 1999 to 2004 period. For instance, a large share of households (29 percent) climbed up from extreme poverty; while close to 10 percent crossed the threshold of living with under \$5 per day. As Table 2 illustrates, upward mobility continued to be strong between 2006 and 2011, (although specifically during the crisis period, 2008-2011, overall mobility slightly declined and more people were “stayers”). Overall, those with incomes over \$10, considered to be middle class at the regional level, remain few in Moldova (at around 11 percent in 2011). Results showed that most transitions occurred to the next higher economic class, with virtually no cases of individuals skipping a class as they moved up.

Figure 9. Consumption growth was high in Moldova, particularly for those at the bottom
Growth Incidence Curves for Moldova, 1999-2004 and 2006-2011

a. 1999 to 2004

b. 2006 to 2011

Source: Calculations based on HBS data.

Table 1. A large share of people escaped poverty in the early 2000s*Transition matrix for intra-generational mobility in Moldova, 1999 to 2004 (percent of individuals)*

		Destination (2004)				
		<\$2.5	\$2.5-\$5	\$5-\$10	\$10+	Total
Origin (1999)	<\$2.5	48.2	29.0	0.8	0.0	78.1
	\$2.5-\$5	0.0	5.8	9.7	0.2	15.7
	\$5-\$10	0.0	0.0	2.0	2.4	4.4
	\$10+	0.0	0.0	0.0	1.8	1.8
Total		48.2	34.9	12.5	4.4	100.0

Table 2. Movements out of poverty continued in the second half of the decade*Transition matrix for intra-generational mobility in Moldova, 2006 to 2011 (percent of individuals)*

		Destination (2011)				
		<\$2.5	\$2.5-\$5	\$5-\$10	\$10+	Total
Origin (2006)	<\$2.5	13.9	9.0	0.0	0.0	22.8
	\$2.5-\$5	0.1	30.2	13.1	0.0	43.4
	\$5-\$10	0.0	0.3	22.8	4.3	27.4
	\$10+	0.0	0.0	0.1	6.2	6.3
Total		14.0	39.5	36.0	10.5	100.0

Source: Calculations based on HBS data.*Note:* Results presented refer to the lower-bound mobility estimates following the Dang et al. (2014) synthetic panel methodology.

However, it is important to note that the synthetic panel methodology used to estimate these transitions may be underestimating downward mobility in Moldova. Synthetic panel results from the high mobility scenario – as opposed to the more conservative one presented here - suggest that up to 10 percent of individuals may have fallen down one category between 1999 and 2004, half of which moved to poverty, and almost 17 percent of the population may have fallen downwards between 2006 and 2011. The methodological differences between the two scenarios relate to the underlying assumption about the correlation between the first and second time period. The optimistic view (which generates a high degree of economic mobility) assumes zero correlation between unobserved characteristics for the two time periods. On the contrary, the more conservative estimate (low degree of mobility) builds on the idea that unobservable characteristics in the first and second time period are strongly correlated. In practical terms this implies that households which already benefited from above average returns for the initial time period will also generate above average returns for the final time period.

Profile of socioeconomic groups

Characteristics of households differ significantly across socioeconomic groups, particularly in education and sector of employment. The poor have larger households, higher dependency rates for both young and old dependents (but particularly for children), and are significantly more concentrated in rural areas (Table 3). However, some of the largest differences between the group in poverty and the rest of the groups are in the share of household members with incomplete secondary education or less (40

percent for those under the \$2.5/day threshold compared to, for example, 8 percent for those with consumption over \$5/day). Similarly, although household employment rates do not differ greatly across groups, the poor have a higher dependence on the agriculture sector (with a household employment rate in agriculture of 53 percent vs. 19 percent for these same groups). Consistent with this, there is a higher share of households receiving wage income in the better-off groups than those in poverty. In terms of public and private transfers, the key difference lies in a larger share of better-off households receiving remittances, compared to the poorest.

Moving out of poverty: Associated factors

What are the differences between those households in Moldova that were able to escape poverty (or to climb up from vulnerability into the middle class) from those that did not? Looking at correlates of economic mobility through descriptive (Figure 10) and regression analysis (Annex Table A3), results suggest that, on average, individuals who moved out of poverty in Moldova lived in smaller households, and had lower child and elderly dependency rates, as illustrated in Figure 10 for the period 2006-2011. Multivariate regression analysis shows that there is a five percentage point lower probability of escaping poverty for each additional household member (1999 and 2004). No consistent patterns across periods and specifications are found in terms of age and gender of the household head, and living in rural areas. For the latter, however, there is a significant lower probability of upward mobility in the period 2006-2011. This might include the effect of the agricultural crisis which hit rural areas particularly hard.

Table 3. Profile by socioeconomic group, 2011

	<\$2.5	\$2.5-\$5	\$5-\$10	\$10+
<i>Demographics and location:</i>				
Household size (no. of members)	4.3	3.5	3.1	2.2
Household depend. rate (<14 & >65)	83.0	65.7	45.6	25.2
Household depend. rate (>65)	25.0	29.0	17.3	9.4
Household depend. rate (< 14)	58.0	36.7	28.2	15.8
Rural	83.9	68.1	40.0	23.9
<i>Labor market (household level):</i>				
Household empl. rate	72.7	66.2	67.0	69.7
Household empl. rate in agriculture	53.4	37.4	18.9	10.3
Household empl. rate in manufacturing	2.2	4.4	6.6	5.1
Household empl. rate in services	17.1	24.4	41.5	54.4
<i>Education - share hh members (15+):</i>				
Primary education	39.5	21.1	8.2	3.5
Secondary education	48.6	58.0	57.8	33.9
Tertiary education	3.0	7.9	24.4	47.7
<i>Share of households receiving:</i>				
Pensions	27.8	30.5	22.7	15.2
Social benefits	11.9	14.8	10.9	10.0
Wages	27.5	33.7	54.1	67.1
Remittances	16.0	24.6	26.3	33.7

Source: Authors' calculations using HBS 2011 data.

Figure 10. Household characteristics and human capital in Moldova

Initial characteristics (1999 and 2006) and movements between 1999 and 2004, and 2006 and 2011

Source: Calculations based on HBS data.

Note: *Poor* refers to those with consumption levels lower than \$2.5 per day. Results presented are for the lower-bound mobility estimates using the synthetic panel methodology by Dang et al (2011). Results for falling into poverty are not presented as sample sizes are small.

Higher levels of education are strongly associated with upward economic mobility in Moldova.

Figure 10 shows how higher human capital accumulation was found to be strongly associated with upward mobility. Further, regression analysis shows that the higher the share of household members with only primary education, the lower the probability of moving up the economic ladder in Moldova (estimated at around 16 percentage points lower for moving out of poverty). This effect disappears for the second period, in which tertiary education becomes the key correlate for economic mobility by increasing the likelihood of escaping poverty. In the period 2006 to 2011, the probability of escaping poverty increased significantly with a higher share of members with tertiary education (27 percentage points for the \$2.5/day threshold, and 20 percentage points for \$5/day). These findings likely reflect the structural change away from agriculture to manufacturing and services which increases returns to higher educational attainment.

On the other hand, labor markets in Moldova have undergone important changes in recent years, also associated with transitions in and out of poverty. The evolution of the labor market has included changes in terms of the sectoral composition of production (with decreasing agricultural employment, rising manufacturing and services), fluctuating unemployment, as well as shifts in remittances flows. Descriptive analysis shows that household employment rates are not strikingly different across the various transitions. However, households who stayed poor had a relatively higher share of members employed in

agriculture (44 and 50 percent in 1999 and 2006, respectively) (see Figure 11). This suggests that it is the type and quality of employment that matters more for mobility in Moldova, rather than labor market status itself. Accordingly, findings from regression analyses suggest that a household with a higher employment rate in the services and manufacturing sectors—vis-à-vis agriculture—has an increased probability of upward mobility.

Figure 11. Labor market outcomes in Moldova

Initial characteristics (1999 and 2006) and movements between 1999 and 2004, and 2006 and 2011

Source: Calculations based on HBS data.

Note: 'Poor' refers to those with consumption levels lower than \$2.5 per day. Results presented are for the lower-bound mobility estimates using the synthetic panel methodology by Dang et al (2011). Results for falling into poverty are not presented as samples sizes are small.

Public and private transfers have also played a role in lifting households out of poverty in recent years. Receiving pensions and remittances in 2006, in particular, had a role in upward mobility. For remittances, results capture a strong and positive association, before and during the crisis, for crossing the \$5/day threshold (around 8 percentage points higher probability), although not significant in these periods for helping people escape extreme poverty (\$2.5/day). For households receiving pensions in the crisis year (2009), for instance, the probability of moving upwards – crossing any of the thresholds - increased by 24 percentage points by 2011. This could be partly linked to increases in pensions by the government in response to the financial crisis.

Russia: A rapidly expanding middle class

During the 2000s poverty reduced significantly and the middle class increased. The share of the population considered middle class – with levels of daily consumption higher than \$10/PPP – increased from 14 percent in 1999 to 55 percent by 2009 (Figure 12). Households at the bottom of the welfare distribution experienced large positive gains over the period: non-anonymous growth incidence curves (Figure 13) reflect higher consumption growth rates for the less well-off in Russia throughout the 2000s.

Figure 12. The middle class has expanded rapidly in Russia

Regional lines, 2001-2010

Source: Calculations based on HBS data. Notes: A similar distribution is found with RLMS data.

Figure 13. Non-anonymous Growth Incidence Curves for consumption, 2001-2010

Source: Authors' calculations using RLMS panel samples.

Table 4. A large share of people escaped poverty in the 2000s

Transition matrix for intra-generational mobility in Russia, 2001 to 2005 and 2006 to 2010 (percent of households)

Destination (2005)					
		<\$5	\$5-\$10	\$10+	Total
Origin (2001)	<\$5	15.6	13.2	7.1	35.9
	\$5-\$10	6.8	14.9	15.3	37.0
	\$10+	3.7	7.0	16.5	27.1
Total		26.0	35.1	38.9	100.0
Destination (2010)					
		<\$5	\$5-\$10	\$10+	Total
Origin (2006)	<\$5	5.8	9.0	6.1	20.9
	\$5-\$10	3.2	12.9	19.3	35.4
	\$10+	1.4	9.0	33.4	43.7
Total		10.4	30.9	58.7	100.0

The dramatic change in the consumption distribution in Russia over time reflects high upward economic mobility, as in the case of Moldova. Using panel data from the Russia Longitudinal Monitoring Survey (RLMS) for the periods 2001-2005 and 2006-2010, shows high movements out of poverty in Russia and into the middle class (measured with consumption). Specifically, around 20 percent of households escaped poverty, with 7 percent of households going from poverty straight into the middle

class. In total, over 22 percent of households joined the middle class in the first part of the 2000s. In the second period, movements into the middle class remained high (25 percent of households joined the middle class), mostly moving from the vulnerability category. Results show, however, some churning with nearly 11 percent of households formerly in the middle class in each period falling into either vulnerability or even poverty.

Profile of socioeconomic groups

Characteristics of households in poverty, vulnerability or the middle class differ significantly. The poor have larger households (4.1 members vs. 3.3 members for those in the middle class in 2010), higher dependency rates for both young and old dependents, and are more concentrated in rural areas (Figure 14). Labor earnings and capital income are relatively more important for middle income households, while public transfers, particularly pensions, are relatively more important for poor and vulnerable households

Figure 14. Profile of location and income composition for households, by socioeconomic groups, 2010

Human capital – education – is lower for the poor, and a large share of poor are out of the labor force. The difference in the stock of human capital between the poor and the non-poor is large: while 35

percent of the poor have incomplete secondary education, 15 percent of those in the middle class do so (Figure 15). Importantly, the middle class has a higher share of people with tertiary education (28 percent) than the rest. Further, labor market engagement is weaker for the poor. In particular, the share of employed – particularly of waged-employed – is lower for the poor (44 percent compared to 65 percent for those at the top), driven mostly by a larger share of people in inactivity.

Figure 15. Education and labor force status by socioeconomic group, 2010

Moving into the middle class: Associated factors

Household composition and individual characteristics have a significant impact on the probability of households to move into the economic middle class. An increasing household size and especially a higher share of elderly relative to individuals in the working age population (old age dependency ratio) are negatively correlated with transitions above the 10 USD threshold. Also female headed households experience a slightly lower probability to move into the middle class.

Educational attainment, as well as labor market status, influences the chances of households to transition into a higher economic class. Households with heads with tertiary education report a much higher probability of moving upwards. In addition, the nature of the job matters for transitions out of poverty or vulnerability into the middle class. Here, the occupational status (white collar versus blue collar and skilled versus unskilled workers) and the employment status turn out to be powerful determinants underlying movements within society. Furthermore findings from the RLMS data suggest that employees in the private sector face a slightly higher chance of upward mobility than public sector employees.

Changes in household demographics show the expected impact on the probability to move into the economic middle class. An increase of the employment rate between the beginning and the end of the period of observation increased the probability of upward mobility. At the same time negative shocks such as unemployment, significantly reduce the probability of moving into the middle class. This pattern suggests that financial implications in response to a loss of employment are still considerable and have the potential to determine the future development path of a household. One explanation underlying this observation could be that the employment status of the household head and the employment rate of the household are strongly correlated and within household risk sharing is limited.

Public transfers seem to play a role as well in promoting movements into the middle class. Findings suggest that higher level of public pensions or other form of public transfers at the beginning of the periods (2001 or 2006) had a positive although not statistically significant impact on middle class entry. Further work is needed to explore the relevance of pensions in promoting transitions into the middle class, particularly in a period of high pension increases as it was the case in the 2000s in Russia.

Frustrated achievers? ⁶ The disconnect between observed and perceived economic mobility in ECA

Despite the positive gains observed in terms of growth, poverty reduction and an expanding middle class, many individuals report negative perceptions on the region's progress. Nearly 50 percent of households in the region in 2006 – a boom year - declared seeing their countries in worse economic standing than in 1989. Using data from the Life-in-Transition Survey, Figure 16 illustrates how nearly 50 percent of households in the region declared seeing their countries in worse economic standing than in 1989. With the exception of Central Asia, the perceived fall in living standards in countries is consistent across all sub-regions, peaking at almost 70 percent in the Western Balkans. This inconsistency in overall improvements in welfare and perceptions is particularly striking if we consider that 2006, the year under study, was one of considerable economic expansion in the region. Across the region, men and women express deep concerns about deteriorating work opportunities, a disappearing middle class and rising inequality. A man in Sveti Nikole, FYR Macedonia, expresses the frustration voiced by many other people in the qualitative survey: *“[...] those on the top, the rich ones stay as they are, but those below are drastically different, and we're all going downhill in a way. And while we all sink, those on the top get even higher.”*

⁶ The expression “Frustrated Achievers” is borrowed from Graham, Carol and Stefano Pettinato (2006) “Frustrated Achievers: Winners, Losers, and Subjective Well-Being in Peru's Emerging Economy”. *Annals of the American Academy of Political and Social Science*, Vol. 606, Chronicle of a Myth Foretold: The Washington Consensus in Latin America (Jul., 2006), pp. 128-153.

Figure 16. Satisfaction with economic situation in country, better in 2006 than 1989?

Source: calculations based on LiTS 2006 data (individual weights).

Trends in subjective economic mobility

Most households in ECA perceived themselves to be worse-off in the 2000s than pre-transition.

Household heads across countries were asked where in a 10-step ladder they would situate their household in 1989 (retrospectively) and in 2006 (in the 2006 LiTS round) and in 2010 (in the 2010 LiTS round). In a perfect-knowledge world, households would have identified their positioning in absolute terms resulting in a uniform distribution of deciles. Results in Figure 17 show, however, that the question was answered in relative terms capturing the perceived distance to the highest income household. The majority of households in ECA report themselves to be in the steps 5 and below in 2006 and 2010, while they recall being in the middle steps of the income distribution in 1989.

Close to half of the households in the region report experiencing downward economic mobility.

Focusing on the period between 1989 and 2006 – with 2006 being a boom year in the region – when asked where they would situate their household in a 10-step ladder, most heads of household report to be located in the lower steps. Using, as definition of movement, a change in at least two steps in any direction between 1989 and 2006, nearly half of the households (47 percent) declare having moved down in the income distribution, and only less than 13 percent of households perceived an improvement (Figure 18). With the exception of the EU11 and Turkey—the cases of higher economic growth during the period—the pattern of perceived downwards mobility is common to all sub-regions. But even in these cases, nearly 40 percent of respondents report that their households are worse off than in 1989.

Figure 17. Household Perceived Position in 10-Step Income Ladder (1989, 2006 and 2010)

Notes: Survey questions for 2006 and 1989 (retrospective) are: “Please imagine a ten-step ladder where on the bottom, the first step, stand the poorest people, and on the highest step, the tenth, stand the richest. On which step of the ten is your household today?” (retrospective for 1989). For 2010: “Please, imagine a ten-step ladder where on the bottom, the first step, stand the poorest 10% people in our country, and on the highest step, the tenth, stand the richest 10% of people in our country. On which step of the ten is your household today?”

Figure 18. Perception of Economic Mobility 1989 – 2006

Source: Authors' calculations using 2006 LiTS individual weights). CIS groups selected countries that include Belarus, Moldova, Ukraine, and Russia.

Why is it important to pay attention to these widespread negative subjective views in the region?

Negative perceptions can play an influential role in (damaging) the sustainability and inclusiveness of the achieved progress on poverty and shared prosperity in ECA. Even as living standards for the less well-off improve, widespread negative perceptions can impact the pathways to prosperity in society, as pessimism and uncertainty affect people's behaviors—such as individuals' efforts to acquire skills and search for jobs—and attitudes—for instance, towards supporting political and economic reform.

What is behind the mismatch between objective and subjective mobility?

Households' income/consumption levels and demographic characteristics do not fully explain these negative perceptions. In fact, the evidence finds that current income actually explains only a minor fraction of the observed variation in perceptions—that is, income is not found to be that important towards perceptions of well-being. Similarly, labor market experiences over 1989 and 2006 have no significant effect and current employment status plays a significant but weak role. Across regions, younger people are more positive while the older generation tends to be more negative, and having a higher level of education is positively associated with a more positive perspective in most of the sub-regions in ECA. The Western Balkans, a sub-region with particularly poor labor market outcomes, show unique results in demographics and education: the sub region has the strongest association between old age and negative perceptions of economic mobility and, in contrast with the regional results, the more educated have a more pessimistic outlook on quality of life than those with little or no formal education (a similar education effect is found for the South Caucasus countries).

Looking beyond absolute income differences, several hypotheses have been identified to shed light into this disconnect. Fully understanding what drives perceptions is difficult in ECA given the region's legacy and culture, as well as data constraints. Nonetheless, given the patterns of economic mobility discussed in the previous section, it is likely that perceptions are not driven by absolute differences, but by relative ones. The analysis tests, to the extent possible, for three hypotheses following the literature and given the region's context: (i) the role of increasing inequality, particularly polarization; (ii) perceptions of unfairness in the process of getting ahead; and (iii) increased uncertainty and vulnerability. Further work and data collection are needed to explore these more in-depth.

The role of increasing polarization

The way in which increasing inequality matters can be explained through the Hirschman and Rothschild tunnel parable. In their well-known 1973 paper, the authors make the analogy between increases in inequality in the development process and the lanes in a traffic jam in a tunnel. While no one is moving, everyone is mildly frustrated. If one lane begins moving, it gives others temporary hope and makes them tolerant to other advancing. Yet, if after a while only that lane is moving, drivers elsewhere become increasingly frustrated, less tolerant (and more likely to correct the injustice, e.g., by crossing the dividing line). In other words, while individuals *are* moving forward, the fact that others are so much better off influences their perception, making their own progress seem relatively worse-off than it is.

As countries in the region have improved their living standards, relative differences might be becoming more important than differences in absolute terms. Research conducted by Graham and Pettinato (2006) suggests that as people move upward they tend to have more negative assessments of wellbeing, as their reference group is no longer their cohort. They also suggest that those in the middle, as opposed to the poor or rich, are most frustrated even with absolute gains. Following these results and with a reduction in poverty and an expanding middle class in ECA in the past decade, the disconnect between objective and subjective mobility might be becoming more pronounced in the region.

The increase in inequality, including concentration of income at the top, is evident across many countries during the 1990s and 2000s. Although pre-transition inequality data is scarce, some figures show that from the late 1980s to the late 2000s the Gini increased by 10 in Hungary, by 16 in Russia and by 13 in Estonia. In the 2000s only, the ratio of consumption deciles 90/10 and the 75/25 increased in many countries in ECA, including Azerbaijan, Bosnia and Herzegovina, Kyrgyz Republic, Lithuania, FYR Macedonia, Montenegro, Poland, Russia and Tajikistan. In Russia, for example, by 2009, the 90/10 percentile ratio was 5.8, and the income share held by the top 10 percent had increased from 20 percent in 1988 to 32 percent in 2009 (likely underestimated in household survey data). In Bosnia and Herzegovina the 90/10 percentile ratio reached 5 (2007), 6.4 in FYR Macedonia (2008), 4.4 in Kyrgyz Republic (2011) and 7 in Georgia (2012).

The work tests for this hypothesis, exploring whether relative income differences matter for perceptions of economic mobility. To test this we use multivariate regression analysis and qualitative surveys. Specifically, the analysis relies first on multivariate regression analysis with the LiTS to explore factors associated with perceptions of economic mobility between 1989 and 2006 (thus excluding the crisis effect). In particular, we include a variable capturing country inequality. Further, questions on perceptions of inequality and polarization are also extracted from focus groups discussions.

Results show that increased polarization seems to matter for perceptions of economic mobility. Multivariate regression analysis suggests that increases in country income inequality in the region are associated with more negative perceptions of economic mobility. Specifically, households in ECA countries in which inequality increased between the 1990s and mid-2000s (circa) – measured by the ratio of the 80th/20th percentiles at the country level for a subsample of countries with available inequality data– had a higher probability of reporting downward movements in the income distribution. Polarization trends have not escaped the notice of people in the ground and are vividly captured in qualitative surveys: Over 75 percent of the focus groups perceived the gap between the rich and the poor in their community to have grown between 2003 and 2013. “...*the middle class disappeared. There is only very rich and very poor*” (women in rural Turkey). Similar perceptions are found in other countries: “*I think there is no middle-class at all*” (man from Tajikistan) and “*The way I see it, the middle class is the one that fits with neither the richest nor the poorest. But I don’t think there is such a class here. I think we are either very poor or very rich*” (working woman in Kosovo).

In a region like Europe and Central Asia that has a socialist legacy, the intolerance to inequality – as expressed in the tunnel parable - could be higher than in other regions in the world. Even controlling for income levels, there is evidence that the perception of having done better than colleagues

in 1989 is associated with less probabilities of perceiving downward economic mobility. This effect is particularly strong in Central Asia and the South Caucasus countries.

Perceptions of unfair processes and institutions

Unfair processes and institutions – linked to inequality in opportunity –can also be part of the story of negative perceptions in the region: if opportunities are not equally available to all and depend instead on characteristics beyond the individuals’ control – such as gender and place of birth – perceptions about the possibilities of getting ahead can be affected. The current role of inequalities in opportunities might be particularly so given the region’s socialist legacy. While the previous hypothesis focused on outcomes, this one focuses on processes; however, both hypotheses have inequality at the center: *“One reason that inequality might make people less happy, even when controlling for absolute income levels, is that it violates their sense of fairness”* (2006 WDR, p. 82).

Existing research on inequality of opportunities in access to employment across ECA countries indeed finds that individuals’ circumstances - including gender of the individual, education of the father, whether parents were affiliated to the communist party, and self-reported minority status – mattered in getting a good job, explained in many countries by gender and father’s education (Abrás et al., 2012). Moreover, results suggest that inequalities between groups in these countries are more closely related to individuals’ perceptions of fairness, than overall inequality measures. Nevertheless, findings on inter-generational mobility in education across ECA countries (Box 5) suggest high mobility across generations, which could contribute to diminish the role of parental education on an individual’s chances in life.

The analysis tests for this hypothesis by exploring evidence of unfairness in accessing opportunities in the region. Once more the research relies on multivariate regression analysis using the LiTS, looking into the role of factors – beyond individuals’ effort or luck – that are related to processes in getting ahead. Qualitative surveys are also used to shed light on this issue, with a particular focus on access to employment.

Box 5. Inter-generational mobility in education in ECA

The role of parents’ education in determining opportunities might be on the decline in ECA. Inter-generational mobility in educational achievement, measured by the LiTS in 2006 and 2010, seems high in ECA; in other words, the region has become more mobile across generations in terms of access to education. Schooling levels of individuals differ significantly from the original conditions of their parents—reflecting that the outcome for the child does not tend to be constrained by her parental background. The table below reports the transitions between the highest level of education of the parents and the achievement of the respondent. The incidence of children improving on their parents is particularly high among families where parents had low levels of education, suggesting convergence to higher educational achievement and a reduction in inequalities in education in the region. In households where parents did not have primary school, more than 94 percent of the respondents in 2010 reached a higher level of education. The increasing educational coverage in the region and the demands of a more

sophisticated and integrated labor market may be factors behind the observed mobility. However, an agenda remains to ensure that equality in access to education, also translates into equality in access to *quality* education.

Transition Matrix Life in Transition Survey 2010 (Percentage of row in parenthesis)⁷

<i>Parents (cols)</i>						
<i>Individual (rows)</i>	<i>No School</i>	<i>Primary</i>	<i>Secondary</i>	<i>Tertiary</i>	<i>Postgrad</i>	<i>Total</i>
No School	1.8% (5.2%)	0.2% (0.5%)	0.1% (0.4%)	0.0% (0.3%)	0.0% (0.7%)	2.1% (2.1%)
Primary	15.3% (43.5%)	5.3% (17.2%)	2.1% (7.5%)	0.2% (5.5%)	0.1% (4.1%)	23.0% (23.0%)
Secondary	14.7% (42.0%)	19.2% (62.4%)	14.0% (51.4%)	1.8% (40.5%)	1.1% (45.8%)	50.9% (50.9%)
Tertiary	2.8% (8.1%)	5.2% (17.0%)	9.5% (34.8%)	1.9% (42.9%)	0.9% (35.0%)	20.3% (20.3%)
Postgrad	0.4% (1.2%)	0.9% (2.9%)	1.6% (5.9%)	0.5% (10.8%)	0.4% (14.5%)	3.8% (3.8%)
Total	35.1% (100%)	30.9% (100%)	27.3% (100%)	4.4% (100%)	2.4% (100%)	100% (100%)

Source: Details of these findings are captured in the (ongoing) work by *Apablaza, Mauricio and Mehtap Hisarciklilar (2013) “Inter-generational mobility in Europe and Central Asia”*

Many people in the region perceive that the pathway to improving living standards in ECA has been tainted by unfair processes that curtail opportunities for some and not for others. Cross-country regressions using the LiTS find that the perception that effort, hard work and intelligence are the most important factors to succeeding in life, rather than criminal or corrupt ties, or political connections, reduces the probability of reporting downward economic mobility. Similarly, trust in public institutions is associated with more positive perceptions about economic mobility, particularly in low and lower-middle income ECA countries.

Perceptions of unfairness in getting a job – the key factor in moving ahead – prevail in the region. Qualitative surveys revealed the perceived importance of having connections to get a job, as it was cited as the second most important factor for upward mobility, and thus a sense of frustration: *“I am a builder. If I had good connections I would win a tender and become rich”* and *“the biggest problem in our country is you need to be a member of the party so you can get employed, good connections too of course. If you haven’t got those, education and knowledge don’t matter at all”*, expressed men in Kazakhstan and FYR Macedonia, respectively.

Uncertainty and vulnerability

The profound socioeconomic transformation undergone by societies in ECA—moving from planned economies with certain degrees of security to higher levels of uncertainty — can play a

⁷ The transition matrix shows the proportion of individuals who are in the same situation as their parent, as well as the evolution across different levels and conditions. The numbers of the cells represent their percentage in the total matrix and the percentage in parenthesis represents the proportion of the column.

huge role in how people perceive their overall well-being. Macroeconomic volatility, for example, which can lead to significant churning, is associated with negative perceptions (Graham and Pettinato, 2006). The literature finds that populations of transition countries have paid for the socioeconomic transformation with their well-being (Selezneva 2011). Reforms have introduced changes in all life dimensions, forcing the populations to face, among others, such new phenomena as unemployment and high fluctuation of incomes (Andren and Martinsson 2006). Evidence from regional patterns of economic mobility show churning in the region, particularly during the global economic crisis, with a share of households moving downwards. In addition, the restructuring process that these countries have undergone has led to significant job shedding in most countries, with job destruction still outweighing job creation in some (World Bank, 2013). This is the case of Dušan (Box 6) who recounts his life after losing his public sector job in Serbia. This uncertainty and vulnerability affected the perceptions of wellbeing, which in the initial years plummeted and saw the proportion of people in the least happy categories soar (Blanchflower and Freeman 1997; Lelkes, 2006a and 2006b; Angelescu, 2008). By 2011, there is still a considerable gap in subjective well-being between transition and other countries, even though smaller than after the initial reforms (Lelkes, 2006b).

Box 6. A story of downward mobility and coping

Dušan, like many others in his generation, experienced the full impact of the socioeconomic transition in ECA. He was born in the middle class, obtained a secondary education diploma, worked most of his life in Belgrade's Public Transport company, and was laid off in 2005 as the company went through restructuring. Today, Dušan sighs as he longs for his lost middle class status and laments his small and unstable income, *"I don't make ends meet, I barely survive."*

Over the course of his life, he saw his household fall from the 6th to the 1st step of the wellbeing ladder. *"I am not from a family that had always been poor, but from a family where we always travelled and had a good time. [...] I visited the whole of Europe even as a young man. I had a good car and I dressed well. And then all of a sudden it all disappeared."* Alongside the economic stability provided by their public jobs, Dušan and his wife lost also the security of public housing, and are now struggling with the lengthy process of legalization of their unit. Since 2005, Dušan has moved from job to job, working occasionally and informally, always thanks to the support of his friends and family. *"When I lost my job in 2005, a friend found me a construction job. I went to work [for two years] in South Africa with the help of another friend. Their support was and still is very important to me."* Dušan's wife started making crafts at home. Their financial situation was better than ever, Dušan sent money to his family back in Serbia while he was abroad, found well-paid construction work while in Serbia, but overall he felt vulnerable due to the informal and occasional nature of his employment. *"It was better financially, but the stability was lower because it wasn't secure."*

In the aftermath of the crisis, Dušan and his family had to resort to making baskets and crafts to sell outside the shopping mall. This was his sole source of income for years. *"I didn't have enough money to pay the bills and they cut my power. That's when I decided to apply for social assistance, which I got two years ago."* He remembers it as a difficult and unpleasant decision, *"When a man makes the decision to go there and look for money - that is the end. He has no way out and that is his only solution."* But despite the current difficulties, there is hope in Dušan's voice. Thanks to that steady source of income

provided by the social assistance he pays the electricity bills, while he continues supporting his friend in beekeeping, hoping to receive a grant to start his own beekeeping business soon. *“Beekeeping I would do individually as an entrepreneur and I would get the whole family involved. [...] it would be a very profitable enterprise.”*

Source: Qualitative survey, Life Story interview with male social assistance recipient, Belgrade (Serbia).

One aspect of increased uncertainty and vulnerability likely lies in the reduction of public employment. Public sector jobs – scarcer now in most countries compared to the past– still give people a sense of stability and security that the private sector does not seem able to provide. A large share of people in the region prefers a lower-paying but safe long-term job (64 percent of women and 59 percent of men),⁸ than a higher-paying but less secure job. Stability is a trait associated with public sector jobs. Indeed, public sector jobs are perceived as the most desirable ones: 100 percent of focus group participants in qualitative surveys in Kosovo reported a preference for public sector jobs instead of private sector ones. The reasons are plenty, and invariably point to a perception of protection offered by public sector jobs: *“You have insurance in the public sector”, “If the job in the private sector bankrupts, you’re left with nothing”* and *“in the public sector they respect your working hours,”* claim women and men in Pristina.

The existing evidence from the literature and focus groups discussions on this hypothesis presented above is complemented by additional testing. Multivariate regression analysis using the LiTS shows that, not surprisingly, countries that reduced more intensely their share of public employment have more negative perceptions of economic mobility: even controlling for current employment status, a reduction of 10 percentage points in this share lowered the probabilities of perceiving upward economic mobility by four percentage points.

Households report various coping mechanisms to make them more resilient to downward economic mobility. Findings from the qualitative surveys show the value of *“stable and predictable jobs”*, but also of education and skills, values such as solidarity and hard work, and remittances. Perceptions point to a limited capacity of public programs in many countries in the region, although they do play a role in reducing household vulnerability. These findings point to a policy agenda aimed at reducing long term vulnerability – through education and skills for the labor market – but also an agenda to provide safety nets for vulnerable households.

⁸ LiTS 2010.

Conclusions and Policy Implications

The Europe and Central Asia region achieved significant poverty reduction and inclusive growth in the 2000s, as a large share of households was able to escape poverty and settle into the middle class. Nevertheless, many individuals report negative perceptions regarding economic mobility in the region that contrast with these achievements. And even if absolute poverty has gone down in most countries and growth has been broad-based, these perceptions can impact negatively on the pathways to prosperity, as pessimism and uncertainty affect people's behaviors, efforts and attitudes in life, including in the support to reform. The policy agenda in ECA should, therefore, aim at influencing both the factors associated with objective upward economic mobility, as well as those related to people's perceptions about their lives' improvement.

The paper found that two of the leading associated factors with upward economic mobility in consumption relate to **education** and **access to jobs**. Accordingly, drawing from the recent regional report on jobs in the region (Arias et al, 2013), a policy agenda should:

- **Foster job creation:** the policy agenda to create more and better jobs in the region should lay the foundations for private sector-led job creation to open up more employment opportunities for all; this can be achieved through continuing the necessary market and institutional reforms, and improving the business environment for firms to thrive and create jobs. For countries that are at the early stages in the reform process ("late modernizers"⁹), such as Belarus and Ukraine, the agenda should focus on public sector restructuring and diversification. For other more advanced in the reform process, policies should focus on business climate reform to promote job creation, and on fostering entrepreneurship through, for example, easing the entry and exit of firms.
- **Promote human capital accumulation:** policies should aim at building the stock of assets of the poor and less well-off - particularly education and training that is relevant in today's modern labor market. That is, providing both strong generic skills, but also the "new economy" skills increasingly valued by employers, such as thinking creatively, working in teams, being reliable, having good inter-personal relations and guiding and motivating others. There is also an agenda to provide life-long learning and make training systems age-sensitive, particularly for countries in the region with a rapidly aging population and older workforce.
- **Remove disincentives and barriers to jobs:** As these new job opportunities emerge policies should also address the work disincentives and other barriers that keep people out of productive employment, affecting particularly some demographic groups like women, ethnic minorities youth and older workers, and economic groups namely the poor and less well-off. These include disincentives from labor taxes and social protection systems; even for countries with still weak social protection systems (as countries in Central Asia) the challenge is to ensure that as these expand they do not introduce disincentives to work. Further, some groups face additional barriers to productive work that call for policy action, related to lack of flexible work arrangements and child care options, limited information and networks, weak access to productive inputs and others.

⁹ See full country typology in Arias et al. 2013.

A reduction in vulnerability should also be a central part of the agenda, as it seems to affect both objective and subjective economic mobility. Along these lines, countries in the region should improve households' resilience in the face of shocks – protecting income and assets – to avoid downward economic mobility and permanent effects on their ability to improve their welfare. Findings from World Bank (2011) found that weakened labor markets in many countries in the region during the global economic crisis led household to resort to various types of coping mechanisms, some of these impacting the stock and accumulation of assets: e.g. drawing down on savings or incurring in further debt, reducing expenditures of food, healthcare and education.

The agenda on reducing vulnerability varies by country but it entails improving coverage and targeting of social protection systems, and moving towards more effective safety net systems in the administration and design of transfers. It is also important to make benefits more flexible to respond to shocks: Isik-Dikmelisk (2012) explores the response of social benefits during the 2008-10 global crisis for 14 countries in ECA, and finds that pre-crisis preparedness is critical in the ability of social benefits to respond to the crisis. Further, social protection systems can contribute to reducing long-term vulnerability and improving households' ability to generate income by promoting human capital and ensuring that these systems are designed in a way that they are compatible with work.

However, a policy agenda towards achieving the World Bank's twin goals and ensuring their sustainability should also aim at promoting fair processes and equality of opportunities. This includes improved provision of public goods and services – including basic services like water, electricity, connectivity and others - to ensure quality and equality in access to opportunities. This requires a revision of public spending to ensure that it is contributing to addressing inequalities instead of exacerbating them. There is also a need to improve accountability of public institutions for increased transparency and fairness on the processes and use of public resources, and increased access to information for all citizens.

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Annex 1. Additional description of background papers and analytical work

Dávalos, Maria E., Moritz Meyer and Carolina Sanchez Paramo (2013). “Regional patterns of economic mobility in ECA in the 2000s” (power point presentation with key findings). This analysis focuses on intra-generational mobility - tracking households’ changes in welfare over time - and its associated factors. The paper explores 34 household surveys for 17 different countries during the pre-crisis period with available data, and the post-crisis period for a subset of countries with recent available surveys (Annex X). Given the usual lack of panel data across countries, the work employs the synthetic panel methodology of Dang et al. (2014) that relies on using cross-sectional data and imputation methods to study mobility patterns over time. Based on further assumptions about the fundamentals of the economy (the correlation between unobserved heterogeneity in both time periods can be associated to the overall extent of economic mobility in society) this method generates an upper and lower bound of economic mobility. By matching households from the end of the time period to households with similar characteristics in the beginning it then becomes also possible to identify determinants of upward mobility. The analysis relies on the lower bound scenario, which presents a more conservative or lower mobility estimate.

Dávalos, Maria E. and Moritz Meyer (2013) “Moldova: A Story of Upward Economic Mobility”. During the early 2000s Moldova experienced strong economic growth which induced a significant reduction in economic poverty. This paper aims at uncovering the patterns behind this poverty trends by looking at economic mobility and its associated factors in Moldova, and relies on the synthetic panel approach developed by Dang et al (2014). Data used for this country study on Moldova come from the household and budget survey which is conducted on a yearly basis. In addition to consumption data for each household, the survey provides detailed information on demographics and characteristics of all household members. Due to changes in the sampling design and adjustments in the survey structure this paper distinguishes between an early time period from 1999 to 2004 and a late time period from 2006 to 2011. This paper presents transition matrices as well as a linear probability model aimed at identifying correlates of mobility between the beginning and end of each time period.

Meyer, Moritz and Carolina Sanchez Paramo (2014) “Economic Mobility and the Emergence of the Middle Class in Russia”. This paper uses information from the Russian Longitudinal Monitoring Survey (RLMS-HSE) and other data sources (see Box 2 for details) to analyze the emergence and growth of the middle class in the Russia in 2001-2010 and discuss how these trends relate to broader patterns of economic mobility in the country. The paper builds on the existing literature on the topic and aims to add value to this literature in two complementary ways. First, by using a standardized definition of the middle class that is relevant for (high) middle-income countries, the paper is able to present international comparisons with other middle-income countries so as to place numbers and trends in Russia in the global context. Second, the paper provides both a characterization of the Russian middle class and a discussion on the main drivers underlying its growth during 2001-2010 distinguishing between the role of demographics, markets and public policy.

Cancho, Cesar, Maria E. Dávalos, and Carolina Sanchez Paramo (2013) “Perceptions of Economic Mobility in ECA: Looking into the Disconnect between Objective and Subjective Economic Mobility”. Despite significant improvements in per capita expenditures and a marked decline in poverty over the

2000s, a large fraction of ECA's population reports their economic situation in the late 2000s to be worse than in 1989. Using data from the 2006 Life-in-Transition Survey this paper documents the gap between objective and subjective economic mobility and investigates what may drive this apparent disconnection. The paper aims at identifying some of the drivers behind subjective perceptions of economic mobility, focusing on the role of perceptions of fairness and trust in shaping people's perceptions of their upward or downward mobility. It also looks at the role of demographics, education, labor market outcomes and selected country level variables. The empirical strategy followed was to estimate discrete dependent variable regressions of the perceptions of mobility on a set of potential drivers, and check for the robustness of the estimates.

Demarchi, Giorgia, and Patti Petesch (2013) “*Economic Mobility in ECA - Insights from Qualitative Analysis*”. This note uses qualitative data to explore the factors and processes that are perceived by women and men to shape their economic mobility. It focuses in particular on differences in men and women's opportunities and barriers to accessing and advancing in employment and entrepreneurship – critical determinants of mobility and wellbeing –, as well as on people's perceptions of mobility and poverty reduction patterns observed in their communities over the last decade. Additionally, the paper complements quantitative work by unpacking the notion of middle class, exploring people's understanding of its meaning and evolution in recent times. The analysis relies on narratives data as well as responses to closed-ended questions gathered in the course of 148 focus group discussions conducted in both rural and urban sites in 8 ECA countries. The focus groups were conducted separately with women and men, workers and non-workers (unemployed and inactive), and within better-off and worst-off communities, thus generating data that reflects a broad spectrum of mobility experiences and allowing various levels of disaggregation.

Annex 2. Validating the synthetic panel methodology with Moldova panel data

The methodology of synthetic panel is tested and validated using panel data for Moldova for the periods 1999-2002 and 2001-2004. The data is divided into two different randomly-generated subsamples: subsample A is used as a reference point whereas results from the synthetic panel model build only on subsample B. Estimated bounds generated in the synthetic panel exercise from subpanel B are compared to the true transitions observed from the descriptive statistics of subsample A.

The basic consumption model uses the welfare aggregate as dependent variable. The poverty line is fixed to 2.5 PPP 2005 USD. The set of independent variables only includes time-invariant characteristics regarding the household and the household head, specifically: dummy for female headed households, birth cohort dummies from cohort 1945-1950 to cohort 1970-1975, education categories and dummy for rural areas, region dummies.

Results show that all estimated bounds are able to “sandwich” the true panel value across all specified models. These results, along with other validation exercises for other countries, provide strong support in that the analysis carried out in this paper captures, to some extent, the true mobility patterns observed in the country.

Transitions in and out of poverty, true value vs. synthetic panel results

Panel 1: 1999-2002

Panel 2: 2001-2004

Source: World Bank staff calculations using HBS data.

Annex Table A1. Countries and periods included in the regional mobility analysis

country	time period EARLY 2000s [circa 2001 to 2008]	time period LATE 2000s [circa 2008 to 2010]
ALB	2002 to 2008	
ARM	2005 to 2008	2008 to 2011
BLR	2003 to 2008	2008 to 2010
GEO	2003 to 2008	2008 to 2011
HUN	2003 to 2007	
KAZ	2001 to 2008	2008 to 2010
LTU	2003 to 2008	
MDA	2001 to 2004	2008 to 2011
MKD	2002 to 2008	
MNE	2005 to 2008	2008 to 2011
POL	2003 to 2008	2008 to 2011
ROU	2001 to 2008	2008 to 2011
RUS	2004 to 2008	2008 to 2009
SVK	2005 to 2008	2008 to 2009
SRB	2003 to 2008	2008 to 2010
TUR	2002 to 2008	2008 to 2011
UKR	2002 to 2008	2008 to 2010

Annex 2. Periods for shared prosperity indicator

Country	Period
Croatia	2004-2008
Serbia	2007-2010
Macedonia, FYR	2003-2008
Georgia	2006-2011
Armenia	2007-2011
Montenegro	2006-2011
Albania	2005-2008
Slovenia	2005-2010
Czech Republic	2005-2010
Kosovo	2006-2011
Hungary	2005-2010
Bulgaria	2007-2010
Turkey	2006-2011
Ukraine	2005-2010
Lithuania	2005-2010
Estonia	2005-2010
Moldova	2006-2011
Kyrgyz Republic	2006-2011
Kazakhstan	2006-2010
Latvia	2005-2010
Tajikistan	2004-2009
Romania	2006-2010
Belarus	2006-2011
Russian Federation	2004-2009
Poland	2005-2010
Slovak Republic	2005-2010

Table A3. Regression analysis: linear probability model on correlates of upward mobility for Moldova

	Period 1999-2004			Period 2006-2011		
	Exiting \$2.5/day	Exiting \$5/day	Upward mobility	Exiting \$2.5/day	Exiting \$5/day	Upward mobility
Female headed households	-0.0294 (-1.26)	0.0273 (1.78)	0.00127 -0.06	-0.0771 (-1.53)	-0.0678** (-2.74)	-0.0358 (-1.42)
<i>Age 25-29 (base)</i>						
Age 30-34	0.0544 (1.42)	0.0200 (1.02)	0.0808* -2.36	0.0594 (0.81)	-0.0111 (-0.23)	-0.00292 (-0.06)
Age 35-39	0.0914* (2.55)	0.0316 (1.67)	0.111*** -3.44	0.0842 (1.23)	0.064 -1.37	0.0524 -1.11
Age 40-44	0.109** (2.93)	0.0327 (1.63)	0.0966** -2.92	0.123 (1.67)	0.117* -2.31	0.0722 -1.49
Age 45-49	0.0897* (2.37)	0.0359 (1.81)	0.0964** -2.87	-0.0294 (-0.41)	0.0793 -1.58	0.00708 -0.15
Age 50-54	0.0892* (2.09)	0.0341 (1.45)	0.0721 -1.93	-0.175* (-2.41)	-0.0227 (-0.46)	-0.118* (-2.52)
Age 55+	0.140 (1.64)	0.114* (2.15)	0.225** -3.1	-0.153 (-1.42)	-0.0474 (-0.75)	-0.0971 (-1.67)
Rural	-0.0111 (-0.38)	-0.0149 (-0.85)	-0.0234 (-0.89)	-0.0845 (-1.46)	-0.0438 (-1.67)	- 0.0870** *
Household size	- 0.0449*** (-5.44)	-0.0170* (-2.42)	-0.0352*** (-3.92)	-0.0242 (-1.78)	- 0.0342** *	-0.0170* (-2.13)
Household dependency rate (children under 14)	-0.0296 (-1.25)	-0.0428** (-2.98)	-0.0425 (-1.89)	-0.0619 (-1.64)	-0.0125 (-0.45)	-0.0108 (-0.44)
Household dependency rate (adults over 65)	-0.159*** (-3.57)	-0.0613* (-2.51)	-0.184*** (-4.43)	- 0.719*** (-4.60)	-0.104 (-1.28)	-0.160** (-3.00)

Secondary education (base)

Primary education (share of members 25-55 in the household)	-0.166*** (-5.96)	- 0.0613** *	-0.173*** (-6.39)	-0.0823 (-1.65)	0.0284 -1.17	0.0523 -1.93
Tertiary education (share of members 25-55 in the household)	0.143*** (3.53)	0.139*** (5.17)	0.107*** -3.42	0.267** (3.17)	0.196*** -3.83	0.0402 -1.01
Household employment rate in:						
Manufacturing	0.0801 (1.58)	0.0853** (2.80)	0.0797 -1.8	0.0313 (0.22)	0.201** -2.68	0.0694 -1.01
Services	0.201*** (4.49)	0.0532 (1.85)	0.158*** -3.89	0.129 (1.47)	0.187*** -3.55	0.0397 -0.85
Agriculture	0.0834* (1.98)	0.0436 (1.56)	0.077 -1.93	-0.0707 (-0.95)	0.0626 -1.47	-0.0395 (-0.97)
Households received wages (dummy)	0.143*** (6.63)	0.0419** *	0.107*** -5.55	-0.0790 (-1.89)	0.00279 -0.13	0.00597 -0.28
Household receives pensions (dummy)	0.0985 (0.93)	-0.0543 (-1.07)	-0.015 (-0.17)	0.304* (2.07)	-0.063 (-1.14)	0.125 -1.39
Household receives remittances (dummy)				0.0250 (0.49)	0.124*** -5.02	-0.00554 (-0.24)
Household receives social benefits (dummy)	0.0978 (1.67)	0.0410 (0.85)	0.0926 -1.76	-0.0390 (-0.64)	0.0159 -0.52	-0.0345 (-1.04)
Constant	0.313*** (5.66)	0.110** (2.87)	0.309*** -6	0.879*** (8.18)	0.316*** -4.61	0.464*** -7.03
observations	2746	3449	3641	631	1982	2909