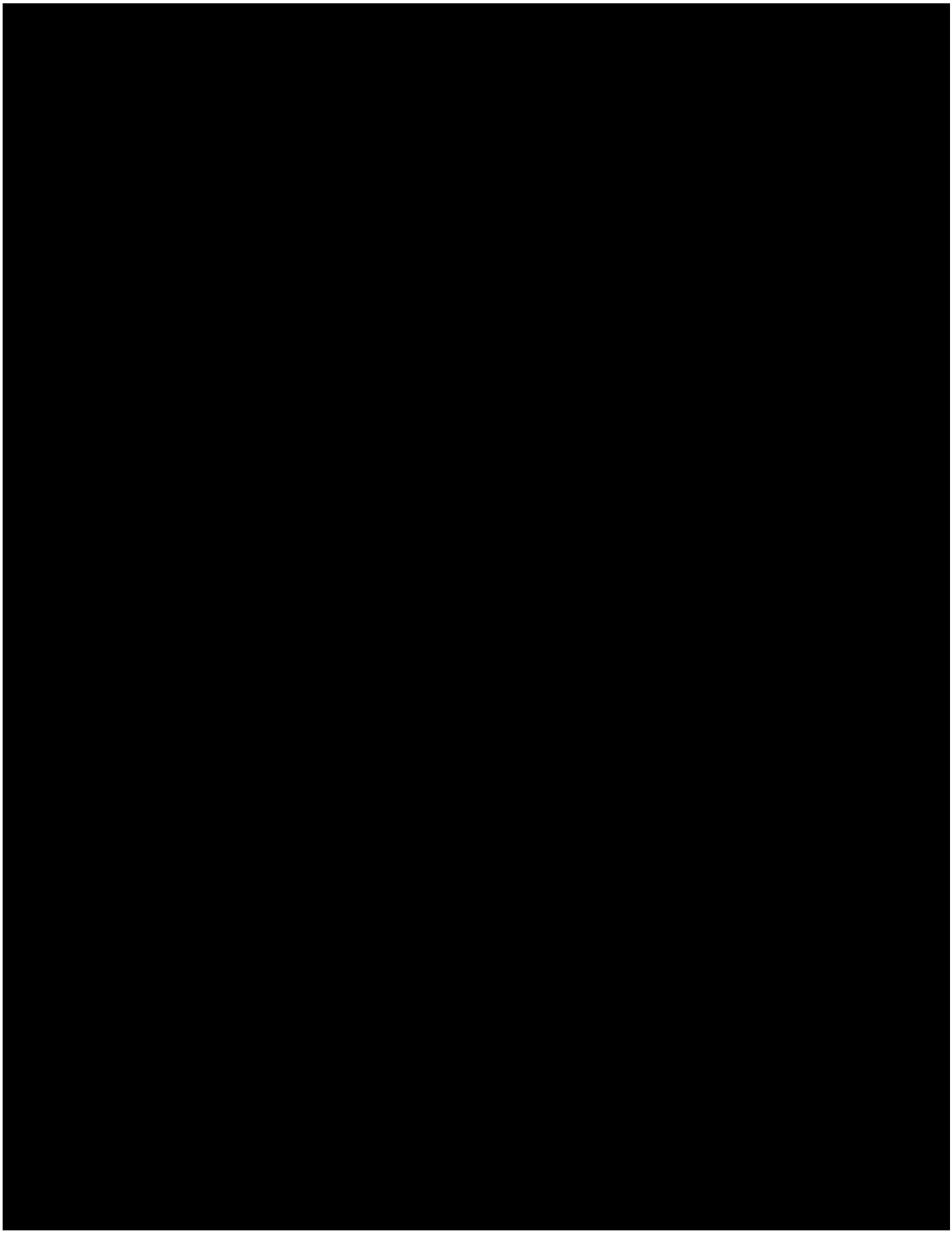

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Being Poor, Feeling Poorer: Inequality, Poverty and Poverty Perceptions in the Western Balkans

Prepared by Zsoka Koczan

Authorized for distribution by Thomas Helbling

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Abstract

Emerging Europe has undergone a major economic transformation over the past 25 years. Most countries experienced initial drops in output during transition, followed by recovery in the second half of the 1990s. The path of transition in the Western Balkans has however been particularly uneven. The effects of transition also seem to have been more traumatic and persistent in the Western Balkans, and nostalgia for the past appears to be more prevalent here than in other former communist regions. Such dissatisfaction has important implications for the political economy of further reforms. This paper aims to inform policy by complementing the analysis of standard macro-level measures of inequality and poverty with a household-level analysis of subjective perceptions of poverty. We find that many more people appear to feel poor than are classified as such using purely income-based measures. Uncertainty, in particular related to expectations of future income and vulnerability to shocks, appears to be a key driver behind this discrepancy.

JEL Classification Numbers: D63, I32, O11, O12, P36.

Keywords: Inequality, Poverty, Western Balkans, Subjective poverty measures

Author's E-Mail Address: zkoczan@imf.org

Contents Page

Tables

Figures

Annexes

I. INTRODUCTION

Emerging Europe has undergone a major economic transformation over the past 25 years. Most countries experienced the 'U-shaped' path of economic performance that has become a 'stylized fact' of transition countries, with initial drops in output followed by recovery in the second half of the 1990s. The path of transition in the Western Balkans (used here to refer to Albania and former Yugoslavia, excluding Slovenia) has however been particularly uneven and more complicated than in the rest of Emerging Europe.[1] The path of GDP resembled more a 'W-shape': recovery, followed by reversal and then recovery again (Sanfey and Cviić, 2010).

Across all of Emerging Europe transition has been associated with uncertainty and worry, about issues ranging from fear of losing one's job to being unable to pay higher electricity bills. However, the effects of transition seem to have been more traumatic and persistent in the Western Balkans and nostalgia for the past appears to be more prevalent here than in other former communist regions (Sanfey and Cviić, 2010).

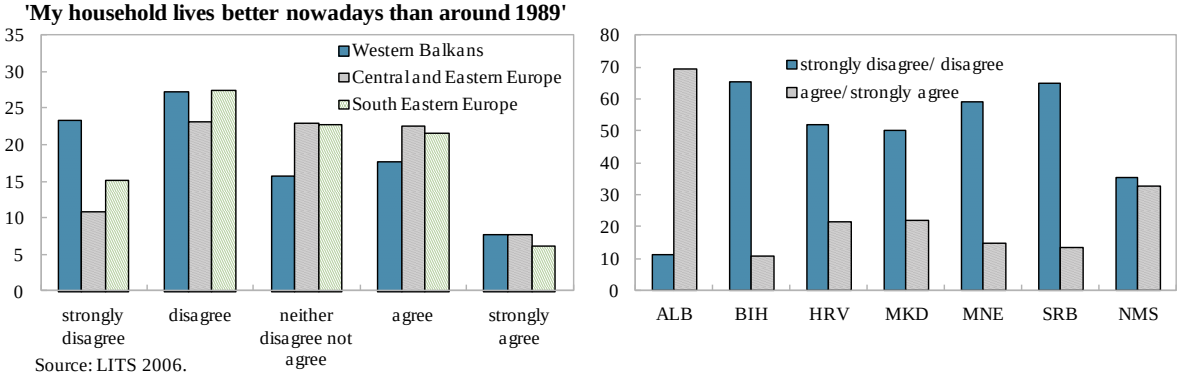
It is striking that even in 2006 (following years of high growth and before the global crisis began to affect the region) over half of the population in the Western Balkans thought they were worse off than they were in 1989 (compared with around 35 percent in the New Member States). A mere 11 percent thought they were better off (compared with around a third in the New Member States). This dissatisfaction appears to be strongest in the former Yugoslav republics, where people overwhelmingly believe that the economic and political situations were better under the old regime (Figure 1).[2] Though such estimates should be treated with great caution given data limitations and uncertainties about prices and exchange rates, real GDP per capita roughly doubled between 1989 and 2006 in Croatia and Kosovo, increased less than 1.5-fold (if at all) in Albania, Bosnia and Herzegovina, Macedonia and Montenegro, and was still below its 1989 level in Serbia in 2006.

[1] Throughout the paper 'Western Balkans States' (WBS) refers to Albania, Bosnia and Herzegovina, Croatia, FYR of Macedonia, Montenegro, and Serbia (of the former Yugoslav republics Slovenia is excluded here as it has from the start – not least because of its close proximity to its western neighbors Austria and Italy – followed a different path). Where data is available Kosovo will be analyzed separately. 'Central and Eastern Europe' includes the Czech Republic, Hungary, Poland, Slovakia and Slovenia; 'South Eastern Europe' includes Bulgaria and Romania. 'Central and South Eastern Europe' (CSE) refers to these seven countries jointly. 'New Member States' also includes Estonia, Latvia and Lithuania. 'Emerging Europe' includes the New Member States and the Western Balkans economies. It should be noted upfront that the Western Balkans are a heterogeneous group, however in light of shared historical experiences we believe comparisons within the group, as well as between the Western Balkans and the New Member States can be informative.

[2] Albanians tend to regard transition in a much more positive light, remembering the bleak economic conditions and oppressive political regime that prevailed up to the end of the 1980s (Sanfey and Cviić, 2010).

Figure 1: Perceptions of well-being

'My household lives better nowadays than around 1989'



Source: LITS 2006.

Note: The question was not asked in the LITS 2010 survey.

Following the conflict-ridden 1990s, the countries of the Western Balkans set out to comprehensively rebuild and reform their economies. They opened up to global trade and became increasingly export-oriented, expanded the role of the private sector, dismantled regulations that stifled business development, and began to build institutions needed to support a market system. The result of these efforts has been robust economic growth, a significant rise in incomes and living standards, and enhanced macroeconomic stability. However, the process of structural transformation began to stall in the mid-2000s, and remains incomplete (Murgasova *et al.*, 2015). Some of this fatigue can be explained by increasing difficulties in pushing through reforms, especially those with significant short-run costs, with benefits coming only later, in a context where there is a sense that reforms have underdelivered, and that the spoils of growth have benefited only a few.

This dissatisfaction has important implications for the political economy of further progress. This paper looks at the evolution and determinants of inequality and poverty in the Western Balkans and aims to contribute to the literature by complementing the analysis of standard macro-level measures of inequality and poverty with a household-level analysis of subjective perceptions of poverty.[3] Standard country-level measures of inequality and poverty such as the Gini coefficient and headcounts have well-known shortcomings in their aggregation of an entire distribution into a single measure. Headcounts depend only on movement across a single (often politically sensitive) threshold; Gini coefficients conflate changes at the tails of the distribution with movements in the middle. We thus rely on micro-level analysis in order to gain insights on the underlying factors driving aggregate, macro-level changes at the household level. We hope that a better understanding of the determinants of subjective perceptions of well-being can help inform policymaking not only by helping direct scarce resources, but also by providing insights on political economy constraints.

The Western Balkans constitutes a particularly interesting case study in this respect as not only are such attitudes starker and more persistent than elsewhere in Emerging Europe, but

[3] While inequality and poverty are closely related concepts, partly due to data constraints (see Section IV for details) they are examined here separately - an explicit examination of cross-linkages is outside the scope of this analysis.

variation in reforms and experiences within this region is also greater than in other transition regions (Sanfey and Cviić, 2010). While the focus of the paper is on the Western Balkans itself, comparisons will also be made with the experiences of the New Member States, in particular in Central and South Eastern Europe.

The paper starts off with a brief summary of the empirical literature on subjective poverty measurement (Section II) and an overview of trends in inequality and poverty in the Western Balkans since the 1990s (Section III). It then relies on macro-level time series data to look at the determinants of poverty and inequality at the country level, examining the role of the government, taxation, social safety nets, education policies and privatization (Section IV). The paper then turns to micro-level data to complement this standard macro-level analysis, relying on cross-sectional household surveys across the region. We start by examining whether those categorized as poor using objective income measures indeed feel poor, look at how factors other than income influence poverty perceptions, and compare overall poverty rates under various objective and subjective measures (Section V). Section VI concludes and provides policy recommendations.

II. LITERATURE REVIEW

Poverty measurement based on official poverty lines is often used to orient and prioritize policy actions. It is, however, well recognized that such 'standard' poverty measures based on household consumption or income aggregates have several shortcomings: related in particular to normalization, low dimensionality and *ad hoc* weights.

Expenditure/ income measures need to be normalized for differences in costs of living, resulting for instance from differences in household size, however even small changes in such assumptions can have large effects on resulting poverty measures (see for example Lanjouw *et al.*, 2004 on equivalence scales; and Deaton, 2010 on difficulties related to PPP exchange rates). Furthermore, while standard survey methods allow a fairly complete accounting of market goods consumed (including own-farm products), there are important non-market goods that are difficult to measure and thus typically excluded, such as access to public services for health care or schooling. Recognizing that welfare is multi-dimensional, and that income is an incomplete metric, there have been several attempts at defining development indices that allow for such non-income factors.[4] However, all such composite indices confront the problem of setting essentially *ad hoc* trade-offs (relative weights) across their dimensions.[5]

[4] An early example was Morris's (1980) 'Physical Quality of Life Index', a now famous example is the Human Development Index (HDI); a recent example is the Multidimensional Poverty Index (MPI) of Alkire and Santos (2010).

[5] The Human Development Index for instance gives equal weight to its three subcomponents (the life expectancy index, the education index and the income index), and such weighting is not related to what weights individuals might assign to these aspects of their living standards.

Scientific research on subjective well-being emerged in the 1960s in psychology (where the emphasis was on measuring and explaining happiness as a state of mind) and economics (where the emphasis was on calibrating welfare functions, including setting equivalence scales), relying on respondents' self-assessments in sample surveys. However, the use of such data in poverty measurement has long stayed at the fringes of practice. Subjective poverty lines have recently gained popularity as recognition of the complementarities between subjective and objective poverty analysis led to increasing attempts to integrate the two approaches[6].

However, there have only been a limited number of empirical applications. Some of these empirical studies have compared headcounts under objective and various subjective poverty lines—generally finding that the latter are (much) higher, in part explained by these picking up different concepts (as noted above). Overall headcounts were also affected by the way the survey questions are posed (for example whether the respondents think they are asking about a 'minimum income' or an 'ideal income'), and whose answers are used (an overall mean or the mean of the poorest, as responses increase with income).[7]

Most studies have focused on the determinants of poverty perceptions to gain a better understanding of the dimensions and structure of poverty. These found that while income/expenditure affects subjective perceptions, other characteristics such as household size, employment status, farm income, assets (home ownership, durable goods), age and health status also matter, even once income differences are accounted for.[8] To the best of our knowledge Carletto and Zezza (2004) provide the only subjective poverty assessment in the Western Balkans, using survey data for Albania. They found that employment status, satisfaction at work, household wealth, relative wealth and being vulnerable had independent effects on perceived welfare, even controlling for income.[9]

We hope to contribute to the literature by analyzing subjective perceptions of poverty in the Western Balkans, and their relation to objective poverty indicators. We believe this region is a particularly interesting case to examine these questions as transition often involves large

[6] See for instance Ravallion (2012).

[7] Examples include Saunders, Halleröd and Matheson (1994) for Australia and Sweden, Ureña (2000) for Spain, Fall *et al* (2000) for France and Slovakia, Herrera (2001) for Peru, and Garner and Short (2003) for the US.

[8] Examples include Pradhan and Ravallion (2000) for Jamaica and Nepal, Ravallion and Lokshin (2002) for Russia, Marks (2005) for Australia, Lokshin, Umapathi and Paternostro (2006) for Madagascar, Castilla (2010) for Mexico, Alem, Köhlin and Stage (2012) for Ethiopia, Dartanto and Otsubo (2013) for Indonesia, Guagnanol, Santarelli and Santini (2013) for the EU, Piñeros and Clavijo (2013) for Colombia, Posel and Rogan (2013) for South Africa, Angelillo (2014) for China and Shams (2014) for Pakistan.

[9] Their results also point to an economies of scale effect not captured by objective measures: they found that for households composed of only one person the incidence of subjective poverty was the highest, while the incidence of objective poverty was the lowest, though this could also be driven by factors affecting the responses to subjective poverty questions, which are also correlated to living alone (e.g. age, vulnerability, unobserved personality traits).

relative price changes, changes to the provision of public goods and an increase in uncertainty (for instance due to the loss of job security) – factors which are likely to affect poverty perceptions, but are generally not picked up by objective measures. Dissatisfaction with living standards is particularly stark and persistent in the Western Balkans, which experienced a more complicated and uneven transition than the rest of Emerging Europe.

Two caveats should be noted up front. First, while we believe that subjective poverty measures can provide useful insights, objective and subjective measures capture very different concepts, and should thus be seen as complements rather than substitutes. Second, the focus of the paper is on explaining the determinants of subjective perceptions of well-being after transition. Data constraints prevent us from looking in detail at the effects of the wars in the 1990s.[10]

III. TRENDS IN INEQUALITY AND POVERTY[11]

The 1990s marked years of transition across Emerging Europe, though with large variation in the extent of reforms across countries and regions, and the Western Balkans lagged behind Central and South Eastern Europe on several indicators of transition. The boom years of the early 2000s brought steady increases in incomes across the region, as in the rest of Emerging Europe. Poverty fell sharply—both in terms of absolute numbers, as measured using the headcount, and depth, as measured using the poverty gap.[12] Mean consumption however remained far below that in Central and Eastern Europe. Rapid growth also brought uneven benefits, and the early 2000s saw large increases in inequality (as measured using the Gini index), driven by increases at the top.[13] While in absolute terms everyone appears to have been made better off, disparities increased as the share of the top rose relative to the share of the bottom (Figure 2). Inequality continued to increase until 2005 across the region, though after 2005 the share of the top decile declined in Albania, Bosnia and Herzegovina and Serbia and to a lesser extent in Montenegro, but continued to increase in Croatia and

[10] Macro-economic data for these years is scarce, there are no comprehensive household-level surveys and poverty measurement is complicated by the need to construct price deflators during hyperinflation.

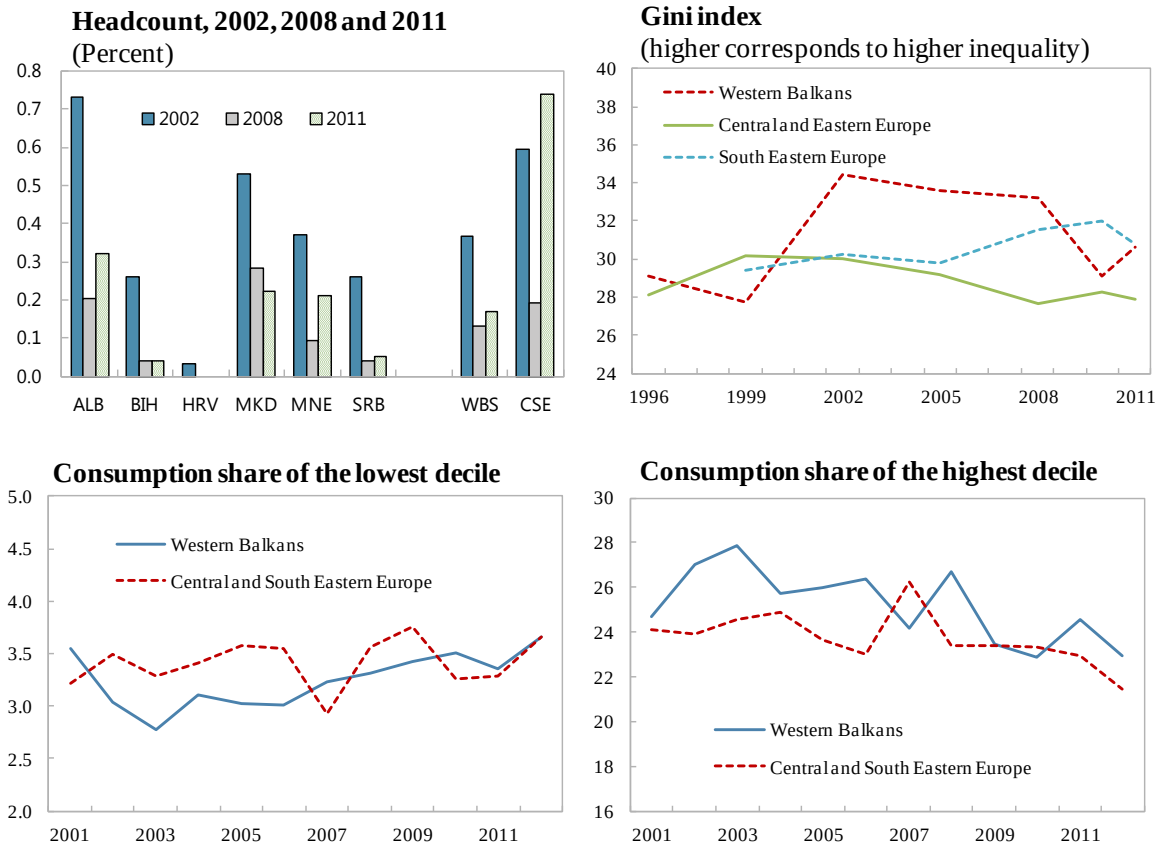
[11] Simple averages are used throughout this section.

[12] The headcount is the percent of the population living in households with consumption per person below the poverty line. The poverty line used in this section is USD 38 per month, corresponding to the World Bank USD 1.25 per day extreme poverty line (in 2005 PPP, as proposed by Ravallion, Chen and Sangraula, 2009). The poverty gap is the mean distance below the poverty line as a proportion of the poverty line. While the headcount provides an estimate of the number of poor, the poverty gap provides an additional metric of the depth of poverty. Poverty rates at national poverty lines are considerably higher, in the order of magnitude of 15-30 percent. As these vary across countries, focus here is on the 1.25 USD per day line; alternative poverty lines, including national poverty lines are discussed in Section VI.

[13] The Gini coefficient is the most commonly used measure of inequality, ranging from 0 (full equality) to 100 (maximum inequality). It is computed based on the Lorenz curve, which plots the proportion of the total income of the population (y axis) that is cumulatively earned by the bottom x percent of the population. The line at 45 degrees thus represents perfect equality of incomes. The Gini coefficient can then be thought of as the ratio of the area that lies between the line of equality and the Lorenz curve over the total area under the line of equality.

Macedonia, with corresponding trends in inequality.[14] This could be driven by the fact that Croatia and Macedonia were at a somewhat more advanced stage of transition already—in particular privatizations may have allowed the top to reap more of the benefits of large capital inflows and growth. Poverty continued to fall across the Western Balkans up to the financial crisis.

Figure 2: Poverty, inequality and consumption shares



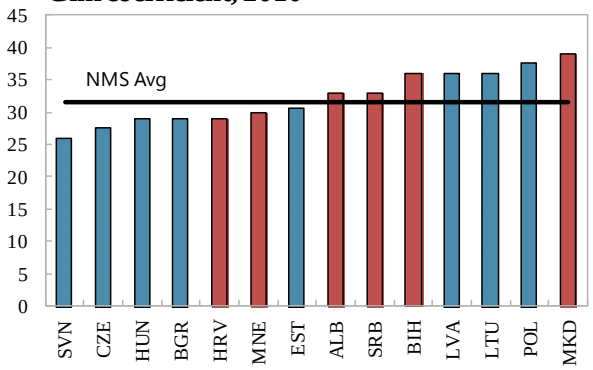
Source: World Bank, Povcal.
Note: Some year-on-year fluctuations (for instance in 2007 and 2009) can be explained by changes in the sample as data is not available for all countries, for all years .

The crisis, however, brought an increase in poverty, though with significant variation across countries, and overall to a lesser extent than in Central and South Eastern Europe (Figure 2). Macro-level data suggests that Albania and Montenegro saw the sharpest pick-ups in poverty since the crisis, though poverty in Serbia also increased.

[14] Increasing inequality in Croatia could be driven by rapid financial integration resulting in fast growth of the financial industry and corresponding increases in the incomes of those employed in the sector.

Inequality fell as a result of the crisis, mostly driven by a decline in incomes at the top (Figure 2). At the peak of inequality in the early 2000s the Western Balkans were more unequal than Central and South Eastern Europe, and though the overall pattern was similar, inequality peaked earlier in Central and Eastern Europe (Figures 2 and 3).

Figure 3: Inequality in the aftermath
Gini coefficient, 2010



Source: World Bank, Povcal; World Development Indicators.

IV. MACRO-LEVEL ANALYSIS

For our macro-level analysis we rely on the World Bank's Povcal database, which is derived from country-level household consumption surveys. National surveys collect information in terms of local currencies, which are then converted to 2005 PPPs to adjust for differences in the price level across countries and over time. We complement this using the EBRD's Transition Indicators, data from the World Economic Outlook and World Development Indicators.

In order to increase the power of our analysis and obtain large enough samples we look at panel regressions of a joint sample of the Western Balkans countries and the New Member States (16 countries, data is not available separately for Kosovo), over the years 2002-2011. Estimations include dummy variables for the Western Balkans countries.

We examine the effects of growth, transition reforms, education, government spending, taxation and unemployment on inequality and poverty at the country level. We analyze impacts on the Gini coefficient, but to disentangle the effects we also study the shares of the top and bottom quintile, and poverty (measured using the headcount and the poverty gap). We look at simple pooled cross-country regressions as well as a fixed effects estimator to account for country-specific factors.[15] The results are reported in Tables 1 and 2.[16]

There is a large literature on the link between income or growth and poverty/inequality, examining whether inequality indeed first rises then falls as countries become richer (the Kuznets curve), and whether growth trickles down to the poor. However, very little has been written on these questions in the Western Balkans. Our regression results suggest that the (lagged) level of income has a significant effect on both inequality and poverty. Inequality

[15] Regressions of this form are always subject to concerns about endogeneity, that explanatory variables may be the result of high inequality or poverty, rather than determinants of it. While we cannot overcome this problem completely, we have included the level and growth of income with a one-year lag. We believe that inequality or poverty would have a lagged impact on government spending, as the budget for a given year is set at the beginning of the year, and thus use contemporaneous values for these variables.

[16] The effects of variables with less time variation (slower-moving variables), such as share of urban population or large-scale privatizations, are in part mopped up by country fixed effects, accounting for some of the differences between Tables 1 and 2.

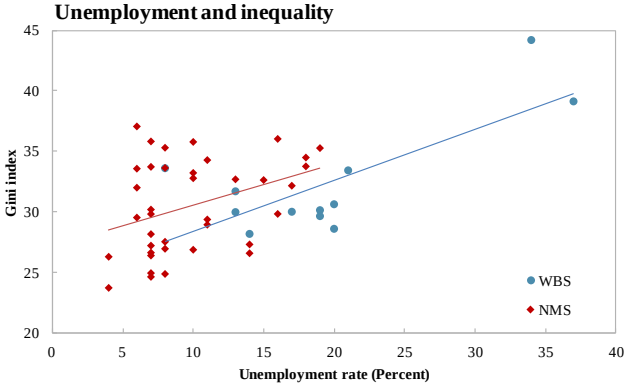
falls with rising income and the share of the bottom quintile increases and poverty falls. However, rather than a pure trickle-down effect, this is likely capturing the role of other factors—once we control for government spending, the level of income is no longer significant. (Lagged) growth increases the share of the top quintile, but at the same time also reduces poverty.

At first sight privatizations appear to have a negative effect, increasing inequality and the share of the top, while reducing the share of the bottom and increasing poverty (Tables 1 and 2, first set of columns). However, this effect is channeled through its impact on unemployment.[17] Once we control for differing unemployment rates small-scale privatizations appear to be pro-poor, possibly capturing the development of entrepreneurship and a private sector (Tables 1 and 2, second and third set of columns).

The Western Balkans are characterized by relatively low inequality in education: primary, secondary and some tertiary education is free, and other than at the tertiary level, private schooling is rare, with the overwhelming majority attending state schools. We examine the impact of pre-primary school enrolment, which (other than tertiary education) is likely to have the most variation, however do not find a significant impact on poverty or inequality—probably explained by equal access at successive stages, a legacy of the socialist system.

Looking at simple scatter plots, there is a striking correlation between unemployment and inequality, even more so in the Western Balkans than in the New Member States (Figure 4). This raises the question whether government policy, and in particular social safety nets are successful in mitigating the impact of shocks, in particular on the poor, who appear to be harder hit.[18] Our regression results confirm that unemployment has a highly significant impact, increasing inequality and the share of the top, and

Figure 4: Correlation between unemployment and inequality



Source: World Bank Povcal, Human Development Indicators, World Economic Outlook.

[17] Note that an increase in unemployment measured at the country level could have an ambiguous impact on inequality (and poverty), depending on whether unemployment increases more among the top or the bottom of the income distribution.

[18] Unemployment has been a persistent legacy of the crisis across the region. Household-level survey evidence for Serbia shows that low-skill sectors have been especially affected by job losses. The same evidence also points to the 'freezing' effect of the crisis on labor market mobility, with the movement of workers between employment, unemployment and inactivity dropping significantly, restricting opportunities for economically inactive populations to rejoin the workforce (World Bank, 2012). Household-level surveys in Bosnia and Herzegovina suggest that it is the 45-54 age group which is at the highest risk of poverty, and more so in rural areas—likely linked to difficulties of this group in particular in finding re-employment (Cojocaru and Ruggeri Laderchi, 2013).

reducing the share of the bottom, suggesting that the poor may be more likely to become unemployed and/or that the social safety net may not provide effective insulation against shocks (or at least to a lesser extent for the poor).

What governments spend on matters. Goods and services expenditure, likely acting as an overall stimulus to the economy is significantly pro-poor, reducing inequality, the share of the top quintile and poverty. Surprisingly, social security expenditure does not have a significant effect. In part this could be explained by the fact that we are looking at differences across countries rather than individuals—as such, social security/unemployment spending is higher when poverty/unemployment is higher. However, it may also be due to low coverage rates and regressive targeting of social safety nets (Annex 2). At first sight capital expenditure appears to increase inequality and the share of the top, possibly linked to corruption surrounding large investment projects. It should however be emphasized that the beneficial effects of, for example, improved infrastructure for the poor are likely underestimated here as the regression only captures immediate (contemporaneous) effects, whereas the beneficial effects of improved infrastructure are likely only visible with a delay. Furthermore, countries with larger infrastructure gaps (that may also have lower incomes and higher poverty rates) may also have higher capital expenditures, further confounding the effect captured in this regression.

Several countries in Emerging Europe introduced flat tax rates in the 2000s, with an on-going debate on whether its benefits in terms of reducing tax evasion outweigh its regressive impact. Our regression results suggest that the impact of a flat income tax is mixed: it reduces the share of the top (perhaps on account of fewer loopholes in the tax system), but also reduces the share of the lowest decile, and increases poverty (probably on account of its regressive nature). It should however be added that this is only a rough metric, and the impact may depend further on its level, as well as its interaction with other taxes and benefits.

Another legacy of the crisis is an increasing disparity between urban and rural areas. Prior to the crisis, the rise in rural incomes was contributing to poverty reduction. That picture appears to have changed, with rural areas now lagging behind in terms of economic growth (Ruggeri Laderchi and Savastano, 2013). We find that even at the country-year level a larger urban population increases inequality, the share of the top and reduces the share of the bottom, in line with the observation that poverty is usually more prevalent in rural areas.

Table 1: Determinants of inequality (Western Balkans and New Member States, 2002-2011)

	Gini	Share of top quintile	Share of bottom quintile	Headcount	Poverty gap	Gini	Share of top quintile	Share of bottom quintile	Headcount	Poverty gap	Gini	Share of top quintile	Share of bottom quintile	Headcount	Poverty gap
Lagged GDP per capita (PPP)	-0.0004***	-0.0002***	0.0000***	-0.0001**	-0.0000	-0.0001	-0.0001	0.0001***	-0.0001	-0.0000	0.0000	0.0001	0.0000	0.0000	-0.0000
	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0002)	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0002)	(0.0001)	(0.0000)	(0.0000)	(0.0000)
Lagged real GDP growth (y/y)	0.0279	0.0691*	0.0120	-0.0209	-0.0235**	0.1464**	0.1272***	0.0000	-0.0289*	-0.0153	-0.0027	0.0369	0.0233*	-0.0415**	-0.0210*
	(0.0633)	(0.0331)	(0.0101)	(0.0136)	(0.0083)	(0.0423)	(0.0289)	(0.0075)	(0.0126)	(0.0111)	(0.0661)	(0.0384)	(0.0104)	(0.0125)	(0.0079)
Large-scale privatization (1-5)	4.0000***	1.5072**	-0.4944***	0.1355	0.1183	-2.8954	-1.6285	0.2306	0.5575	-0.0852	-2.3263	-1.6539	-0.0013	-1.2505	-0.0425
	(0.9735)	(0.4592)	(0.1181)	(0.1874)	(0.0800)	(1.7491)	(0.9979)	(0.2294)	(0.5963)	(0.4051)	(2.9114)	(1.5267)	(0.3252)	(0.8866)	(0.5210)
Small-scale privatization (1-5)	3.0151*	0.4601	-0.2070	-0.2414	-0.0238	1.1271	0.4082	-0.3410	0.0454	0.6898	-4.4905	-2.8023	1.3281***	-1.6205**	-0.2551
	(1.4005)	(0.5172)	(0.1301)	(0.3680)	(0.1122)	(4.1811)	(2.4198)	(0.5443)	(1.0706)	(0.5977)	(3.0099)	(2.3781)	(0.2727)	(0.4887)	(0.3747)
Pre-primary school enrolment (percent)						-0.0701	-0.0457	-0.0037	-0.0027	0.0075	-0.0184	-0.0136	-0.0016	0.0031	0.0031
						(0.0426)	(0.0255)	(0.0035)	(0.0069)	(0.0065)	(0.0567)	(0.0408)	(0.0059)	(0.0099)	(0.0067)
Unemployment rate (percent)						0.2742*	0.1490*	-0.0333*	-0.0019	0.0206	0.3192*	0.2089**	-0.0302*	-0.0383	-0.0036
						(0.1022)	(0.0670)	(0.0159)	(0.0239)	(0.0173)	(0.1094)	(0.0632)	(0.0123)	(0.0185)	(0.0116)
Government expenditure (percent of GDP)						-0.1286	-0.0503	-0.0022	-0.0689	-0.0072					
						(0.1865)	(0.1162)	(0.0222)	(0.0518)	(0.0346)					
Compensation of employees (percent of GDP)											0.2837	0.0189	-0.0229	0.0706	0.0835
											(0.1783)	(0.1216)	(0.0306)	(0.0702)	(0.0415)
Goods and services expenditure (percent of GDP)											-1.6779*	-0.9428*	0.0907	-0.4745*	-0.1409
											(0.6886)	(0.3429)	(0.0758)	(0.1677)	(0.1137)
Social security expenditure (percent of GDP)											-0.3719	-0.2002	0.0521	-0.0533	-0.0740
											(0.1937)	(0.1218)	(0.0300)	(0.0575)	(0.0419)
Capital expenditure (percent of GDP)											0.5400*	0.3822**	-0.0519	-0.0698	-0.0172
											(0.2273)	(0.1142)	(0.0303)	(0.0740)	(0.0412)
Flat income tax rate (dummy)						1.5873	0.8058	-0.3796**	0.2342	0.2303	-2.1679	-1.8081**	-0.0061	0.5149*	0.2123
						(1.2824)	(0.7290)	(0.1312)	(0.1816)	(0.1360)	(1.2779)	(0.6147)	(0.1788)	(0.2173)	(0.1176)
Urban population (share of total)						0.4416***	0.2674***	-0.0556***	-0.0114	0.0122	0.5015*	0.3210**	-0.0434*	0.0774	0.0099
						(0.0957)	(0.0523)	(0.0113)	(0.0271)	(0.0201)	(0.1825)	(0.0917)	(0.0198)	(0.0438)	(0.0285)
Number of obs.	65	140	140	87	86	46	69	69	45	45	29	43	43	31	31
R-squared	0.529	0.395	0.373	0.266	0.281	0.831	0.801	0.854	0.656	0.665	0.941	0.883	0.890	0.791	0.781

Sources: World Bank, World Development Indicators, Povcal; World Economic Outlook and IMF staff calculations.

Note: Robust standard errors in parentheses. * p<0.05, ** p<0.01, *** p<0.001. Constant and Western Balkans country dummy variables included but not reported.

Table 2: Determinants of inequality (Western Balkans and New Member States, 2002-2011, fixed effects regression)

	Gini	Share of top quintile	Share of bottom quintile	Headcount	Poverty gap	Gini	Share of top quintile	Share of bottom quintile	Headcount	Poverty gap	Gini	Share of top quintile	Share of bottom quintile	Headcount	Poverty gap
Lagged GDP per capita (PPP)	-0.0000	-0.0001	-0.0000	-0.0000	0.0000	-0.0002	-0.0001	0.0001*	-0.0000	-0.0000	-0.0001	-0.0001	0.0001	0.0000	-0.0000
	(0.0001)	(0.0001)	(0.0000)	(0.0000)	(0.0000)	(0.0001)	(0.0001)	(0.0000)	(0.0001)	(0.0000)	(0.0001)	(0.0001)	(0.0000)	(0.0000)	(0.0000)
Lagged real GDP growth (y/y)	0.0540*	0.0802***	0.0083	-0.0222*	-0.0208*	0.0206	0.0421	0.0128	-0.0303	-0.0199*	-0.0841	0.0058	0.0285	0.0005	-0.0059
	(0.0194)	(0.0188)	(0.0064)	(0.0098)	(0.0078)	(0.0296)	(0.0201)	(0.0087)	(0.0161)	(0.0090)	(0.0739)	(0.0313)	(0.0188)	(0.0087)	(0.0101)
Large-scale privatization (1-5)	2.0139	2.1799*	-0.2842	-0.2520	-0.0869	-3.7279	-1.4813*	0.1937	-0.3864	0.4443	-5.5866**	-2.5850*	0.3230	-2.8146**	-0.3308
	(1.4759)	(0.9156)	(0.1453)	(0.2496)	(0.1273)	(1.9251)	(0.6904)	(0.2246)	(1.3158)	(0.5788)	(1.4181)	(1.0093)	(0.1614)	(0.6690)	(0.6680)
Small-scale privatization (1-5)	-1.9856	-1.4468	-0.1455	0.5534	0.1376	-9.8215***	-6.7191***	1.4419***	-0.5401	-0.0282	-8.3615**	-6.0695***	1.8709***	-1.1846	0.0996
	(1.6433)	(0.8869)	(0.1804)	(0.2825)	(0.1347)	(2.2820)	(0.9401)	(0.1970)	(1.5549)	(0.8614)	(1.8921)	(0.9599)	(0.3020)	(0.7684)	(0.7904)
Pre-primary school enrolment (percent)						0.0363	0.0211	-0.0032	-0.0135	-0.0056	0.0588	0.0467	-0.0089**	0.0056	0.0049
						(0.0297)	(0.0193)	(0.0033)	(0.0119)	(0.0060)	(0.0441)	(0.0234)	(0.0024)	(0.0041)	(0.0046)
Unemployment rate (percent)						-0.0445	-0.0540	-0.0088	0.0024	0.0241	0.1116	0.0253	-0.0013	-0.0171	-0.0001
						(0.1053)	(0.0654)	(0.0160)	(0.0264)	(0.0148)	(0.0915)	(0.0424)	(0.0166)	(0.0102)	(0.0172)
Government expenditure (percent of GDP)						0.1254	0.0255	0.0218	-0.0699	-0.0629					
						(0.1334)	(0.0730)	(0.0122)	(0.0864)	(0.0440)					
Compensation of employees (percent of GDP)											-0.1299	0.0297	0.2500	0.1284	0.0215
											(0.9469)	(0.3776)	(0.1301)	(0.1396)	(0.1110)
Goods and services expenditure (percent of GDP)											-0.9005	-0.1531	0.0598	-0.3646*	-0.1440
											(0.6934)	(0.1412)	(0.0939)	(0.1238)	(0.0724)
Social security expenditure (percent of GDP)											-0.2859	-0.1130	-0.0886*	0.1005	0.0227
											(0.2375)	(0.1307)	(0.0324)	(0.0530)	(0.0466)
Capital expenditure (percent of GDP)											0.2372	0.0965	-0.0547	-0.1622**	-0.0550
											(0.3620)	(0.1155)	(0.0729)	(0.0377)	(0.0322)
Flat income tax rate (dummy)						1.7422	0.9888	-0.1616	0.0750	-0.0121	-0.1270	-1.2103	-0.1020	0.2782	0.1141
						(1.4557)	(1.1817)	(0.0808)	(0.1502)	(0.0987)	(0.6842)	(1.3316)	(0.0987)	(0.1932)	(0.1123)
Urban population (share of total)						-0.4594	-0.2786	0.0925	0.1017	-0.0143	-0.2764	0.3178	0.1813	0.2417*	0.0048
						(0.4165)	(0.4520)	(0.0591)	(0.1350)	(0.0687)	(0.3657)	(0.5528)	(0.0992)	(0.1014)	(0.0969)
Number of obs.	65	140	140	87	86	46	69	69	45	45	29	43	43	31	31
R-squared	0.111	0.213	0.230	0.101	0.266	0.388	0.301	0.509	0.348	0.551	0.838	0.555	0.678	0.780	0.433

Sources: World Bank, World Development Indicators, Povcal; World Economic Outlook and IMF staff calculations.
Note: Robust standard errors in parentheses. * p<0.05, ** p<0.01, *** p<0.001. Constant included but not reported.

V. MICRO-LEVEL ANALYSIS

Country-level regression of the determinants of poverty and inequality pointed to the importance of factors such as privatization, acting in particular through unemployment, and the composition of government spending. We now turn to micro-level analysis of the determinants of subjective poverty perceptions to examine how closely related factors such as uncertainty, unemployment and expectations affect subjective perceptions. We also compare overall headcounts using various objective and subjective poverty indicators to get a sense of how well standard macro-level measures reflect people's perceptions.

We use the 'Life in Transition Surveys' for our micro-level analysis on poverty and poverty perceptions at the household level. These surveys were administered by the European Bank for Reconstruction and Development and the World Bank across the transition region and aimed for a sample of 1000 randomly chosen households per country.[19] The survey was administered first in 2006, and again in 2010; as the 'minimum income' question (discussed below) was only asked in 2006 we rely on this for most of our analysis and examine the 2010 round as a robustness check.

While this is a unique dataset in terms of cross-country coverage of the transition region, the limitations of such survey data need to be kept in mind. While response rates were reasonable (over 70 percent on average in 2006), there is a known tail bias of surveys, where the richest and the poorest are often not being reached. As a result we are wary of relying on this data to construct inequality measures, however believe that interesting insights can be gained from looking at the responses of the poor who can be reached (even if they may not be the poorest). While most of our analysis looks at the Western Balkans region as a whole, we examine Central and South Eastern Europe as a comparison group, and also look at variation across Western Balkans countries.

We look at two measures of subjective poverty:

- the 'economic ladder' question
  '*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 of the ten is your household today?'*

- the 'minimum income' question (a money-metric of subjective welfare)[20]

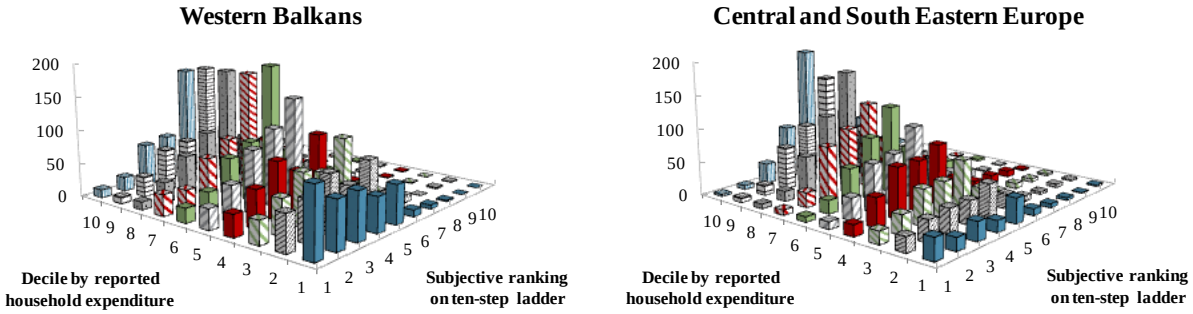
[19] Sample sizes in Tables 4, A.3 and A.4 are smaller than the targeted 6000 households in the Western Balkans and 7000 households in Central and South Eastern Europe due to overall non-response and missing data on some variables.

[20] Originally proposed in Goedhart *et al* (1977), this can be thought of as a special case of Van Praag's (1968) income evaluation question, which asks what income is considered 'very bad', 'bad', 'not good', 'not bad', 'good', or 'very good'.

'Living in this dwelling and doing what you do, what would be the minimum amount of money that this household would need to make ends meet at the end of each month?'

We look at how such subjective poverty measures compare to objective poverty indicators, analyze their determinants and construct 'social subjective poverty lines'. The 'minimum income' question is a natural way of defining poverty as the income below which people tend to think they are poor in a specific setting and above which they tend to think they are not poor. However, such reported 'minimum income' depends on the respondent's circumstances, in particular it is an increasing function of income. We will thus construct 'conditional minimum incomes', controlling for the impact of individual circumstances, and will evaluate this for those whose incomes are closest to reported 'minimum income' as they are likely to give the most accurate answers about 'minimum income'.[21]

Figure 5: Objective and subjective relative standing of households, 2006



Source: LITS 2006.

Looking at descriptive statistics from the 2006 round of the Life in Transition Survey we find that median (and mean) household expenditure is only slightly lower in the Western Balkans than in Central and Eastern Europe, though with considerable variation across countries (with spending in Croatia and Montenegro being around 60 percent higher than in the other four economies). The reported 'minimum income' is however around 10 percent lower in the Western Balkans than in Central and South Eastern, picking up differences in the cost of living, as well as different reference groups. More people feel relatively poor (on the bottom two rungs of the expenditure ladder) in the Western Balkans than in Central and South Eastern Europe (Table 3, Table A.1).[22] Across the region, as in Central and South Eastern Europe, the share of those who feel poor is higher than the share of those who are objectively in the poorest two deciles, despite a bias in the ladder question towards middle

[21] As noted before, such lines are not directly comparable with official poverty lines, which are narrower, based on the ability to afford a basic basket of goods.

[22] Households are considerably larger (driven by Macedonia and Albania), slightly less likely to be urban and farming is more likely to be an important source of income in the Western Balkans. Respondents' views are broadly similar, people in the Western Balkans are somewhat more pessimistic about finding a job once unemployed, and are slightly more likely to favor redistribution.

rungs (Figure 5).[23] There is, however, considerable variation across countries: Croatia and Montenegro exhibit the largest discrepancies, with subjective perceptions in line with those in the rest of the region despite higher mean incomes (Figure A.1). A particularly high share of respondents feel poor in Serbia; even though objective rates are only slightly higher than elsewhere.

Table 3: Poverty perceptions and household characteristics, 2006

	Western Balkans		**Central and South Eastern Europe**	
	Mean	*Std. Dev.*	*Mean*	*Std. Dev.*
HH expenditure (USD), median in brackets	510 (423)*	361.3	528 (419)	417.7
Reported minimum income required (USD)	749*	492	828	519
Perceived relative standing in bottom 2 deciles	0.18*	0.38	0.15	0.36
Owns a house	0.90*	0.31	0.86	0.35
Farming imp. source of income	0.10*	0.30	0.04	0.20
No. of adults in hh	2.91*	1.37	2.37	1.15
No. of children in hh	0.50*	0.88	0.29	0.66
Age	45.6*	17.4	49.7	17.8
Healthy	3.49*	1.08	3.38	1.03
Highest degree (1-5)	3.25*	1.24	3.41	1.12
Employed in last year	0.44*	0.50	0.48	0.50
Lives in urban area	0.56*	0.50	0.61	0.49
Chance of finding job	1.77*	0.97	1.93	1.10
Should reduce inequality	4.37*	0.88	4.18	0.96
Prefers market economy	0.63	0.48	0.63	0.48

Source: LITS 2006 and staff calculations.

Note: * denotes statistically significant difference at the 5% level. Household expenditure is reported in the surveys in local currency and converted to USD using market exchange rates.

Among households which are measured as objectively poor (ranked in the bottom two deciles by actual household income), 38 percent also self-assess as poor (see also Figure 6). While this may appear surprising at first sight, it points to important differences between objective and subjective measures and is broadly in line with that reported in other studies which use the bottom two rungs of the ladder to identify the subjectively poor.[24] Among the 62 percent of objectively poor households that are not subjectively poor, the overwhelming majority (96 percent) have household income below their reported 'minimum income'. These numbers are similar to those for Central and South Eastern Europe.[25] The mean monthly

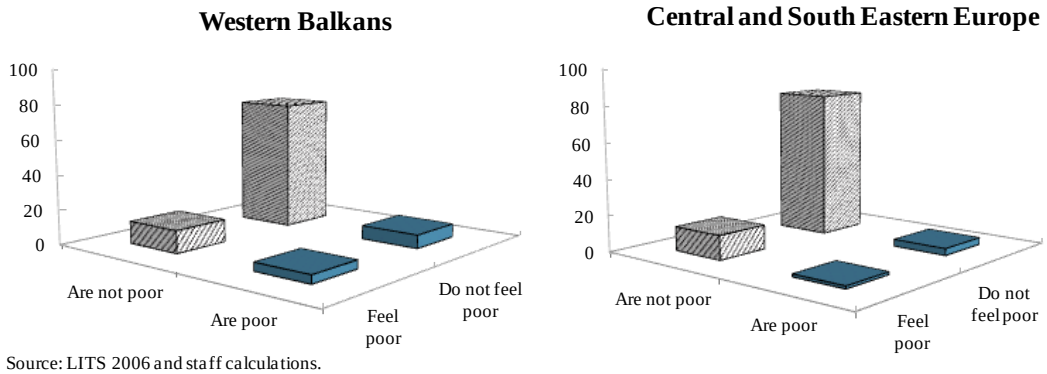
[23] This is true both among the poor and among the rich and is in line with the findings of Ravallion and Lokshin (2002), who also found that people's perceptions can differ significantly from objective rankings, and that there is a bias towards the middle of the scale.

[24] 50 percent in Albania (Carletto and Zezza, 2006); 40 percent in Russia (Ravallion and Lokshin, 2002).

[25] In Central and South Eastern Europe 28 percent of respondent who are objectively poor also feel poor, and 98 percent of the remaining 72 percent have income below what they report they would need to make ends meet.

household expenditure of those who are both objectively and subjectively poor is around 100-120 USD, while those with household expenditure around 600 USD are both objectively and subjectively 'non-poor'.

Figure 6: Poverty and poverty perceptions, 2006



Source: LITS 2006 and staff calculations.
Note: 'Are poor' defined as household expenditure in bottom two deciles. 'Feel poor' defined as self-ranked welfare ranking on bottom two rungs.

Comparing the characteristics of those who are/ feel poor we find that expectations of future income play an important role, affecting perceptions of poverty: healthier and better educated respondents, and those unemployed respondents who see better chances of reemployment (all likely indicative of higher expected future income) are less likely to feel poor for a given income level (Table A.2). Views also seem to matter somewhat, with those who favor more redistribution more likely to feel poor.

Having looked at basic descriptive statistics, we now turn to regression analysis (Table 4), looking at the determinants of poverty perceptions once income is controlled for.[26] We look at three dependent variables: a dummy variable for feeling poor (self-ranked in the poorest two deciles), a self-assessed relative ranking (on a 1-10 scale) and the 'minimum income' question. We find that while income is a highly significant predictor, subjective economic welfare is influenced by many other factors including household size, age, health, education, employment, assets, feelings of uncertainty and expectations about future welfare.

Household expenditure has the expected significant effect, reducing the perception of being in the bottom two deciles, increasing the perception of relative standing. As expected, it also has a significant positive effect on reported 'minimum income'. The impact of income is however generally somewhat smaller in the Western Balkans than in Central and South Eastern Europe. This could be driven by a larger role of factors omitted from objective poverty measures such as public goods in the Western Balkans. Larger households feel poorer and report needing higher 'minimum income', even once expenditure is controlled for (possibly driven by problems with existing equivalence scales and/or a reflection of current difficulties in making ends meet).

[26] These tables and the following discussion refer to 2006, results for 2010 are broadly similar and are presented in Table A.3. Table A.4 reports the results for Central and South Eastern Europe.

Those who own a house or have farm income are less likely to feel poor. This finding is in line with the existing literature (Ravallion and Lokshin, 2002; Marks, 2005; Dartanto and Otsubo, 2013; Posel and Rogan, 2014) and may indicate that the imputed value of home production has been underestimated in the measure of household expenditure, or that access to land for farming (and living in one's own home) reduces perceptions of vulnerability.[27] Farm income is no longer significant in Central and South Eastern Europe, likely reflecting the lower importance of farm income or less volatility/ uncertainty in formal wages.

Turning to individual characteristics, we find that expectations and uncertainty matter for subjective well-being. Older respondents are less likely to report feeling poor, and in the Western Balkans (but not in Central and South Eastern Europe) they also report needing significantly lower 'minimum income', probably reflecting the security provided by near-universal state pensions in the region and/ or extended family support systems. As noted elsewhere in the literature (Ravallion and Lokshin, 2002; Shams, 2014), health status plays an important role for perceptions of subjective poverty – we find that those in worse (self-reported) health are more likely to feel poor (this could be capturing lower expected future income as well). Its impact on 'minimum income' is, however, not significant once income is controlled for, probably on account of access to free public health care. Those with higher educational degrees are less likely to feel poor and report higher relative standing, again likely driven by higher expectations of future incomes. They also report higher 'minimum income', reflecting aspirations as well as status, and the impact of education remains economically and statistically significant even controlling for expenditure. Another finding in line with the literature is the independent impact of being employed, other than merely providing a source of income (Ravallion and Lokshin, 2002; Carletto and Zezza, 2006).[28] Unemployed respondents feel poorer and report higher 'minimum income' needs. In the restricted sample of those who are currently unemployed, those thinking they have better chances of reemployment also feel better about their relative standing, and are less likely to feel poor, once again reflecting the importance of expectations.[29]

Subjective poverty perceptions also provide interesting insights on the urban-rural dimension of poverty. In the Western Balkans, as in Central and South Eastern Europe, those living in cities report needing higher income (in line with higher prices, and fewer non-market goods). However, while in Central and South Eastern Europe those living in urban areas are less likely to report feeling poor, in the Western Balkans this effect is of a much smaller magnitude and not statistically significant—the social safety net may only be an imperfect substitute for rural networks and the security of having access to land and farm income.

[27] Angelillo (2014) noted the role of vulnerability for subjective poverty perceptions in China.

[28] Ravallion and Lokshin (2002) found that the unemployed judge their economic welfare to be lower, even with full income replacement and note that this could be a possible explanation why many Russian workers continue working despite substantial wage arrears.

[29] Expectations of future income are likely to affect migration from the region as well: net migration rates are highest for Albania and Kosovo, though migration from Serbia has also increased recently as visa requirements have been liberalized.

Even after controlling for numerous personal and household characteristics, important country differences remain. Respondents in Macedonia, Montenegro and Serbia feel statistically significantly poorer than those in Albania (perhaps driven by a more negative outlook on future incomes); households in Croatia, Montenegro and Serbia report needing higher 'minimum incomes' (perhaps reflecting different reference groups on account of seaside tourism).

A very large proportion of variation – over 80 percent for poverty perceptions, over 50 percent for 'minimum income' – still remains unexplained in our regressions. While such low R-squares are not unusual in micro-level analyses, this could be picking up the impact of response errors, random differences in the interpretation of the survey question, idiosyncratic and transient differences in respondents' moods and differences in personality and tastes. Ideally we would like to use panel data to at least control for individual-level time invariant characteristics such as personality traits (some of which may however be picked up through the 'opinions' that we control for), however such data is unfortunately not available. While this finding is in line with the existing literature (Ravallion and Lokshin, 2002; Carletto and Zezza, 2006), it supports the view that subjective poverty measures should be used as a complement to rather than as a substitute for objective measures.

Table 4: Determinants of subjective poverty perceptions in the Western Balkans, 2006

Dependent variable:	**Perceived relative standing in bottom 2 deciles in 2006 (0-1)**			**Perceived relative standing in 2006 (1-10)**			**Reported 'minimum income required to make ends meet' in 2006 (USD)**		
Log hh expenditure (USD)	-0.40***	-0.44**	-0.38***	0.43***	0.43**	0.41***	235.88***	186.44***	249.71***
	(0.05)	(0.15)	(0.07)	(0.04)	(0.14)	(0.05)	(11.04)	(38.25)	(14.77)
Owns a house	-0.13	0.07	-0.28*	0.22***	0.14	0.27***	16.97	66.30	17.90
	(0.09)	(0.26)	(0.11)	(0.06)	(0.16)	(0.07)	(21.35)	(52.76)	(26.15)
Farming imp. source of income	-0.08	-0.50	-0.14	-0.04	0.26	-0.03	-75.09***	-138.48*	-64.20*
	(0.11)	(0.39)	(0.14)	(0.07)	(0.22)	(0.08)	(22.37)	(66.53)	(27.01)
No. of adults in hh	0.02	0.05	0.04	-0.04*	0.00	-0.04	57.16***	37.86*	47.38***
	(0.03)	(0.07)	(0.03)	(0.02)	(0.05)	(0.02)	(6.32)	(15.32)	(7.22)
No. of children in hh	0.07	0.03	0.03	-0.06*	-0.06	-0.04	6.40	26.01	-3.25
	(0.04)	(0.09)	(0.05)	(0.03)	(0.08)	(0.03)	(9.17)	(24.83)	(11.32)
Age	-0.00	0.02	-0.01*	0.00	-0.01	0.00*	-1.35**	2.26	-1.61*
	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)	(0.52)	(2.34)	(0.63)
Healthy	-0.29***	-0.08	-0.31***	0.29***	0.08	0.31***	12.49	27.19	7.48
	(0.03)	(0.11)	(0.04)	(0.02)	(0.09)	(0.03)	(7.13)	(24.57)	(8.62)
Highest degree (1-5)	-0.09**	-0.15	-0.09*	0.06**	0.15	0.06**	19.24**	31.05	25.46***
	(0.03)	(0.10)	(0.04)	(0.02)	(0.09)	(0.02)	(5.90)	(24.13)	(7.48)
Employed in last year	-0.11	0.55*	-0.20*	0.03	-0.58**	0.07	44.87**	21.79	46.00*
	(0.07)	(0.27)	(0.09)	(0.05)	(0.20)	(0.06)	(16.42)	(79.17)	(20.04)
Lives in urban area	-0.02	0.10	0.02	0.02	0.04	-0.01	59.86***	62.93	79.84***
	(0.07)	(0.19)	(0.08)	(0.04)	(0.14)	(0.06)	(13.84)	(39.12)	(16.79)
Chance of finding job		-0.26*			0.15			37.72	
		(0.12)			(0.08)			(29.24)	
Should reduce inequality			0.07			-0.05			-13.84
			(0.05)			(0.03)			(8.93)
Prefers market economy			0.02			0.06			-11.19
			(0.08)			(0.05)			(18.03)
Number of obs.	2626	240	1768	2626	240	1768	2643	243	1775
Pseudo/Adjusted R-squared	0.138	0.147	0.123	0.065	0.063	0.058	0.466	0.280	0.459

Source: LITS 2006 and IMF staff calculations.

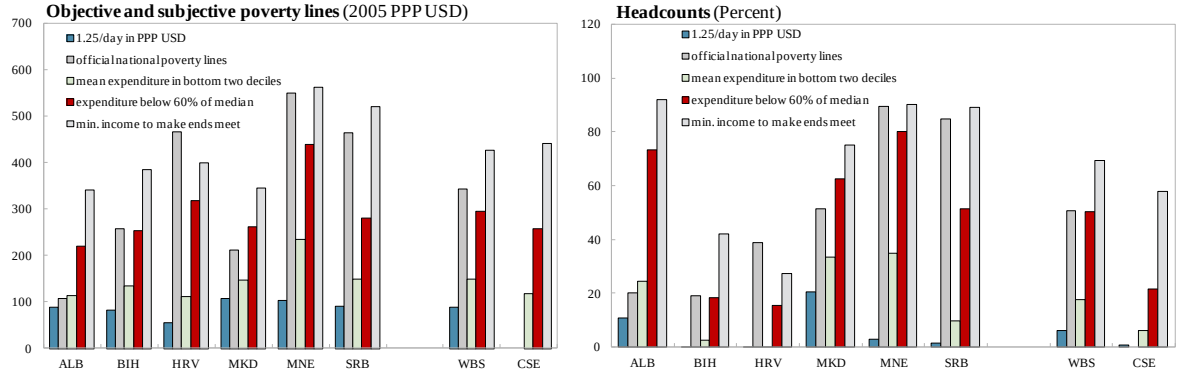
Note: Robust standard errors in parentheses, constant not reported. * denotes significant at the 5% level, ** at the 1% level, *** at the 0.1% level.

Sample sizes differ between the first and second columns as the second column looks at the subset of unemployed respondents, as only they were asked about the 'chance of finding a job'.

The above analysis focused on differences in the structure of poverty—in the following we compare overall headcounts using various subjective and objective measures.

Comparing objective and subjective poverty lines, we find that reported 'minimum income' is higher for richer deciles than for poorer ones, unsurprising given the formulation of the survey question and its dependence on current circumstances, especially income. Such subjective poverty lines are also higher than official poverty lines, and much higher than the World Bank's extreme (1.25 USD per day) poverty line (Figure 7). Headcounts are correspondingly higher, though with large variation across countries (ranging from 27 percent in Croatia to 92 percent in Albania; see also Figure A.2). While these seem very high in comparison to headcounts based on objective measures, our overall headcounts are not out of line with earlier empirical studies. [30]

Figure 7: Objective and subjective poverty lines and corresponding headcounts, 2007/2008



Source: Povcal, LITS 2006 and staff calculations.
Note: Predicted minimum income to make ends meet from regression analysis for the poorest 20%.

The discrepancy is likely driven by the fact that subjective and objective lines capture different concepts. Subjective poverty, especially as measured using the 'minimum income' question, is a much broader measure, and may be interpreted by respondents as also allowing them to save to deal with unexpected shocks. In this sense it may be closer to the definition of the 'at risk' group (usually defined as living below 60 percent of median income)—households who can make ends meet under normal circumstances, but who are at risk of falling back into poverty due to their vulnerability to shocks.

The 2010 Life in Transition Survey contains detailed information on how respondents were affected by the crisis – including which shocks hit them, and how they dealt with them. Households in the Western Balkans were generally hit harder than those in Central and South Eastern Europe, in particular through lower or delayed/suspended wages (more so for higher earners), lower remittances (particularly for low income households), and unemployment, and had more limited options of dealing with them through increased hours or employment

[30] Fall *et al* (2000) for instance found that using the 'minimum income' question 71 percent of respondents in Slovakia considered themselves poor; our estimate is 65 percent.

(especially in poorer households; Figure A.3). They were thus more likely to cut consumption of luxury goods, alcohol and tobacco, but also of staples, and were more likely to try to save on utilities and health-related spending. As expected, poorer households were more likely to cut their consumption of staples, health- and utility-related spending, and withdraw from education. Being ill-equipped to deal with shocks has a significant impact on subjective perceptions of poverty—the correlation between feeling poor and having to reduce consumption of staples remains significant even after controlling for income.

Together with the crucial role of vulnerability and expectations of future income for subjective poverty perceptions (as seen from the regression results), this suggests that increased uncertainty plays an important role in explaining why many more people in the Western Balkans feel poor than is implied by objective poverty measures.

VI. CONCLUSIONS

Across the region governments are dealing with the legacies of the past, including an incomplete transition. While the role of the state—acting as a stimulus to the domestic economy and as an employer—has shrunk, the development of the private sector is often lagging behind, as reflected in high unemployment rates.

During the crisis and its aftermath, government revenues decreased, resulting in pressures to reduce spending, including on wages, pensions and social protection. The demand for unemployment benefits and social assistance has however increased, placing even more weight on the design of social safety nets and the targeting of welfare transfers. Improved targeting and extended coverage of the poor could help, and poorly targeted social assistance could in many cases be improved at no additional fiscal cost by shifting from categorical to means-tested benefits. Complementing this, and in light of increasing demographic pressures, governments should improve labor market institutions to enhance employment as well as participation rates. Governments should also pay more attention to the urban-rural divide and the prominent regional aspect of poverty.

The analysis of poverty perceptions also provides some insights into the persistent dissatisfaction of people in much of the region. Those who grew up in the former Yugoslavia remember a time when they lived well and could travel freely abroad. The uncertainty and vulnerability of the transition period are in sharp contrast with this experience and appear to be driving dissatisfaction even following years of high growth. The crisis likely further worsened the situation as it hit households in the Western Balkans particularly hard, even more so than in Central and South Eastern Europe, resulting in job losses, reductions/ delays in wages and lower remittances. Many more people feel poor in the region than are picked up by standard income-based measures. The finding that uncertainty and expectations are key to subjective perceptions could have important implications for the sequencing and communication of reforms - in particular reforms affecting the labor market, whether directly through changes in labor market institutions, or indirectly through privatizations. Such dissatisfaction also has important implications for the political economy of further reforms. This context is both an opportunity and a threat to policymakers in the region: an

opportunity because it creates a sense of urgency in trying to improve people's lot, but also a threat because there may be a reluctance to push ahead with potentially painful reforms.

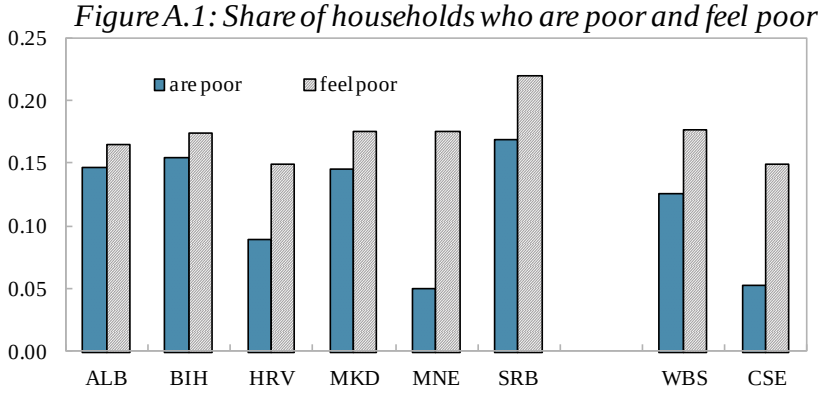
ANNEX 1

Table A.1: Poverty perceptions and household characteristics in the Western Balkans (means), 2006

	ALB	BIH	HRV	MKD	MNE	SRB
HH expenditure (USD), median in brackets	457 (392)	438 (380)	742 (632)	427 (374)	748 (679)	439 (373)
Reported minimum income required (USD)	568	629	1125	520	919	732
Perceived relative standing in bottom 2 deciles	0.17	0.18	0.15	0.18	0.18	0.22
Owns a house	0.94	0.90	0.89	0.94	0.84	0.87
Farming imp. source of income	0.14	0.09	0.06	0.12	0.06	0.12
No. of adults in hh	3.36	2.67	2.42	3.27	2.92	2.80
No. of children in hh	0.85	0.42	0.32	0.53	0.54	0.38
Age	44.0	44.3	52.6	44.1	41.3	47.3
Healthy	3.63	3.40	3.23	3.70	3.69	3.31
Highest degree (1-5)	2.72	3.21	3.35	3.31	3.56	3.34
Employed in last year	0.44	0.39	0.44	0.45	0.45	0.49
Lives in urban area	0.60	0.44	0.60	0.54	0.62	0.56
Chance of finding job	1.73	1.67	1.78	1.51	2.24	1.78
Should reduce inequality	4.37	4.16	4.50	4.36	4.50	4.33
Prefers market economy	0.83	0.46	0.57	0.55	0.66	0.67

Source: LITS 2006 and IMF staff calculations.

Figure A.1: Share of households who are poor and feel poor



Source: LITS 2006 and IMF staff calculations.
Note: 'Are poor' defined as household expenditure in bottom two deciles.
'Feel poor' defined as self-ranked welfare ranking on bottom two rungs.

Table A.2: Characteristics of objectively and subjectively poor households

	is poor, feels poor	**is poor, does not feel poor**	**is not poor, but feels poor**	**is not poor, does not feel poor**
	Mean	*Mean*	*Mean*	*Mean*
Household expenditure (USD)	119.7	136.0*	459.0*	604.0*
Owns a house	0.89	0.92	0.89	0.90
Farming imp. source of income	0.07	0.08	0.10	0.10
No. of adults in hh	2.08	2.15	2.83*	3.05*
No. of children in hh	0.34	0.21*	0.52*	0.54
Age	58.5	56.5	48.45*	43.1*
Healthy	2.66	3.09*	2.99	3.67*
Highest degree (1-5)	2.28	2.61*	2.91*	3.43*
Employed in last year	0.14	0.19	0.34*	0.50*
Lives in urban area	0.49	0.49	0.47	0.59*
Chance of finding job	1.28	1.74*	1.48	1.93*
Should reduce inequality	4.27	4.24	4.42*	4.38
Prefers market economy	0.56	0.53	0.58	0.65*

Source: LITS 2006 and IMF staff calculations.

Note: * denotes statistically significant difference relative to previous column at the 5 percent level.

Table A.3: Determinants of subjective poverty perceptions in the Western Balkans, 2010

Dependent variable:	**Perceived relative standing in bottom 2 deciles in 2010 (0-1)**			**Perceived relative standing in 2010 (1-10)**		
Log hh expenditure (USD)	-0.54***	-0.68***	-0.58***	0.41***	0.52***	0.47***
	(0.07)	(0.15)	(0.08)	(0.05)	(0.11)	(0.05)
Owns a house	-0.19	-0.19	-0.21	0.17*	0.26	0.19*
	(0.14)	(0.24)	(0.15)	(0.08)	(0.15)	(0.09)
Farming imp. source of income	0.10	0.16	0.14	-0.19	0.10	-0.20
	(0.18)	(0.36)	(0.20)	(0.12)	(0.28)	(0.14)
No. of adults in hh	0.08*	-0.08	0.08*	-0.05*	0.04	-0.06*
	(0.04)	(0.08)	(0.04)	(0.02)	(0.05)	(0.03)
No. of children in hh	0.12**	0.17*	0.13**	-0.02	-0.06	-0.01
	(0.04)	(0.08)	(0.05)	(0.03)	(0.06)	(0.03)
Age	-0.01	0.01	-0.01	0.00*	-0.01	0.01**
	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Never married	0.08	-0.01	0.06	0.10	0.13	0.20*
	(0.14)	(0.26)	(0.15)	(0.08)	(0.17)	(0.09)
Divorced/separated	0.33**	0.44	0.38**	-0.22*	-0.36*	-0.19
	(0.13)	(0.26)	(0.14)	(0.09)	(0.18)	(0.10)
Widowed	-0.21	0.84*	-0.24	0.22**	-0.70*	0.25**
	(0.12)	(0.34)	(0.13)	(0.08)	(0.30)	(0.08)
Healthy	-0.27***	-0.25**	-0.27***	0.25***	0.14*	0.26***
	(0.04)	(0.09)	(0.05)	(0.03)	(0.06)	(0.03)
Highest degree (1-5)	-0.13***	-0.10	-0.14***	0.14***	0.12**	0.13***
	(0.03)	(0.07)	-0.03	(0.02)	(0.04)	(0.02)
Employed in last year	-0.08	-0.20	-0.08	0.05	0.18	0.04
	(0.08)	(0.16)	(0.09)	(0.05)	(0.11)	(0.06)
Lives in urban area	0.19*	0.10	0.22*	-0.03	0.04	-0.03
	(0.08)	(0.16)	(0.09)	(0.05)	(0.10)	(0.05)
Bosnia and Herzegovina	0.27	0.32	0.14	-0.23**	-0.50**	-0.16
	(0.15)	(0.30)	(0.18)	(0.08)	(0.17)	(0.09)
Croatia	0.75***	0.71*	0.68***	-0.51***	-0.61**	-0.57***
	(0.16)	(0.30)	(0.18)	(0.09)	(0.20)	(0.10)
Macedonia	0.49***	0.32	0.46**	-0.48***	-0.67***	-0.52***
	(0.14)	(0.28)	(0.16)	(0.08)	(0.18)	(0.09)
Montenegro	0.32	0.00	0.33	-0.34***	-0.47**	-0.35***
	(0.17)	(0.35)	(0.19)	(0.08)	(0.17)	(0.10)
Serbia	0.89***	1.01***	0.85***	-0.76***	-0.94***	-0.80***
	(0.12)	(0.24)	(0.14)	(0.07)	(0.15)	(0.08)
Chance of finding job		-0.24*			0.14**	
		(0.09)			(0.05)	
Risk averse			0.09			-0.05
			(0.08)			(0.05)
Optimist			-0.07			-0.04
			(0.08)			(0.05)
Prefers growth over pol. Liberties			0.10			-0.09
			(0.10)			(0.06)
Number of obs.	2210	463	1840	2195	460	1833
Pseudo/Adjusted R-squared	0.169	0.248	0.177	0.071	0.09	0.074

Source: LITS 2010 and IMF staff calculations.

Note: Robust standard errors in parentheses, constant not reported. * denotes significant at the 5% level, ** at the 1% level, *** at the 0.1% level.

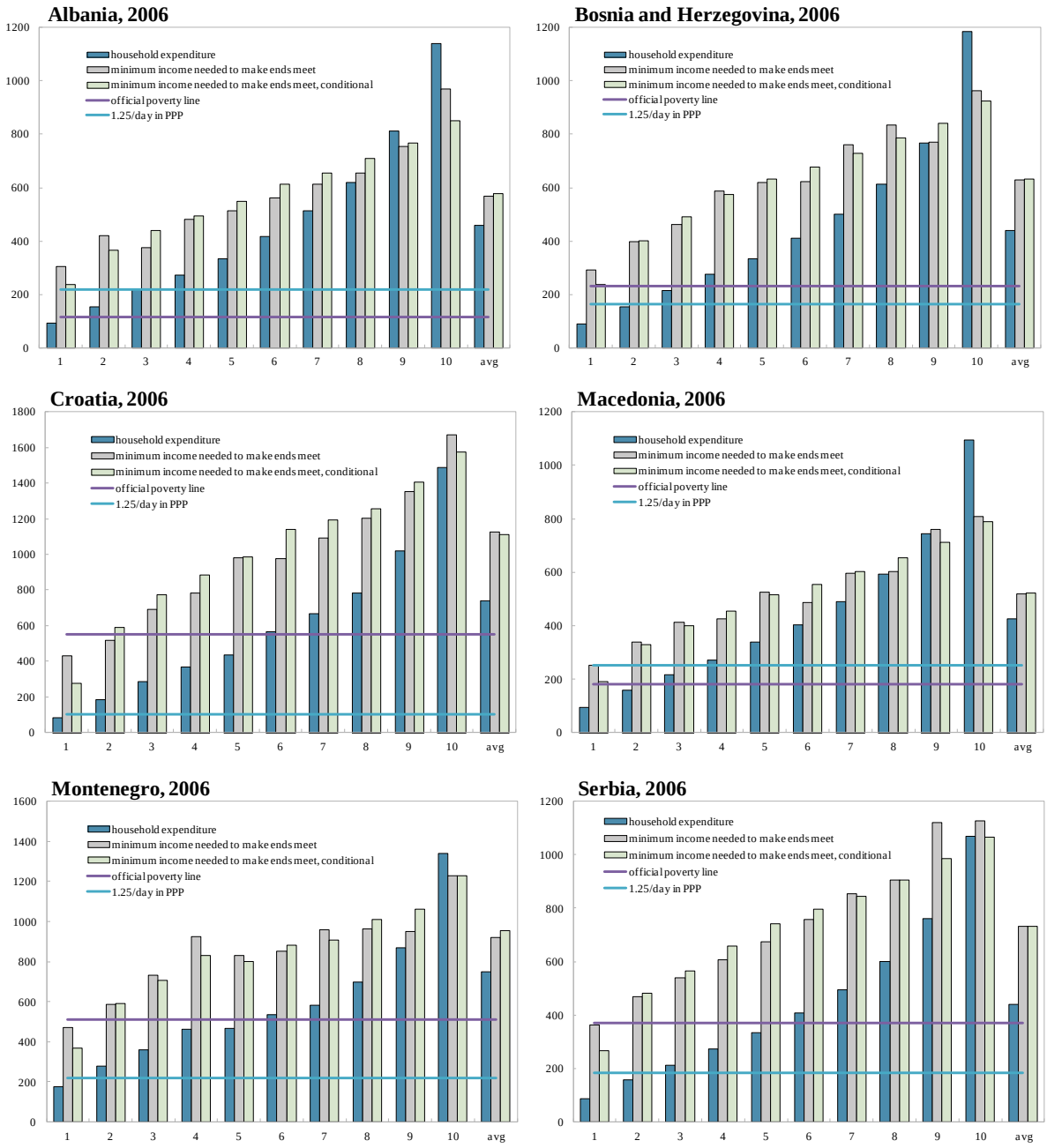
Table A.4: Determinants of subjective poverty perceptions in Central and South Eastern Europe, 2006

Dependent variable:	**Perceived relative standing in bottom 2 deciles in 2006 (0-1)**			**Perceived relative standing in 2006 (1-10)**			**Reported 'minimum income required to make ends meet' in 2006 (USD)**		
Log hh expenditure (USD)	-0.50***	-0.70***	-0.51***	0.37***	0.48***	0.31***	256.93***	203.61***	267.59***
	(0.04)	(0.18)	(0.06)	(0.03)	(0.12)	(0.04)	(11.24)	(41.96)	(14.17)
Owns a house	-0.29***	-0.21	-0.29**	0.24***	0.27	0.28***	1.17	-45.53	3.83
	(0.07)	(0.24)	(0.09)	(0.04)	(0.17)	(0.06)	(17.10)	(67.31)	(21.89)
Farming imp. source of income	-0.01	-0.80	0.19	0.01	0.54	-0.13	10.35	-110.41	-30.09
	(0.12)	(0.54)	(0.16)	(0.08)	(0.38)	(0.11)	(31.70)	(70.60)	(41.74)
No. of adults in hh	0.08**	-0.01	0.12***	-0.05**	-0.00	-0.05**	65.99***	80.95**	60.64***
	(0.03)	(0.10)	(0.03)	(0.02)	(0.07)	(0.02)	(6.96)	(30.40)	(8.31)
No. of children in hh	0.13**	0.18	0.11	-0.08**	-0.20*	-0.03	66.79***	56.17	80.58***
	(0.04)	(0.11)	(0.06)	(0.03)	(0.08)	(0.03)	(12.91)	(33.54)	(15.38)
Age	-0.01***	-0.00	-0.01**	0.01***	-0.00	0.00**	0.24	0.23	1.08
	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)	(0.50)	(2.56)	(0.61)
Healthy	-0.31***	-0.37***	-0.24***	0.26***	0.21*	0.21***	-3.84	24.92	0.81
	(0.03)	(0.11)	(0.04)	(0.02)	(0.08)	(0.02)	(7.02)	(28.53)	(8.68)
Highest degree (1-5)	-0.14***	-0.19*	-0.12***	0.13***	0.14*	0.12***	18.39**	3.31	19.30**
	(0.02)	(0.09)	(0.03)	(0.02)	(0.07)	(0.02)	(5.80)	(20.78)	(7.13)
Employed in last year	-0.25***	0.22	-0.18*	0.12**	-0.25	0.11*	97.94***	4.08	114.10***
	(0.07)	(0.22)	(0.09)	(0.04)	(0.15)	(0.05)	(15.47)	(57.35)	(18.74)
Lives in urban area	-0.17**	0.14	-0.15*	0.12***	0.06	0.06	50.24***	24.88	42.04**
	(0.05)	(0.20)	(0.07)	(0.03)	(0.15)	(0.04)	(12.37)	(47.61)	(16.03)
Czech Republic	-0.15	0.39	-0.12	0.11	-0.04	0.06	140.89***	197.34*	134.95***
	(0.09)	(0.40)	(0.12)	(0.06)	(0.27)	(0.08)	(19.85)	(84.50)	(24.54)
Hungary	-0.26**	-0.23	-0.17	0.06	0.04	0.05	283.52***	331.96***	309.26***
	(0.08)	(0.34)	(0.11)	(0.06)	(0.26)	(0.08)	(17.65)	(70.93)	(23.19)
Poland	-0.14	0.31	-0.05	0.06	-0.24	-0.04	95.07***	73.81	108.22***
	(0.09)	(0.38)	(0.13)	(0.07)	(0.29)	(0.09)	(17.58)	(72.08)	(23.25)
Romania	-0.68***	-0.24	-0.60***	0.39***	0.18	0.26***	46.00**	83.53	78.99***
	(0.09)	(0.35)	(0.12)	(0.06)	(0.27)	(0.08)	(17.74)	(67.47)	(23.20)
Slovenia	-0.54***	0.45	-0.36*	0.23***	-0.04	0.17*	230.01***	395.76**	262.30***
	(0.12)	(0.51)	(0.16)	(0.07)	(0.32)	(0.08)	(28.56)	(141.32)	(35.04)
Slovakia	-0.12	0.25	-0.20	-0.10	-0.18	-0.12	74.51***	118.96	87.04***
	(0.09)	(0.36)	(0.13)	(0.06)	(0.28)	(0.08)	(18.66)	(72.01)	(23.77)
Chance of finding job		-0.24*			0.22***			-40.06	
		(0.10)			(0.07)			(28.01)	
Should reduce inequality			0.16***			-0.15***			-22.21**
			(0.04)			(0.02)			(8.26)
Prefers market economy			-0.25***			0.19***			-10.22
			(0.07)			(0.04)			(14.90)
Number of obs.	4677	247	3037	4677	247	3037	4704	248	3050
Pseudo/Adjusted R-squared	0.202	0.232	0.179	0.065	0.089	0.056	0.435	0.380	0.415

Source: LITS 2006 and IMF staff calculations.

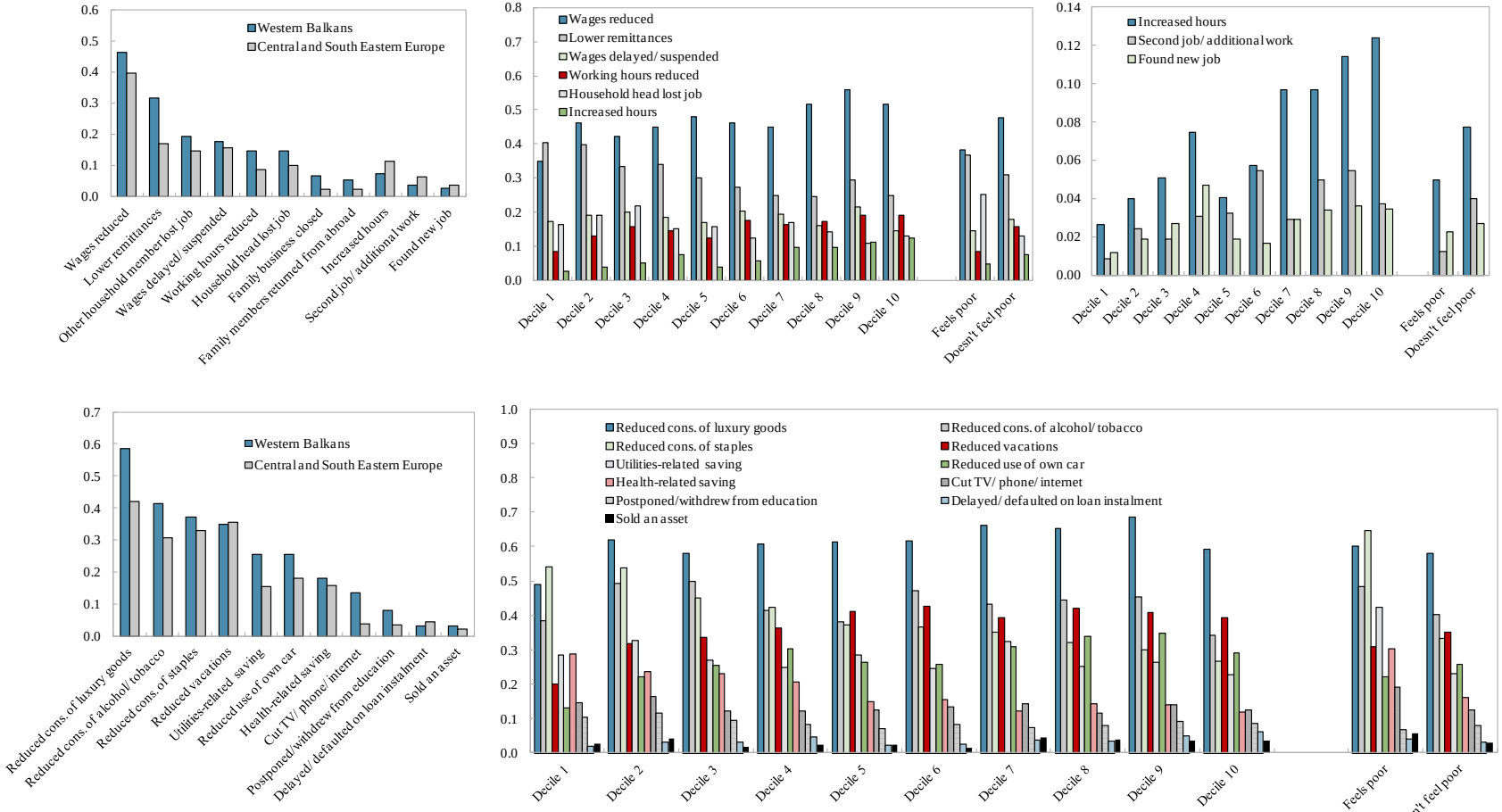
Note: Robust standard errors in parentheses, constant not reported. * denotes significant at the 5% level, ** at the 1% level, *** at the 0.1% level.

Figure A.2: Objective and subjective poverty lines in the Western Balkans



Source: LITS 2006 and IMF staff calculations.

Figure A.3: Impact of the crisis in the Western Balkans and Central and South Eastern Europe; shocks and coping mechanisms by decile in the Western Balkans



Sources: LITS 2006 and staff calculations.
Note: 'Utilities-related saving' includes 'delaying payments on utilities' and 'having utilities cut because of delayed payments'. 'Health-related saving' includes 'postponed/skipped doctor visits', 'stopped buying medications' and 'cancelled health

ANNEX 2: SOCIAL SAFETY NETS IN THE WESTERN BALKANS[31]

Western Balkan countries operate two types of safety nets, reflecting the two different approaches adopted during transition:

- Bosnia and Herzegovina, Macedonia, Montenegro and Serbia undertook evolutionary and gradual reforms to the structure and design of the pre-transition safety net. These systems are more generous in terms of the scope of risks covered, however they provide multiple and often categorical benefits that are fragmented, which undermines the efficiency of social assistance as a whole.
- Albania and Kosovo completely overhauled their old systems and introduced entirely new benefits. These new systems have fewer types of benefits and less fragmentation, but they provide lower levels of protection, especially for families with children and the unemployed.

Non-contributory social assistance programs typically consist of four broad categories:

- Last-resort social assistance programs, mostly targeted to the chronic poor, and with less capacity to identify and protect the transient poor.
- Family and child protection benefits, with multiple objectives (alleviate poverty, increase fertility rates). Expenditure on child allowances is generally lower in the Western Balkans than in the New Member States: Albania and Kosovo have no stand-alone child benefits, while other countries restrict benefits by targeting child allowances with rigorous income tests (Bosnia and Herzegovina, Serbia) or a means test (Montenegro).
- Disability benefits for those without disability-insurance. The Western Balkans spend more on disability allowances than the New Member States, with Albania having the highest spending.
- Region-specific benefits for war veterans and their families. These are highly regressive and constitute a particularly large share in Bosnia and Herzegovina, but are also sizeable in Kosovo, Montenegro and Serbia, and have been increasing across the region.

Coverage and targeting

Public spending on social assistance in the Western Balkans is comparable to that in the New Member States. However, a growing share of allocations is going to categorical programs rather than means-tested benefits. The coverage of the poorest quintile with all types of social benefits is low in all Western Balkan countries.

[31] See also Ruggeri Laderchi and Savastano (2013) and Murasova *et al.* (2015).

Generosity

The generosity of benefits varies significantly among the Western Balkan countries, though is generally low compared to minimum wages (ranging between 7 and 20 percent of the minimum wage level, with the exception of Montenegro where the social assistance transfer is about 75 percent of the minimum wage). Household-level studies of social safety nets suggest that people perceive the financial support offered by most schemes as too small to live off, and especially compared to economic shocks such as the loss of a job. For some programs, such as energy benefits, many poor households who had not applied indicated that they had not bothered to do so as the costs of application were high relative to the rewards if they were successful. The role of safety nets in helping poor households handle shocks appeared to be relatively minor, at least in people's own descriptions (Turk, 2013).

Pensions

Pensions have a significant impact in reducing poverty, and have kept their universal coverage role from earlier times. Even as they have lost their redistributive role, they provide some sense of security (for example in Serbia during 2008-2011 minimum pensions helped reduce poverty among regular pensioners: poverty among pensioners was somewhat lower than nationwide poverty, while those over 65 who were not entitled to pension benefits proved to be much more vulnerable; Nestorovic, 2013). However, they are generally very low, close to absolute national poverty lines.

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