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Poverty, Vulnerability and the Middle Class in Latin America

Marco Stampini, Marcos Robles, Mayra Sáenz, Pablo Ibararán, Nadin Medellín¹

Abstract

Between 2000 and 2013, Latin America has considerably reduced poverty (from 46.3% to 29.7% of the population). In this paper, we use synthetic panels to show that, despite progress, the region remains characterized by substantial vulnerability that also affects the rising middle-class. More specifically, we find that 65% of those with daily income between \$4 and 10, and 14% of those in the middle-class, experience poverty at least once over a ten-year period. Furthermore, chronic poverty remains widespread (representing 91% and 50% of extreme and moderate poverty respectively). Differences between rural and urban areas are substantial. Urban areas, which are now home to most moderate poor and vulnerable, are characterized by higher income mobility, particularly upward mobility. These findings have important implications for the design of effective social safety nets. These need to mix long term interventions for the chronic poor, especially in rural areas, with flexible short-term support to a large group of transient poor and vulnerable, particularly in urban areas.

JEL classification: I32, O15, O54, C23, C53

Keywords: Poverty dynamics, transitory and chronic poverty, vulnerability, middle-class, Latin America, panel data, synthetic panels, mobility.

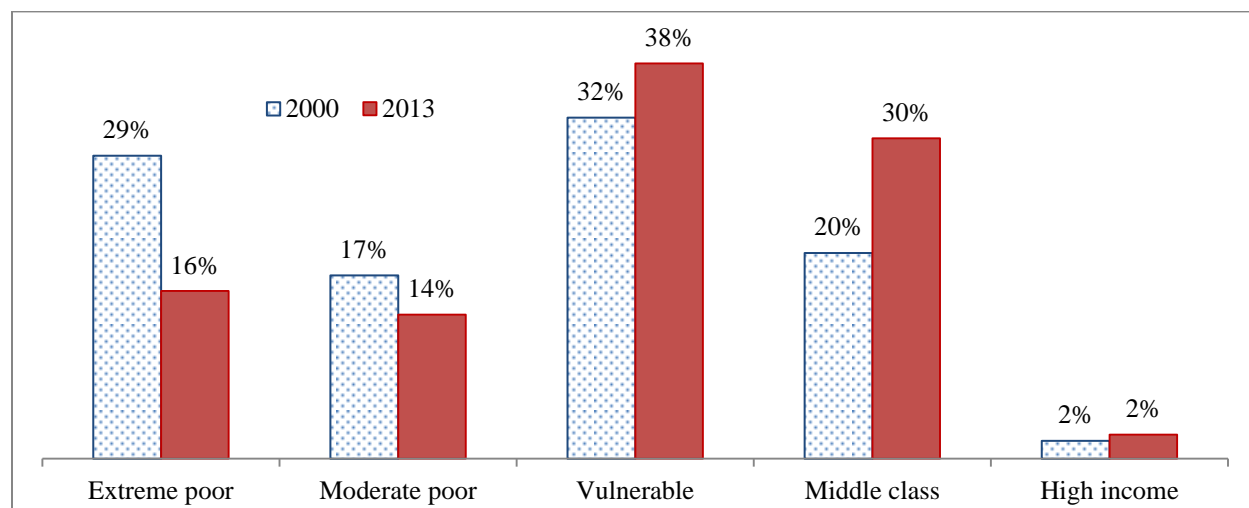
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1. Introduction

In recent years, Latin America has made remarkable progress in the reduction of poverty and inequality. Between 2000 and 2013, the percentage of the population living on less than \$2.5 per capita per day decreased from 28.8% to 15.9%, while the share of the population living on less than \$4 dropped from 46.3% to 29.7%. Over the same period, the region has also managed to reduce its unfortunately distinctive inequality: the Gini coefficient of the income distribution fell from 0.57 to 0.51.

These improvements were largely driven by sustained economic growth, which led to an expansion of the middle-class.² However, despite these positive trends, the region is still home to 92 million extreme poor and 77 million moderate poor. In addition, most of those that exited poverty joined the vulnerable class and are still at substantial risk of falling into poverty (Figure 1).

Figure 1 – Income Distribution in Latin America (2000-2013), Region Aggregate



Source: Authors' calculations based on household survey data from IDB's Harmonized Data Bank of Household Surveys from Latin America and the Caribbean (also known as IDB's *Sociometro*).

Notes: extreme poor are defined as having per-capita daily income under \$2.5 after purchasing power adjustment; moderate poor between \$2.5 and 4; vulnerable between \$4 and 10; middle-class between \$10 and 50 (as in López-Calva and Ortiz-Juárez (2011)); high-income above \$50. Results based on 18 countries (Argentina (only urban), Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Uruguay (only urban), Venezuela).

The trends in the incidence and depth of poverty, however, do not fully capture poverty dynamics, i.e. its duration and how often families enter and exit poverty. This information is very

² For an analysis of the key drivers of poverty reduction in Peru, see Robles and Robles (2014).

important for the design of effective social safety nets, particularly as far as targeting and recertification are concerned.³ Frequent movements in and out of poverty imply the need for flexible safety net entry and exit rules.

The analysis of poverty dynamics and income mobility in developing countries has received relatively limited attention, largely due to the lack of adequate longitudinal data.⁴ Recently, Ferreira et al. (2013) and Vakis et al. (2015) have analyzed intra-generational mobility in Latin America, with a focus respectively on the middle class and the chronic poor. Their analysis is based on the synthetic panel methodology developed by Dang et al. (2014), which is the same we employ in this paper. The two works construct two-period transition matrices (1995-2010 in Ferreira et al. (2013), 2004-2012 in Vakis et al. (2015)) and define the chronic poor as those that were poor in both years. The analysis only captures mobility from the first to the last period, and not yearly mobility in between the two. Consequently, it depicts the vulnerable and the middle class as consolidated in their position (with a low probability of experiencing poverty).

In this paper, we generate 10-year synthetic panels for a large sample of Latin American countries, and use them to estimate yearly movements in and out of poverty from 2003 to 2013. We provide a novel classification of households based on poverty duration, which distinguishes chronic poor, transient poor, future-poor and never poor. The future-poor include those that initially belonged to the vulnerable, middle and high-income classes, and experienced poverty at any time over the following decade.

We find that 65% of the vulnerable (i.e. those with daily income between \$4 and 10), and 14% of those in the middle-class (with daily income between \$10 and 50) of 2003, experienced poverty at least once during the period 2004-13. At the same time, chronic poverty remains widespread, accounting for 91% and 50% of extreme and moderate poverty respectively. Differences between rural and urban areas are substantial. Urban areas, which are now home to

³ Targeting is the process of identification of poor and vulnerable beneficiaries, as opposed to universal entitlement to benefits. Recertification is the periodic verification of beneficiaries' living standards, to assess whether they still qualify for receiving the benefits.

⁴ See Jalan and Ravallion (1998), Baulch and Hoddinott (2000), Davis and Stampini (2002), Hulme and Shepherd (2003), Dercon and Shapiro (2007), Fields et al. (2007), Stampini and Davis (2009). What is missing in this literature is the analysis of poverty or income dynamics with long panels made of consecutive years. Robles and Saenz (2015) have started to fill this gap; using synthetic panels (similar to those employed in this paper) and a discrete-time hazard model, they identify the factors associated with long-term poverty and exit from poverty in a sample of Latin American countries.

most moderate poor and vulnerable, are characterized by higher (particularly upward) income mobility.

The remainder of the paper is organized as follows. Section 2 defines poverty and vulnerability, and describes the data and the methodology employed for constructing synthetic panels and forecasting poverty dynamics. Section 3 presents the trends in poverty reduction and shows that the Latin American region is highly heterogeneous in the stage and speed of the socioeconomic transition towards the middle-class. Section 4 analyzes poverty dynamics, including transition matrices and poverty duration, and discusses household characteristics of chronic and transient poor. Section 5 highlights the main differences between urban and rural poverty. Along the paper, we discuss the policy implications of the findings for the design and implementation of the social safety nets, with particular focus on the targeting and recertification processes.⁵ Section 6 concludes summarizing key findings and policy implications. Annex 1 provides additional information on the data sources. Annex 2 discusses at length the methodology used to produce estimates of poverty duration. Annex 3 shows the bounds of selected estimates, providing a visual representation of the quality of our results. Finally, Annex 4 presents country specific poverty profiles.

2. Data and methodology⁶

We look at poverty through two lenses, one that focuses on depth and one on duration. The former is static, and analyzes a picture of poverty through the value of daily per-capita income (expressed in 2005 dollars adjusted to reflect purchasing power parity). It divides the population in five groups: (i) the extreme poor, with income below \$2.5; (ii) the moderate poor, between \$2.5 and 4; (iii) the vulnerable, between \$4 and 10; (iv) the middle-class, between \$10 and 50 (as in López-Calva and Ortiz-Juárez (2011)); (v) the high-income class, above \$50.

The \$2.5 line corresponds to the median of the official extreme poverty lines in Latin American countries (CEDLAS and World Bank, 2012), and has already been used in regional

⁵ We refer to social safety nets as the systems of social protection for the poor and vulnerable. In the Inter-American Development Bank Strategic Framework Document on Social Protection and Poverty, this is defined as “(i) efficient redistributive programs that contribute to human capital development; and (ii) delivery of services for social inclusion, in particular those aimed at early childhood development and at-risk youth” (IDB, 2014). The findings of this paper are particularly relevant for the design and implementation of redistributive programs, such as Conditional Cash Transfers (CCTs), whose duration and level of benefits should depend on poverty duration and depth.

⁶ Non-technical readers can skip this section with no prejudice to their ability to understand the rest of the paper.

studies (World Bank, 2014). It is higher than the international extreme poverty line of \$1.25 used by Ravallion et al. (2008), which corresponds to the mean of the official extreme poverty lines of the 15 poorest countries in the world. The use of a higher line reflects the relatively more advanced stage of socioeconomic development (and the higher price levels) of the Latin American region. Similar considerations hold for the \$4 poverty line. The vulnerable class is defined by López-Calva and Ortiz-Juárez (2011) as having a per capita daily income between \$4 and 10, which is empirically observed to imply a probability greater than 10% of falling into poverty.

The second lens is dynamic and focuses on the duration of poverty. It divides the population in four groups: (i) the chronic poor, that are poor (either extreme or moderate) in the first year of analysis, and in five or more years over the following decade;⁷ (ii) the transient poor, that are poor in the first year, and again in four or less years over the following decade; (iii) the future-poor, that are either vulnerable, middle-class or high-income in the first year of analysis, but experience poverty in at least one year during the following ten years; (iv) the never-poor, who are always above the \$4 poverty line.

Conditioning the definition of chronic and transient poverty on being poor in the first year guarantees that the sum of extreme and moderate poverty equals the sum of chronic and transient poverty. In other words, the incidence of poverty does not change, no matter if one looks at it through the lenses of depth or through those of duration.

The analysis focusing on the static definition of poverty is based on observed micro-data from 216 cross-sectional household surveys collected between 2000 and 2013 in 18 Latin American countries (see Annex 1).⁸ This data is from IDB's Harmonized Data Bank of Household Surveys from Latin America and the Caribbean (also known as IDB's *Sociometro*). Regional estimates of the incidence of poverty are obtained by imputing missing values for years with no survey, then calculating population-weighted country averages.

The data is representative both at the national level and at the urban-rural level, with the exception of Argentina and Uruguay. In the former, the household survey is only urban. In the

⁷ The 5-year threshold, like any alternative threshold, is somehow arbitrary. However, the results presented in this paper are generally robust to the adoption of alternative values.

⁸ These are the 18 countries that regularly execute household surveys and share their databases with the IDB. We lament not being able to include Caribbean countries, for which such data is not available.

latter, rural areas have been surveyed only since 2006. We restrict the analysis to urban areas to ensure comparability over the period 2000-2013.

Given the unavailability of real panel data sets in which the same households are surveyed across time, the analysis of poverty duration is based on the construction of synthetic panels *a la* Dang et al. (2014).⁹ This methodology is generally used to study mobility across two consecutive points in time. In addition, most of the literature so far has focused on proving the reliability of the methodology (Cruces et al., 2011; Fields and Viollaz, 2013; Haynes et al., 2013). We extend the literature by estimating yearly movements in and out of poverty over a decade for a large sample of Latin American countries.¹⁰ Our procedure involves the following steps: (i) first, a per-capita income equation is estimated for each country and year to obtain estimated coefficients that can be used for predictions; (ii) second, we estimate the standard errors;¹¹ (iii) third, per-capita income is predicted for the households of the first-year sample (2003), for every year (excluding the first), using the estimated coefficients, time-invariant regressors measured in 2003 and the error terms. As a result, our analysis of income mobility is based on income observed in 2003 along with income estimated for the years between 2004 and 2013. The details of the procedure are discussed in Annex 2.

The quality of the predictions is essential to guarantee that results are credible. As is usual practice, we carefully ensured the quality of the fit (value of R-squared, significance of coefficients, over-fitting). The equations were built using variables typically employed in the literature (see Dang et al., 2014; Cruces et al., 2011). Unlike previous works, however, we also included statistically significant variables at the regional level.¹² In Annex 3, we show for selected countries that the upper and lower bounds of predicted incomes produce poverty rates

⁹ See also Elbers et al. (2003). Other synthetic or pseudo-panel approaches are those that track cohorts of individuals or households over repeated cross-sectional surveys (Deaton, 1985), and those that recover the stochastic process from cross sectional data and generate individual income dynamics (Bourguignon et al., 2004).

¹⁰ We follow Canavire and Robles (2013), who, using this kind of panels and non-parametric duration models, analyze the sequencing and duration of the episodes of poverty.

¹¹ We use the non-parametric version of the methodology of Dang et al. (2014). To obtain point estimates of per-capita income, we use the mean of the residuals calculated under the following two assumptions: (i) independent distribution across time; (ii) constant distribution across time. The former residuals lead to an upper bound estimate of income mobility, while the latter lead to a lower bound estimate.

¹² The model includes the following variables. (i) Household head characteristics: sex, age, age squared, years of schooling, years of schooling squared, and agricultural work. (ii) Region (first-level administrative country subdivision) characteristics: average years of schooling of household head, and proportion of workers in agriculture. (iii) Geographic controls: rural-urban residence. (iv) Retrospective regressors at regional level in initial year (2003): inequality (standard deviation of log income), extreme poverty headcount (\$2.5 a day), average per capita income, average household size, and average years of schooling of the household head.

that are very close to the rates directly observed from household surveys. We also show the bounds for the estimates of chronic poverty, transient poverty and future-poverty in selected countries.

Our methodology can only be applied to twelve countries that have household survey data for each year between 2003 and 2013 (Argentina, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Honduras, Panama, Paraguay, Peru, El Salvador and Uruguay). Regional numbers were obtained pooling micro-data from the twelve countries and using survey weights.¹³

3. Static analysis: an heterogeneous and still vulnerable region

Latin America is a very heterogeneous region in terms of the stage of socioeconomic transition, defined as the process of transition out of poverty towards the middle-class. Countries like Argentina, Chile and Uruguay are at an advanced stage, being mainly made of middle and high-income class (with the incidence of poverty around 10%). On the other hand, countries like Guatemala and Honduras are at the earliest stages: almost half of their population still lives in extreme poverty, and the incidence of overall poverty exceeds 65% (Table 1).

One feature, however, is common to all countries: the large size of the vulnerable class. This represents in most cases 30-40% of the population, suggesting that an important share of the population remains at substantial risk of falling into poverty. Countries with low poverty rates and large middle-classes are no exception. In these countries, the vulnerable class is the back-end of the socioeconomic transition, while in the poorest countries the vulnerable class leads the way. Country heterogeneity is also high in the speed of the socioeconomic transition. For example, Colombia and Ecuador reduced the incidence of poverty by more than 25 percentage points (pp), and expanded their middle and upper classes by more than 15 pp (Table 1). In contrast, progress was sluggish in Mexico and Dominican Republic, despite the fact that these countries started from poverty headcounts around 40%.

¹³ Brazil does not have a household survey for 2010. In order to include it in the dynamic analysis, we considered mobility over the period 2002-2013. It is important to highlight the caveat that our dynamic analysis is based on twelve countries with available data. Among the excluded countries is Mexico, which accounts for an important share of the population of the region. The exclusion of Mexico is due to the fact that the *Encuesta Nacional sobre Ingresos y Gastos de los Hogares* is carried out every two years, while the *Encuesta Nacional de Ocupación y Empleo* is yearly but has been nationally representative only since 2005.

Table 2 summarizes the region's heterogeneity by classifying the Latin American countries based on the stage and speed of their socioeconomic transition. In the countries in the upper-left cell, for example Nicaragua and El Salvador, the poor still represent the largest share of the population, and poverty reduction has been relatively slow (less than 25% between 2000 and 2013). These are the countries with the highest need for reforming and/or expanding the social safety net, as poverty is widespread and resilient. These are also the countries with less financial resources for its implementation, so efficiency should be at the top of their policy agenda.

Table 1 - Income Distribution in Latin American Countries (2000-2013)

	Incidence (%) in 2013 (a)					Variation (pp): 2013-2000 (b)				
	Extreme poor	Moderate poor	Vulnerable	Middle-class	High income	Extreme poor	Moderate poor	Vulnerable	Middle-class	High income
ARG	4.0	6.9	34.4	52.5	2.2	-10.9	-8.5	-2.1	21.3	0.2
BOL	19.7	12.8	38.5	28.4	0.6	-23.0	-5.1	12.7	15.8	-0.4
BRA	10.4	10.8	38.4	36.9	3.6	-16.8	-6.1	6.0	15.6	1.3
CHL	3.7	6.6	37.7	45.7	6.3	-6.5	-6.4	-0.9	12.2	1.7
COL	18.6	15.4	36.7	27.2	2.2	-21.5	-4.1	10.0	14.5	1.2
CRI	8.5	10.6	37.7	39.2	4.0	-6.7	-4.3	-2.8	11.0	2.8
DOM	22.7	20.7	38.7	17.2	0.8	-1.3	2.9	3.8	-4.8	-0.6
ECU	13.4	16.4	42.0	26.8	1.4	-27.3	-4.4	14.5	16.7	0.5
GTM	47.7	19.6	25.2	7.3	0.2	0.4	5.5	2.5	-7.0	-1.4
HND	49.5	17.0	24.9	8.5	0.2	2.1	1.5	-0.1	-3.2	-0.3
MEX	19.9	17.6	37.8	23.0	1.7	-3.0	-0.3	0.6	2.5	0.2
NIC	33.0	24.1	33.3	9.3	0.3	-14.3	6.9	9.6	-0.8	-1.3
PAN	15.6	11.1	36.1	34.7	2.6	-8.1	-3.7	2.1	9.4	0.4
PER	19.3	13.7	40.5	25.7	0.8	-15.5	-4.4	6.1	13.4	0.4
PRY	15.9	14.0	38.5	30.1	1.5	-14.7	-0.7	5.2	10.3	-0.2
SLV	21.6	21.2	41.4	15.4	0.3	-8.5	3.1	7.5	-1.9	-0.2
URY	3.9	6.4	32.3	54.5	2.9	-0.9	-2.7	-5.1	8.7	0.0
VEN	10.7	13.8	45.9	29.1	0.6	-20.7	-7.7	9.7	18.3	0.4
Region	15.9	13.7	37.6	30.5	2.3	-12.9	-3.7	5.2	10.9	0.6

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Notes: ARG = Argentina, BOL = Bolivia, BRA = Brazil, CHL = Chile, COL = Colombia, CRI = Costa Rica, DOM = Dominican Republic, ECU = Ecuador, GTM = Guatemala, HND = Honduras, MEX = Mexico, NIC = Nicaragua, PAN = Panama, PER = Peru, PRY = Paraguay, SLV = El Salvador, URY = Uruguay, VEN = Venezuela. (a) Last year is 2012 in Bolivia, Honduras and Nicaragua, and 2011 in Chile. (b) First year is 2001 in Brazil, Honduras, Nicaragua and Paraguay.

Table 2 - Categorization of Latin American Countries, by Income Distribution and Poverty Reduction (2000-2013)

Between 2000 and 2013 → In 2013 ↓	Cut poverty by less than 25%	Cut poverty by between 25% and 50%	Cut poverty by more than half
Mostly poor	DOM, GUA, HND, NIC, SLV		
Mostly vulnerable	MEX	BOL, COL, PER, PRY	ECU, VEN
Mostly middle-class or high-income		CRI, PAN, URU	ARG, BRA, CHL

Source and notes: see Table 1.

4. Dynamic analysis: poverty is still largely chronic

Income mobility between 2003 and 2013 was considerable. Poverty reduction was the net effect of many exiting poverty, while fewer were falling back. Upward mobility was particularly high for those that started in moderate poverty.

Most of the moderate poor rose to the vulnerable class, and a few (6%) made it to the middle-class (Table 3).¹⁴ In contrast, 73% of those that were initially extreme poor were still poor after a decade, although about a third of them enjoyed less severe poverty and another quarter rose to the vulnerable class. As may be expected (as they started from higher initial living standards), also the vulnerable enjoyed less upper mobility. Only 28% of them rose to the middle-class, while 62% remained in the initial income category and 10% fell into poverty.

Table 3 - Poverty Transition Matrix in Latin America (2003-2013), Region Aggregate

% of individuals		2013					Total
		Extreme poor	Moderate poor	Vulnerable	Middle- class	High- income	
2003	Extreme poor	41.2	32.0	25.1	1.0	0.7	100.0
	Moderate poor	8.0	23.5	61.6	6.4	0.4	100.0
	Vulnerable	2.0	7.7	61.9	28.2	0.3	100.0
	Middle-class	0.2	0.9	21.1	75.5	2.3	100.0
	High-income	0.0	0.0	0.7	58.9	40.4	100.0

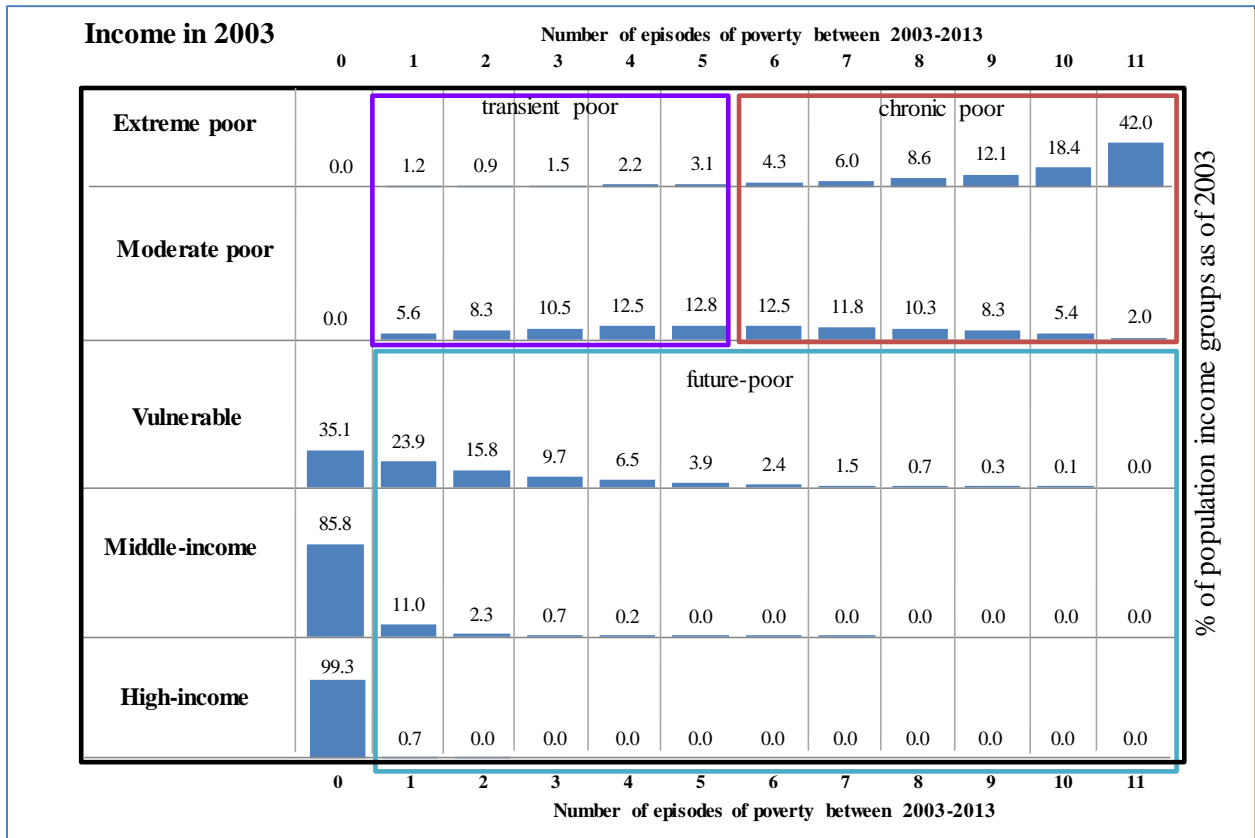
Source: Authors' calculations based on synthetic panels built from household survey data from IDB's *Sociometro*.

Notes: results based on 12 countries (Argentina (only urban), Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Honduras, Panama, Peru, Paraguay, El Salvador and Uruguay (only urban)).

¹⁴ Table 3 presents the two-point transition matrix, similar to Table 4.1 of Ferreira et al. (2013) and Table 1 of Vakis et al. (2015), using a larger number of income groups and extending the time period to 2013.

Chronic poverty was widespread both among the extreme and the moderate poor. Many of those that were initially moderate poor, despite enjoying a high likelihood of rising to the vulnerable class in 2013, were poor in at least 5 years over the period 2004-2013. This may be explained by an ascending trajectory that only rose above the poverty line in the last part of the period of analysis.

Table 4 - Poverty Duration in Latin America (2003-2013), Region Aggregate



Source: Authors' calculations based on synthetic panels built from household survey data from IDB's *Sociometro*.

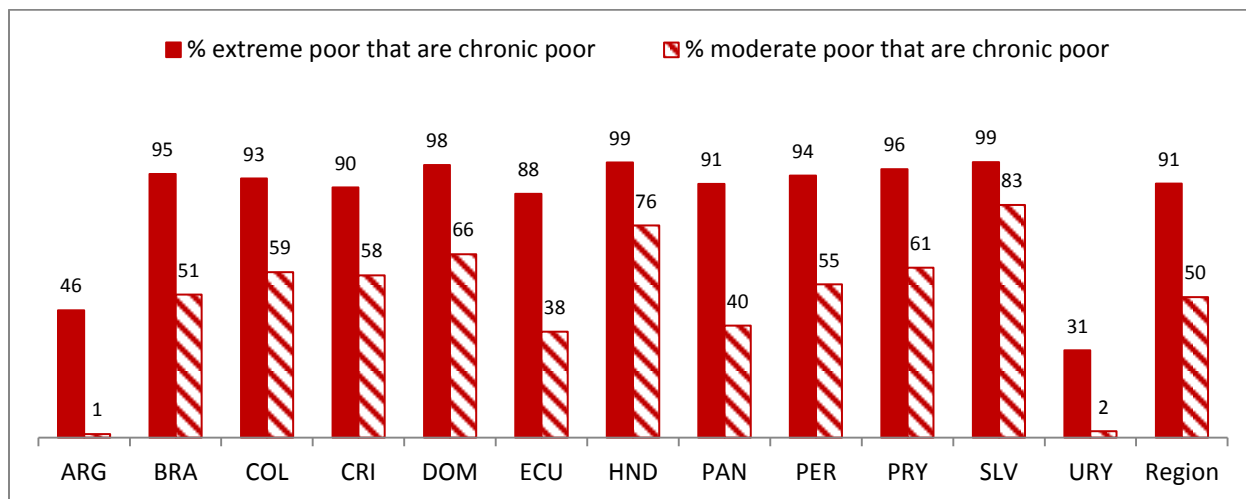
Notes: results based on 12 countries (Argentina (only urban), Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Honduras, Panama, Peru, Paraguay, El Salvador and Uruguay (only urban)).

On average, 91% of extreme poverty was chronic (Table 4), with very little country heterogeneity (Figure 2). In almost all countries with available data, about 90% or more of the extreme poor in 2003 remained poor in at least five of the following ten years. The only exceptions were Argentina and Uruguay, for which data is urban only.

More surprisingly, also half of the moderate poor in 2003 were chronically poor. This has important implications for the design and implementation of the social safety nets. In particular, it implies that long-term interventions are not only needed for the extreme poor, but also for an important share of those in moderate poverty. In this respect, however, country heterogeneity

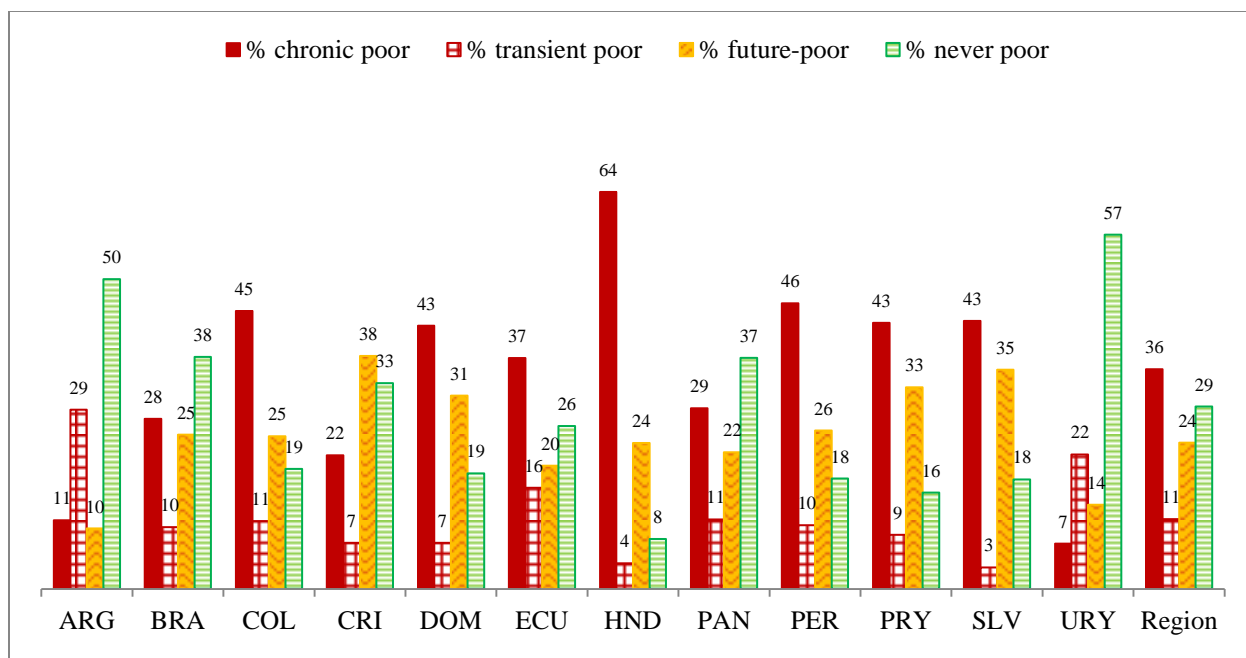
was substantial (Figure 2). For example, while extreme poverty was equally chronic in Ecuador and Colombia, in the former moderate poverty was much more transient than in the latter.

Figure 2 - Chronic Poverty in Latin American Countries (2003-2013)



Source: Authors' calculations based on synthetic panels built from household survey data from IDB's *Sociometro*.

Figure 3 – Poverty Dynamics in Latin American Countries (2003-2013)



Source: Authors' calculations based on synthetic panels built from household survey data from IDB's *Sociometro*.

An important share of the vulnerable and, more surprisingly, of the middle-class experienced poverty over the period 2004-13. More precisely, 65% of the vulnerable group and 14% of the middle-class of 2003 were poor at least once over the following decade. We call these families “future-poor”, a group whose share ranged from 10% of the population in Argentina to 38% in Costa Rica (Figure 3). Finally, the share of the population that was never poor ranged from 8% in Honduras to 57% in Uruguay (Figure 3).

The identification of the chronic and transient poor in the samples of 2003 allows investigating the household characteristics that are associated with different poverty durations. In other words, it allows studying who are the chronic poor, how they differ from the transient poor and, for comparison, from the non-poor. We address these questions by looking at Paraguay and Honduras, two countries at different stages of the socioeconomic transition.

Household characteristics of the chronic poor broadly mimic those that, in the literature, are commonly associated with extreme poverty. They include larger household size, more children, lower levels of education, more engagement in self-employment, less wage employment, and residence in rural areas. Table 5 reports average household characteristics by dynamic poverty status in Paraguay and Honduras. Despite a few differences between the two countries, most patterns are common and the similarities are striking. In both countries, for example, chronically poor households had no member with complete tertiary education. In Honduras, they did not even have any member with complete secondary education, while in Paraguay only one in six chronically poor households had one member with this level of schooling. Their likelihood to live in rural areas was ten times higher than among the non-poor. Self-employment decreased and wage employment grew as one moved from chronic poverty to non-poverty. The low level of human capital and the remote location suggest that, at least among the chronic poor, the graduation strategies with which many Latin American countries are attempting to complement the social safety nets have low probability of being successful.

Table 5 - Household Characteristics in Paraguay and Honduras (2003), by Poverty Status

Characteristic in 2003	Paraguay			Honduras		
	Chronic poor	Transient poor	Not poor	Chronic poor	Transient poor	Not Poor
% of population	43.1	8.7	48.2	64.3	4.1	31.6
Household head (share)						
Male	0.51	0.51	0.48	0.80	0.72	0.72
Single	0.04	0.06	0.08	0.21	0.27	0.27
Adult members (number)						
Self-employed	1.03	0.72	0.45	0.76	0.52	0.30
Salaried	0.48	1.11	1.48	0.74	1.30	1.44
Unemployed	0.14	0.21	0.16	0.08	0.14	0.16
Inactive	0.89	0.82	0.84	1.13	0.91	0.98
Primary education or less	1.24	0.69	0.25	1.12	0.59	0.26
Incomplete secondary educ.	0.46	0.79	0.65	0.27	1.03	1.10
Complete secondary educ.	0.16	0.51	0.82	0.01	0.06	0.12
Incomplete tertiary educ.	0.05	0.27	0.66	0.01	0.18	0.60
Complete tertiary educ.	0.00	0.04	0.41	0.00	0.04	0.38
Children (aged 0-5)	1.17	0.72	0.48	1.16	0.74	0.49
Children (aged 6-14)	2.01	1.20	0.85	1.99	1.19	0.96
Elderly (65 and older)	0.20	0.24	0.30	0.24	0.20	0.25
Members (total)	6.55	5.34	4.66	6.50	5.14	4.59
Rural (share)	0.69	0.28	0.08	0.73	0.17	0.06

Source: Authors' calculations based on synthetic panels built from household survey data from IDB's *Sociometro*.

5. Differences between urban and rural areas

The region is undergoing a process of progressive urbanization. The urban share of the population has been growing from 49% in 1960 to 80% in 2013, and is expected to reach 83% in 2025 (ECLAC, 2013). In our sample of countries, this figure has increased from 72% in 2000 to 74% in 2013 (Table 6, panel B). In this context, it is extremely important to understand the different urban-rural trends in poverty reduction, as when it comes to poverty cities and countryside remain two worlds apart.¹⁵

¹⁵ It is relevant to acknowledge that the term urban refers to very different sizes of human settlements (Satterthwaite, 2010), that may range from as few as 2,500 to as many as several million inhabitants. Despite this heterogeneity, in this paper we use the terms urban areas and cities as synonyms.

Extreme and overall poverty have decreased substantially in both urban and rural areas. Yet, in the latter one third of the population still lives in extreme poverty, and the incidence of total poverty exceeds 50% (Table 6, panel A).

The growth of a middle-class is an eminently urban phenomenon. In rural areas, poverty reduction has been accompanied by an expansion of the vulnerable class, and only 13% of the population had per-capita income above \$10 in 2013. In contrast, the size of the vulnerable class remained fairly constant in urban areas. This is where the middle-class expanded more rapidly (by over 10 pp).

As a result, the rural nature of poverty has intensified, with a substantial increase of the share of poor living in rural areas. While in 2000 the rural areas were home to 54% of the extreme poor and 30% of the moderate poor, these figures increased to 58% and 38% respectively in 2013. Also the rural share of vulnerable expanded, and only the high-income class became more urban during the period of analysis.

Table 6 - Geographic Profile of Poverty in Latin America (2000-2013), Region Aggregate

	2000			2013		
Panel A - Incidence	Urban	Rural	Total	Urban	Rural	Total
Extreme poor	19.1	55.4	28.8	9.8	34.8	15.9
Moderate poor	17.0	18.3	17.4	12.2	19.4	13.7
Vulnerable	37.1	20.0	32.4	39.6	32.5	37.6
Middle-class	24.6	6.0	19.6	35.5	12.9	30.5
High-income	2.2	0.4	1.7	2.9	0.4	2.3
Total	100	100	100	100	100	100
Panel B - geographic distribution	Urban	Rural	Total	Urban	Rural	Total
Extreme poor	46.4	53.6	100	42.3	57.7	100
Moderate poor	70.0	30.0	100	62.0	38.0	100
Vulnerable	82.2	17.8	100	77.7	22.3	100
Middle-class	91.0	9.0	100	89.7	10.3	100
High-income	92.7	7.3	100	95.9	4.1	100
% of the population	71.6	28.4	100	73.7	26.3	100

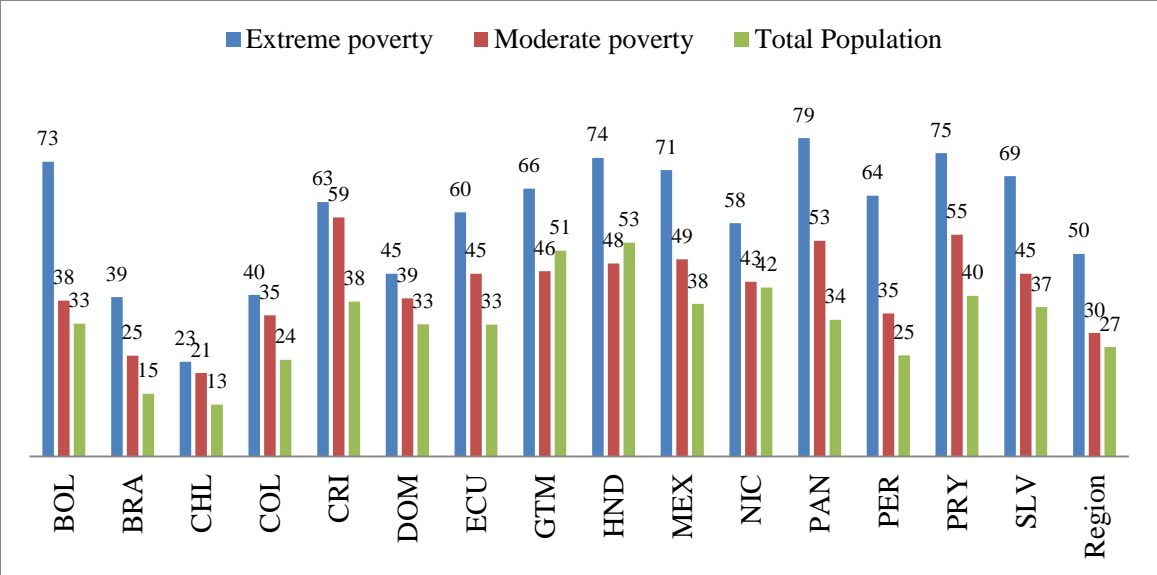
Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Notes: results based on 18 countries (Argentina (only urban), Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Uruguay (only urban), Venezuela).

In 2013, the majority of the extreme poor lived in urban areas only in four countries (Brazil, Chile, Colombia and Dominican Republic). In contrast, with few exceptions, moderate poverty

was fairly equally distributed between urban and rural areas (Figure 4). This suggests that long term social safety net programs are best suited for rural areas, while short term interventions are equally needed in urban and rural areas.

Figure 4 - Rural Percentage of Poverty and Population in Latin American Countries (2013)

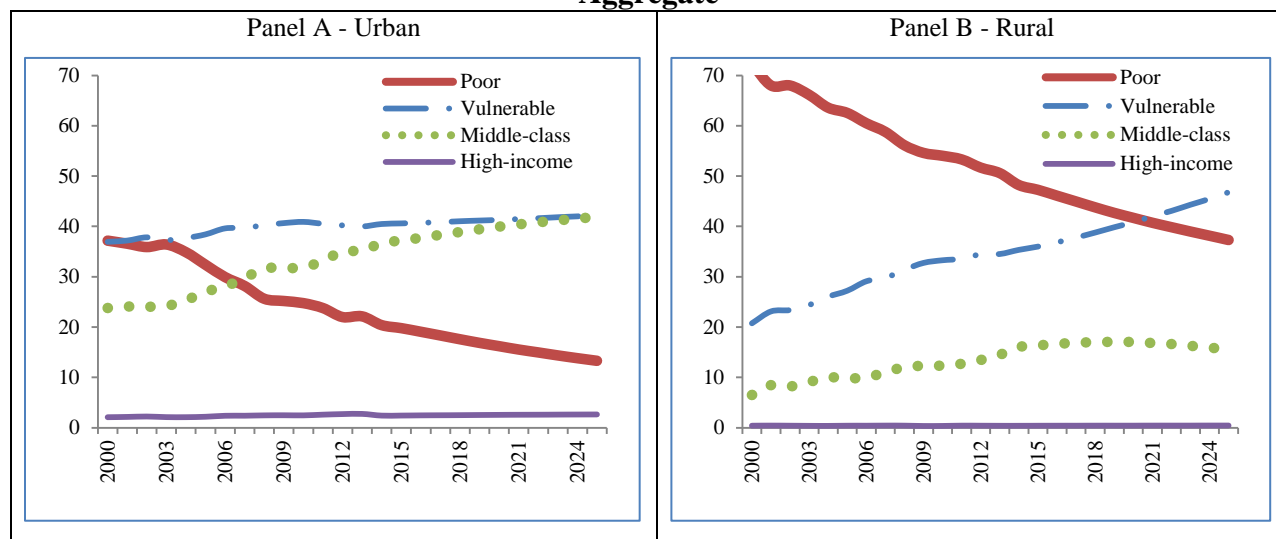


Source: Authors’ calculations based on household survey data from IDB’s *Sociometro*.

In the near future, in urban areas, poverty is expected to leave way to a rising middle-class (Figure 5). This forecast is obtained by combining economic growth and demographic projections with the estimated growth elasticity of poverty. While the size of the vulnerable class will remain fairly stable (at around 40% of the urban population), by 2025 the incidence of urban poverty is expected to fall to 13%. The middle-class will rise to represent 42% of the urban population.

In contrast, the growth of the middle-class will be slow in rural areas. Poverty will be mostly replaced by vulnerability. The vulnerable class is expected to become the single largest group in 2021, and grow to 47% of the rural population in 2025.

Figure 5 – Poverty, Vulnerability and Middle-Class in Latin America (2000-2025), Region Aggregate



Source: Authors' calculations based on household survey data from IDB's *Sociometro* and population growth estimates from the Population Division of the United Nation Economic Commission for Latin America and the Caribbean (CELADE, ECLAC).

Notes: projections for 2014-2025 were obtained using linear models on log of the Gini coefficient, log of Gross Domestic Product (GDP) per capita (current and one-year lagged), log of general government expenditure as percentage of GDP (current and one-year lagged), and country dummy variables. Data on GDP per capita and general government expenditure until 2019 are from the International Monetary Fund World Economic Outlook (October 2014) and for 2020-2025 are projections based on the growth rate 2000-2019. Data on population until 2025 are from ECLAC (2013). Projections for the region are population-weighted averages. Results based on 18 countries (Argentina (only urban), Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Uruguay (only urban), Venezuela).

The dynamic analysis confirms that most of the mobility out of poverty took place in urban areas. In the cities, only 35% of the extreme poor and 8% of the moderate poor in 2003 were still poor after ten years (Table 7, panel A). In contrast, in rural areas only 15% of the extreme poor and 53% of the moderate poor managed to exit poverty over the same period (Table 7, panel B). A similar pattern can be observed for upward mobility from the vulnerable class. Symmetrically, the risk of falling from the middle class to the vulnerable class or into poverty was more than double in rural than in urban areas (44% versus 21%). This may also be due to the differential urban-rural impacts of the world recession in the second part of the period of analysis.

Rural areas are characterized by high incidence of chronic poverty and future-poverty. 99% of the extreme poor and 78% of those that were moderate poor in 2003 experienced chronic poverty between 2004 and 2013. Furthermore, 86% of the vulnerable and 37% of the middle-class were poor at least once during the period of analysis. The picture is relatively rosier in urban areas, where “only” 86% of extreme poverty and 42% of moderate poverty were chronic, and where “only” 62% of the vulnerable experienced at least one episode of poverty (Figure 6).

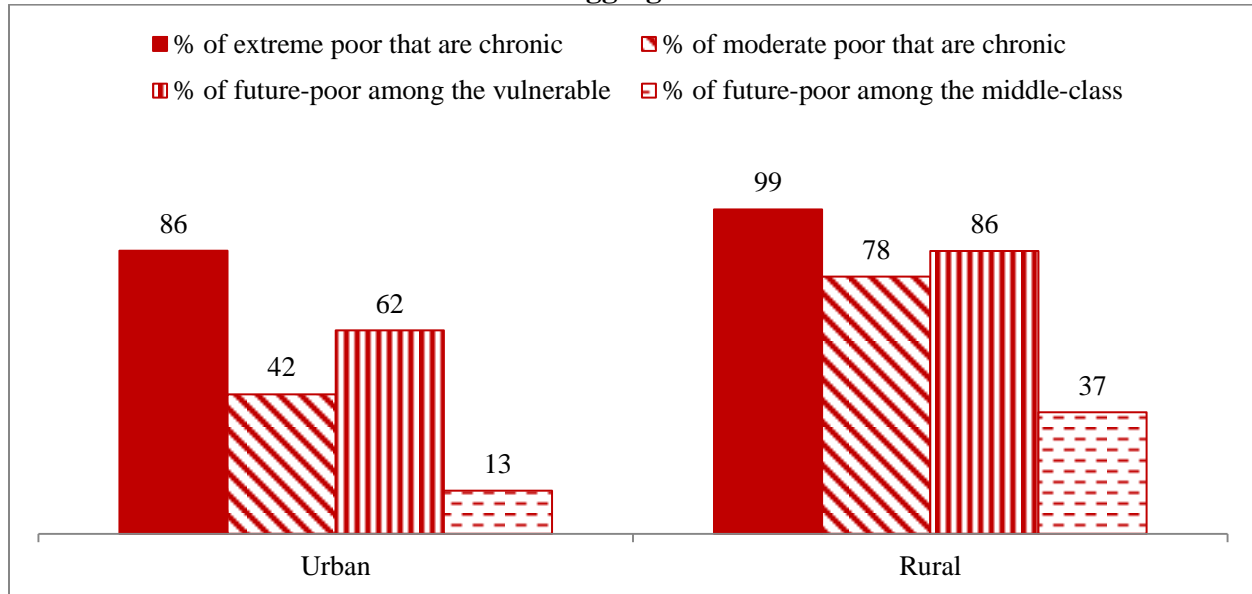
**Table 7 – Urban and Rural Poverty Transition Matrices in Latin America (2003-2013),
Region Aggregate**

		Panel A - Urban					
% of individuals		2013					
		Extreme poor	Moderate poor	Vulnerable	Middle-class	High-income	Total
2003	Extreme poor	29.9	34.9	32.8	1.5	0.9	100
	Moderate poor	6.1	20.9	65.0	7.6	0.5	100
	Vulnerable	1.5	6.6	61.4	30.2	0.3	100
	Middle-class	0.2	0.7	20.2	76.5	2.4	100
	High-income	0.0	0.0	0.6	59.9	39.5	100
		Panel B - Rural					
% of individuals		2013					
		Extreme poor	Moderate poor	Vulnerable	Middle-class	High-income	Total
2003	Extreme poor	57.7	27.6	14.1	0.3	0.3	100
	Moderate poor	14.5	32.9	50.0	2.4	0.3	100
	Vulnerable	5.3	15.0	65.8	13.8	0.1	100
	Middle-class	1.0	3.3	39.5	55.9	0.3	100
	High-income	0.0	0.0	2.7	35.6	61.7	100

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Notes: results based on 12 countries (Argentina (only urban), Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Honduras, Panama, Peru, Paraguay, El Salvador and Uruguay (only urban)).

Figure 6 - Urban and Rural Poverty Dynamics in Latin America (2003-2013), Region Aggregate

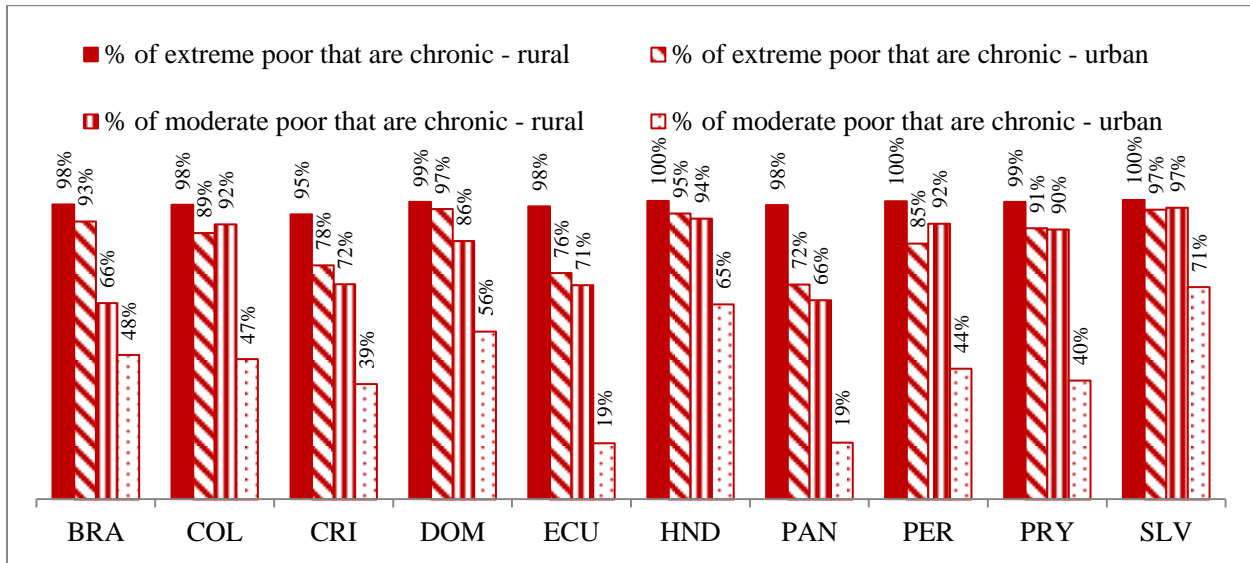


Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Notes: results based on 12 countries (Argentina (only urban), Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Honduras, Panama, Peru, Paraguay, El Salvador and Uruguay (only urban)).

Cross-country analysis shows that Ecuador and Panama present the widest gap between rural and urban areas, a result that is driven by the highly transient nature of urban moderate poverty. Variability is limited in the percentage of extreme poor that are chronic poor, both in rural and urban areas. More differences emerge when looking at the percentage of moderate poor that experience chronic poverty. This is particularly the case in urban areas. While in El Salvador 71% of urban moderate poor experience chronic poverty over the following decade, the same happens to only one every five urban moderate poor in Ecuador and Panama. This indicates that in these countries urban moderate poverty is particularly transient (Figure 7). Complete data by country is presented in Annex 4.

Figure 7 - Urban and Rural Chronic poverty in Latin American Countries (2003-2013)



Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

6. Conclusions and implication for the design and implementation of social safety nets

In the absence of information on poverty dynamics, development practitioners frequently assume that extreme poverty is chronic and rural, while moderate poverty is transient and urban. Similarly, they tend to expect that the vulnerable are at risk of falling into poverty, while the middle-class has reached a safe place and no longer needs a social safety net.

In this paper, we construct synthetic panels and analyze poverty dynamics for a large sample of Latin American countries, with the aim to provide policy makers and development practitioners (engaged in project design) with estimates of the duration of poverty. While the availability of real long panel data would allow refining and deepening the analysis, we believe our results constitute a useful proxy and hope they will stimulate further data collection and research. Our analysis contributes to debunking a few common assumptions.

First, we show that chronic poverty is widespread also among the moderate poor. This type of poverty, characterized by long duration, accounts for 91% of extreme poverty and, surprisingly, 50% of moderate poverty. As expected, chronic poverty is more frequent in rural areas, where 99% of the extreme poor and as many as 78% of the moderate poor are chronic poor.

Second, we show that also the middle-class is still exposed to a substantial risk of falling back into poverty. More specifically, we find that 14% of those that belonged to the middle-class in 2003 experienced at least one poverty episode during the following decade.

Our results differ from those of Ferreira et al. (2013) and Vakis et al. (2015), although they are based on the application of a similar synthetic panel methodology. These authors analyze mobility between two periods only, and find that the vulnerable and the middle class are more consolidated in their status. For example, Ferreira et al. (2013, Table 4.1) estimate that only 2.7% of the vulnerable and 0.5% of the middle class fall back into poverty.

Our findings have important implications for the design and implementation of social safety nets. First, they suggest that interventions that target the rural poor and the urban extreme poor need to adopt a long-term perspective. The frequent recertification of the beneficiaries might not be needed and probably represents a loss of administrative and financial resources.

Second, our findings suggest that interventions that target the urban moderate poor need to adopt flexible entry and exit rules in response to this group's high income mobility. Targeting mechanisms based on proxy means tests are unlikely to perform satisfactorily. The Brazilian model based on declared income may represent a better alternative, if it can be coupled with frequent recertification and electronic audits of eligibility based on crossing information from the roster of beneficiaries with other sources of administrative data (e.g., social security contributions, ownership of assets).

Third, we show that the chronic poor have extremely low levels of human capital and live in rural areas with limited opportunity of wage employment. These are key factors for escaping poverty. Consequently, our findings suggest that, at least for this group, graduation strategies aimed at increasing income-generation capacity have low probabilities of success.¹⁶ Finally, the finding that both the vulnerable and the middle-class are likely to experience poverty in the future implies that the social safety nets remain relevant for many that are currently out of poverty.¹⁷

¹⁶ For a review of the experience with recertification and graduation in Latin American conditional cash transfer programs, see Medellin et al. (2015).

¹⁷ For an estimate of the demand for social safety nets in Latin American countries, see Ibarra et al. (2015).

A caveat is worth mentioning. Our dynamic analysis is based on twelve countries for which data is available. Further work is needed to incorporate results for more countries and increase the representativeness of our findings.

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Annex 1. Data sources

IDB's Harmonized Data Bank of Household Surveys from Latin America and the Caribbean (also known as IDB's *Sociometro*) contains harmonized household data sets for Latin American and Caribbean countries starting from the late 1980s. Variable names, definitions and contents are kept constant across countries and time. Table 8 shows the number of data sets used for the preparation of this paper.

Table 8 – Data Sets Used in this Paper, by Country, 2000-2013

Country	Geographic coverage	Survey year		# of surveys	Average observations per survey
		Initial	Final		
ARG	urban	2000	2013	14	112,282
BOL	national	2000	2012	11	23,280
BRA	national	2001	2013	12	384,241
CHL	national	2000	2011	5	245,192
COL	national	2000	2013	14	172,354
CRI	national	2000	2013	14	43,100
DOM	national	2000	2013	14	28,051
ECU	national	2000	2013	13	75,818
GTM	national	2000	2013	9	29,275
HND	national	2001	2013	13	63,955
MEX	national	2000	2012	8	80,655
NIC	national	2001	2012	6	31,306
PAN	national	2000	2013	14	49,091
PER	national	2000	2013	14	85,462
PRY	national	2000	2013	13	25,986
SLV	national	2000	2013	14	74,010
URY	Urban until 2005, national since 2006	2000	2013	14	108,960
VEN	national	2000	2013	14	159,906
Total				216	

Although it is well known that per-capita consumption is a better proxy for well-being, we use per-capita income because few countries in the region routinely conduct surveys with a consumption module, while all of them include questions on income. We calculate per-capita income by dividing total household income by the number of household members, without using any adult equivalence scale.

Income components are reported after-tax whenever possible. Extraordinary income sources are not considered. Similarly, we do not include the implicit rent from owned or occupied housing because not all countries capture the information that allows estimating it.¹⁸ As is common practice in academic and official studies, we do not make any imputation for missing, null or outlying values in addition to those already contained in the data sets provided by the national statistical offices. Finally, we do not make adjustments for differences in urban-rural prices.

¹⁸ Given our definition of the income variables, our poverty estimates may differ from the official ones and from those calculated by other institutions that use the same household surveys.

Annex 2. Synthetic-panel methodology

The analysis of poverty dynamics presented in this paper is based on synthetic-panel data constructed with the method developed by Dang *et al.* (2014). This method was originally designed to analyze transitions in and out of poverty based on two (or more) rounds of cross-sectional data. Our objective is slightly different, as we aim to investigate poverty duration, or more specifically in how many years a family has been poor over a decade. For this purpose, we calculate yearly point estimates of per-capita income based on yearly cross-sectional data.

The sample is made of families surveyed in the first year ($t=0$). For each of the following ten years ($s=1,10$), we estimate per-capita income using time invariant variables observed in $t=0$, coefficients estimated in $t=s$, and empirical residuals. Dang *et al.* (2014) and Cruces *et al.* (2014) show that the method performs well irrespective of the forecasting direction, i.e. that estimates of mobility are very similar if one predicts per-capita income in each year based on the sample of families that are surveyed in the last year.

The methodology assumes a linear structure of the income equation, and is based on the following two assumptions: (i) households do not change, which ensures that time-invariant variables observed in $t=0$ can be used to estimate income in $t=s$, and; (ii) the correlation of the error terms across time ($\varepsilon_{t=0}$ and $\varepsilon_{t=s}$) is not negative. This is a reasonable assumption given that income shocks show persistence over time, and factors leading to a negative correlation of income over time are unlikely to apply to all households at the same time.

The methodology requires estimating the following equations:

$$(1) \quad y_{i,t} = \beta'_t x_{i,t} + \varepsilon_{i,t} \quad \text{for } t=0,10$$

i.e for the first period and for the following ten years, where $y_{i,t}$ is the logarithm of household i 's per-capita income at time t , and $x_{i,t}$ is a vector of variables measuring household i 's characteristics at time t . Our specification of the model includes the following variables:

- i. Household head characteristics: sex, age, age squared, years of schooling, years of schooling squared, and agricultural work;
- ii. Region (first-level administrative country subdivision) characteristics: average years of schooling of the household heads, and proportion of workers in agriculture;
- iii. Geographic controls: rural-urban residence;

- iv. Retrospective regressors at regional level in the initial year (2003): inequality (standard deviation of log income), extreme poverty headcount (\$2.5 a day), average per capita income, average household size, and average years of schooling of the household heads.

The regressions produce 11 estimates of vectors β and ε ($\hat{\beta}_t$ and $\hat{\varepsilon}_t$, one for each time period). They also produce 11 estimates of the error term variance ($\hat{\sigma}_{\varepsilon_t}$). These parameters are used to produce the synthetic-panel estimates of yearly per-capita income.

Following Cruces *et al.* (2014), Fields and Viollaz (2013) and Haynes et al (2013), we use the “non-parametric” version of the method, i.e. we make no assumptions on the structural form of the joint distribution of the errors terms. Two extreme assumptions on the non-parametric time correlation of the error terms lead to a lower and upper bound estimate of per-capita income mobility. At one extreme, one can assume zero correlation between $\varepsilon_{t=0}$ and $\varepsilon_{t=s}$, i.e. that the two error terms are independent from each other. The logarithm of per capita income of household i in $t=s$ ($\hat{y}_{i,t=s}^U$) is estimated as follows:

$$(2) \quad \hat{y}_{i,t=s}^U = \hat{\beta}'_{t=s} x_{i,t=0} + \hat{\varepsilon}_{i,t=s}$$

Where the apex U indicates uncorrelated error terms, $\hat{\varepsilon}_{i,t=s}$ is the mean of 50 random draws (with replacement) from the vector of estimated residuals in $t=s$.

At the other extreme, one can assume perfect correlation between $\varepsilon_{t=0}$ and $\varepsilon_{t=s}$. In this case, the logarithm of per capita income of household i in $t=s$ ($\hat{y}_{i,t=s}^C$) is estimated as follows:

$$(3) \quad \hat{y}_{i,t=s}^C = \hat{\beta}'_{t=s} x_{i,t=0} + \gamma \hat{\varepsilon}_{i,t=0}$$

where the apex C indicates correlated error terms, $\hat{\varepsilon}_{i,t=0}$ is (the time-invariant) household i 's empirical error term estimated in $t=0$, and $\gamma = \hat{\sigma}_{\varepsilon_{t=0}} / \hat{\sigma}_{\varepsilon_{t=s}}$ is a scale factor.

Dang *et al.* (2014) and Cruces *et al.* (2014) show that: (i) equation (2) produces upper-bound estimates of income mobility, due to the high variation in the error term, and overestimates people's movements in and out of poverty; (ii) equation (3) produces lower-bound estimates of income mobility, due to the constant error term, and underestimates poverty transitions; (iii) the average of (2) and (3) approximates well the observed income mobility, providing a satisfactory estimation of movements in and out of poverty. This last point is proved

empirically by comparing synthetic-panel estimates of mobility with those observed in genuine panel data. We therefore calculate point estimates of per-capita income of the households in the synthetic-panel as follows¹⁹:

$$(4) \quad \hat{y}_{i,t=s} = \hat{\beta}'_{t=s} x_{i,t=0} + \frac{(\hat{\varepsilon}_{i,t=s} + \gamma \hat{\varepsilon}_{i,t=0})}{2}$$

Recently, Dang and Lanjouw (2013) have developed a point estimate synthetic panel approach, which generalizes the use of non-parametric and parametric methods to produce point estimates of poverty transitions. This could have been used, as alternative to equation (4), to produce the estimates of poverty duration presented in this paper. We preferred to rely on equation (4) because the two methods have been shown to be empirically equivalent in terms of accuracy, and because Dang and Lanjouw (2013) indicate that the point-estimate methodology is most accurate when short time periods are analyzed.

Table 9 summarizes the existing literature comparing results from genuine panel data with non-parametric, parametric, and point estimate synthetic-panel methods. All results reported are based on the use of household time-invariant characteristics, sub-national controls and region fixed effects, consistently with the definition of our own model. They show that the estimates based on the average of the bounds approximate well the estimates based on genuine panel data, irrespective of the length of the period analyzed (2 years in Peru, versus 10 in Chile), the width of the bounds, the type of poverty transition and the number of replications used to obtain the upper bound (50, 100, 500). These estimates are found to be as accurate as those obtained with either the parametric approach (for Indonesia and Vietnam) or the point estimate approach (Bosnia-Herzegovina).

¹⁹ Dang et al. (2014) suggest that standard errors for the bounds can be estimated by bootstrapping. This involves bootstrap resampling from the original cross-sections while accounting for survey weights (footnote 14). Similarly, we could obtain standard errors for our point estimates by complementing Dang *et al.*'s suggested procedure with the application of the delta method.

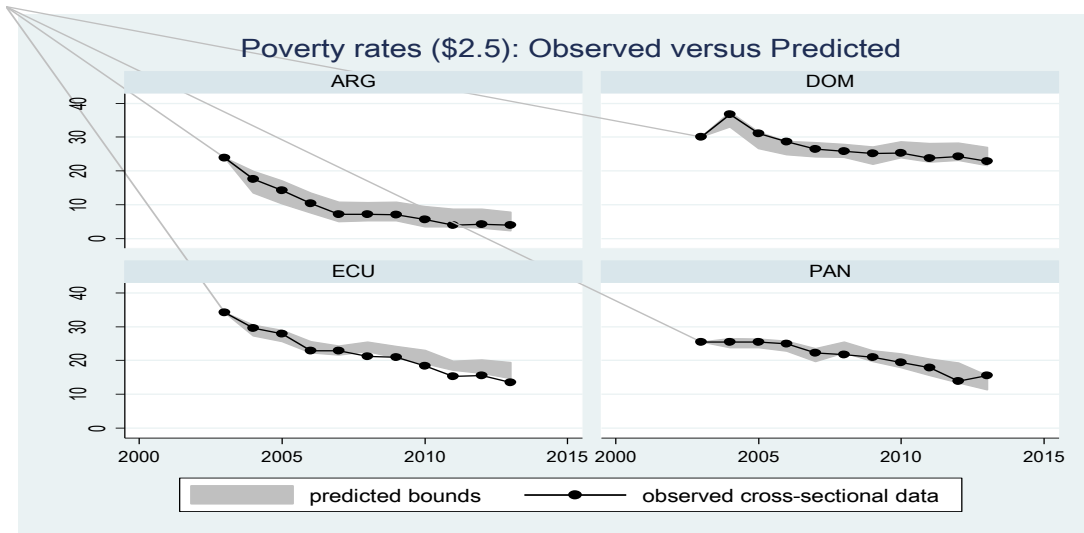
Table 9 – Summary of the Literature Comparing Estimates from Synthetic and Genuine Panel Data

Reference	Country, years, type of transition	non-parametric approach			genuine panel	parametric approach			point estimate approach	genuine panel
		lower	upper	average		lower	upper	average		
Cruces <i>et al.</i> (2014)	Peru 2008-2009									
	poor, poor	30.81	17.21	24.01	23.57					
	poor, non-poor	4.29	17.62	10.96	9.96					
	non-poor, poor	2.77	16.37	9.57	10.00					
	non-poor, non-poor	62.13	48.80	55.47	56.46					
	Nicaragua 2001-05									
	poor, poor	39.44	30.97	35.21	35.68					
	poor, non-poor	0.00	9.89	4.95	3.35					
	non-poor, poor	22.36	30.83	26.60	26.12					
	non-poor, non-poor	38.20	28.31	33.26	34.85					
	Chile 1996-2006									
	poor, poor	6.68	2.66	4.67	4.64					
poor, non-poor	10.35	20.66	15.51	19.59						
non-poor, poor	0.92	4.94	2.93	2.96						
non-poor, non-poor	82.06	71.75	76.91	72.82						
Haynes <i>et al.</i> (2013)	Philippines 2003-09									
	poor, poor	40.62	25.66	33.14	33.53					
	poor, non-poor	16.39	7.33	11.86	10.37					
	non-poor, poor	17.01	2.06	9.54	9.14					
Dang <i>et al.</i> (2014)	Indonesia 1997-00									
	poor, poor	13.80	3.50	8.65	7.30	10.10	6.30	9.38		
	poor, non-poor	1.90	11.10	6.50	10.10	8.10	11.90	7.30		
	non-poor, poor	2.60	13.00	7.80	8.30	6.90	10.70	7.35		
	non-poor, non-poor	81.70	72.40	77.05	74.30	74.80	71.10	75.93		
	Vietnam 2006-08									
	poor, poor	12.50	8.10	10.30	9.90	9.10	6.30	9.70		
	poor, non-poor	2.50	7.90	5.20	5.90	5.50	8.80	5.35		
	non-poor, poor	4.00	8.50	6.25	4.90	5.60	8.40	5.93		
	non-poor, non-poor	80.90	75.50	78.20	79.30	79.90	72.10	79.05		
Dang and Lanjouw (2013)	Bosnia-Herzegovina 2001-04									
	poor, poor								10.80	8.20
	poor, non-poor								13.10	12.60
	non-poor, poor								10.90	12.10
	non-poor, non-poor								69.20	67.20

Note: Upper bound estimations are based on 50 replications in Cruces *et al.*, 100 replications in Haynes *et al.*, and 500 replication Dang *et al.*

Annex 3. Estimate bounds

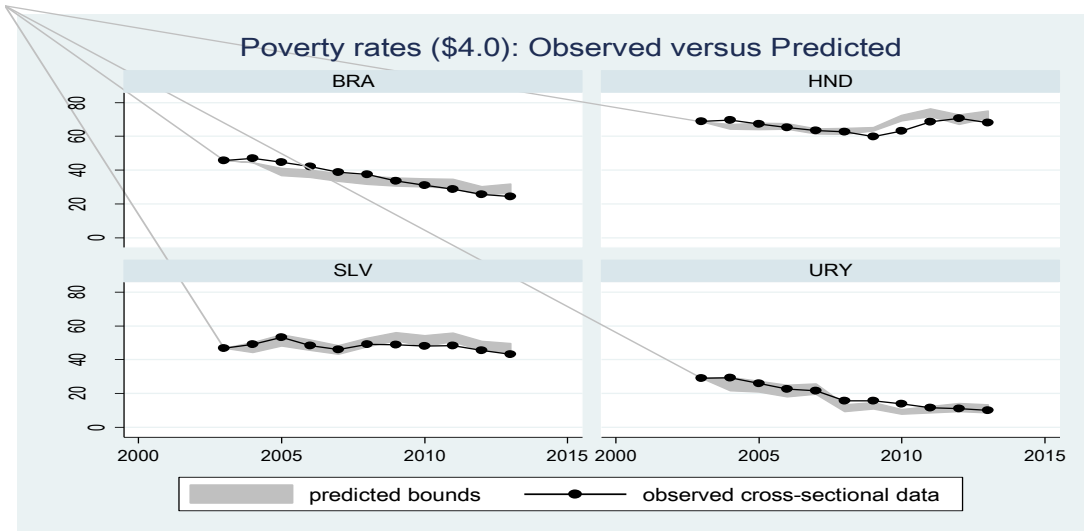
Figure 8 - Observed Versus Predicted Extreme Poverty Headcounts in Selected Countries



Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Notes: ARG = Argentina; DOM = Dominican Republic; ECU = Ecuador; PAN = Panama.

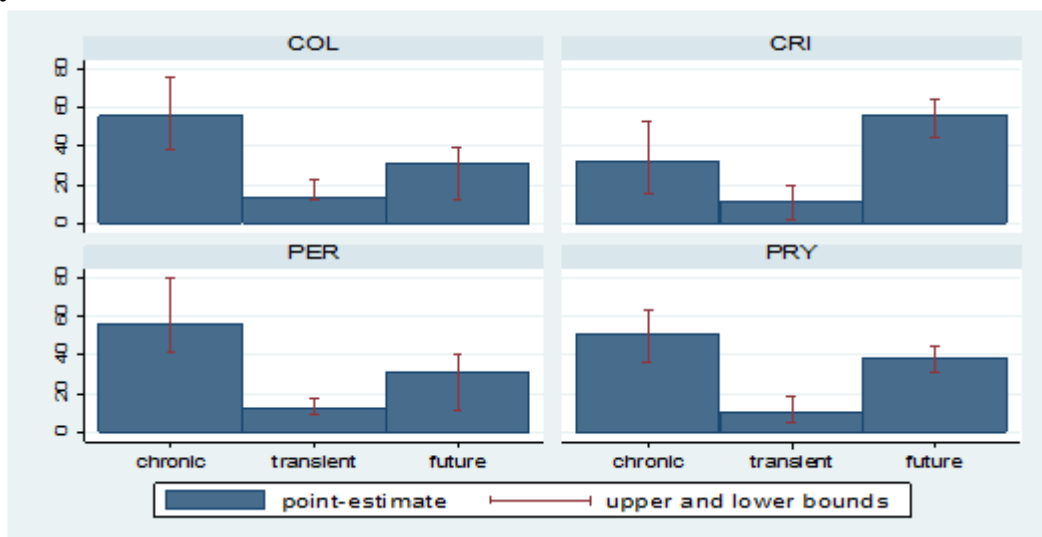
Figure 9 - Observed Versus Predicted Poverty Headcounts in Selected Countries



Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Notes: BRA = Brazil; HND = Honduras; SLV = El Salvador; URY = Uruguay.

Figure 10 - Bounds for the Estimates of Transient Poverty, Chronic Poverty and Future-Poverty in Selected LAC Countries



Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Notes: COL = Colombia; CRI = Costa Rica; PER = Peru; PRY = Paraguay.

Annex 4. Country profiles – Argentina

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	--	--	--	--	--	--
Urban	14.9	15.4	36.5	31.3	2.0	100.0
Rural	--	--	--	--	--	--
Incidence in 2013 - total	--	--	--	--	--	--
Urban	4.0	6.9	34.4	52.5	2.2	100.0
Rural	--	--	--	--	--	--
Share rural in 2000	0.0	0.0	0.0	0.0	0.0	0.0
Share rural in 2013	0.0	0.0	0.0	0.0	0.0	0.0
Transition probabilities - total						
Extreme poverty	--	--	--	--	--	--
Moderate poverty	--	--	--	--	--	--
Vulnerable class	--	--	--	--	--	--
Middle-class	--	--	--	--	--	--
High-income	--	--	--	--	--	--
Transition probabilities - urban						
Extreme poverty	5.9	20.5	63.7	7.3	2.7	100.0
Moderate poverty	0.5	2.0	65.2	31.2	1.2	100.0
Vulnerable class	0.1	0.6	27.2	71.1	1.0	100.0
Middle-class	0.0	0.1	2.6	90.7	6.7	100.0
High-income	0.0	0.0	0.0	33.3	66.7	100.0
Transition probabilities - rural						
Extreme poverty	--	--	--	--	--	--
Moderate poverty	--	--	--	--	--	--
Vulnerable class	--	--	--	--	--	--
Middle-class	--	--	--	--	--	--
High-income	--	--	--	--	--	--
% of chronic poverty - total	--	--				--
Urban	45.7	1.2				27.7
Rural	--	--				--
% future-poor - total			--	--	--	--
Urban			25.6	2.5	0.0	16.3
Rural			--	--	--	--
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	11.1	29.0	9.8	50.1	100.0	
Male household head	0.476	0.483	0.507	0.476	0.481	
Household size	6.222	5.294	4.389	3.577	4.448	
Number of children (aged 0-5)	1.096	0.709	0.524	0.284	0.521	
Adult members						
Self-employed	0.348	0.342	0.349	0.309	0.327	
Salaried	1.060	1.147	1.372	1.233	1.202	
Unemployed	0.538	0.388	0.205	0.178	0.282	
Inactive	0.851	0.980	0.854	0.825	0.876	
Primary education or less	0.527	0.355	0.321	0.144	0.265	
Incomplete secondary educ.	0.759	0.725	0.632	0.386	0.550	
Complete secondary educ.	0.298	0.495	0.537	0.582	0.521	
Incomplete tertiary educ.	0.136	0.250	0.263	0.514	0.371	
Complete tertiary educ.	0.025	0.122	0.113	0.512	0.306	
Rural (share)	--	--	--	--	--	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles – Brazil

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2001 - total	27.1	16.8	32.5	21.3	2.3	100.0
Urban	21.9	16.6	34.5	24.4	2.7	100.0
Rural	54.3	18.3	21.9	5.3	0.3	100.0
Incidence in 2013 - total	10.4	10.8	38.5	36.7	3.6	100.0
Urban	7.5	9.6	38.6	40.2	4.1	100.0
Rural	26.5	17.5	37.6	17.8	0.6	100.0
Share rural in 2001	32.4	17.6	10.9	4.0	2.1	16.2
Share rural in 2013	39.3	24.9	15.1	7.5	2.4	15.4
Transition probabilities - total						
Extreme poverty	36.2	37.0	26.0	0.7	0.0	100.0
Moderate poverty	5.9	23.7	65.9	4.5	0.0	100.0
Vulnerable class	1.3	6.6	67.7	24.4	0.0	100.0
Middle-class	0.1	0.8	22.1	75.6	1.4	100.0
High-income	0.0	0.0	0.7	64.9	34.4	100.0
Transition probabilities - urban						
Extreme poverty	31.8	38.1	29.2	0.8	0.0	100.0
Moderate poverty	5.7	23.1	66.5	4.6	0.0	100.0
Vulnerable class	1.2	6.4	67.3	25.1	0.0	100.0
Middle-class	0.1	0.7	21.6	76.2	1.4	100.0
High-income	0.0	0.0	0.7	64.7	34.6	100.0
Transition probabilities - rural						
Extreme poverty	45.4	34.7	19.4	0.5	0.0	100.0
Moderate poverty	6.6	26.3	63.4	3.7	0.0	100.0
Vulnerable class	1.7	8.6	71.7	18.0	0.0	100.0
Middle-class	0.4	1.9	35.2	62.3	0.1	100.0
High-income	0.0	0.0	0.0	79.9	20.1	100.0
% of chronic poverty - total	94.6	51.3				77.8
Urban	92.8	48.2				73.4
Rural	98.4	65.6				89.8
% future-poor - total			65.2	11.5	0.3	42.1
Urban			63.5	11.0	0.3	40.0
Rural			79.1	23.0	0.0	67.5
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	27.5	10.0	25.0	37.5	100.0	
Male household head	0.495	0.496	0.487	0.487	0.490	
Household size	4.872	4.289	3.661	3.471	3.986	
Number of children (aged 0-5)	0.784	0.426	0.315	0.211	0.416	
Adult members						
Self-employed	0.423	0.354	0.401	0.349	0.383	
Salaried	0.786	0.945	1.189	1.197	1.057	
Unemployed	0.171	0.215	0.121	0.107	0.139	
Inactive	0.652	0.912	0.633	0.735	0.704	
Primary education or less	1.323	1.196	1.156	0.694	1.033	
Incomplete secondary educ.	0.107	0.179	0.191	0.159	0.155	
Complete secondary educ.	0.134	0.397	0.477	0.753	0.478	
Incomplete tertiary educ.	0.007	0.057	0.082	0.570	0.242	
Complete tertiary educ.	0.000	0.001	0.002	0.052	0.020	
Rural (share)	0.310	0.123	0.125	0.044	0.145	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles – Colombia

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	40.1	19.5	26.7	12.7	1.0	100.0
Urban	30.3	20.2	31.8	16.5	1.3	100.0
Rural	66.2	17.8	13.3	2.5	0.1	100.0
Incidence in 2013 - total	18.6	15.4	36.7	27.2	2.2	100.0
Urban	11.4	13.2	39.2	33.4	2.8	100.0
Rural	42.3	22.7	28.4	6.6	0.1	100.0
Share rural in 2000	45.2	25.0	13.7	5.4	3.5	27.4
Share rural in 2013	53.2	34.5	18.1	5.7	1.0	23.4
Transition probabilities - total						
Extreme poverty	49.7	29.4	19.2	0.6	1.0	100.0
Moderate poverty	12.6	29.9	53.4	3.3	0.8	100.0
Vulnerable class	3.5	12.6	59.1	23.7	1.0	100.0
Middle-class	0.3	0.9	24.1	70.8	3.9	100.0
High-income	0.0	0.0	0.0	25.8	74.2	100.0
Transition probabilities - urban						
Extreme poverty	35.9	35.4	27.0	1.0	0.7	100.0
Moderate poverty	9.4	24.2	61.1	4.6	0.8	100.0
Vulnerable class	2.6	10.4	59.5	26.4	1.1	100.0
Middle-class	0.2	0.8	23.0	72.0	4.1	100.0
High-income	0.0	0.0	0.0	29.7	70.3	100.0
Transition probabilities - rural						
Extreme poverty	67.6	21.6	9.2	0.1	1.5	100.0
Moderate poverty	20.7	44.8	33.6	0.0	0.9	100.0
Vulnerable class	9.6	27.1	56.6	6.4	0.2	100.0
Middle-class	3.8	3.4	51.5	41.3	0.0	100.0
High-income	0.0	0.0	0.0	3.9	96.1	100.0
% of chronic poverty - total						
Urban	88.9	46.8				70.7
Rural	98.3	91.8				96.5
% future-poor - total						
Urban			74.5	23.5	0.6	56.0
Rural			92.2	44.4	0.0	81.2
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	45.0	11.0	24.7	19.4	100.0	
Male household head	0.743	0.810	0.712	0.791	0.752	
Household size	5.814	5.194	4.603	3.928	5.082	
Number of children (aged 0-5)	0.986	0.773	0.458	0.384	0.716	
Adult members						
Self-employed	0.944	0.774	0.770	0.476	0.792	
Salaried	0.466	0.811	1.056	1.198	0.791	
Unemployed	0.326	0.447	0.290	0.245	0.315	
Inactive	0.947	0.813	0.875	0.753	0.877	
Primary education or less	0.887	0.372	0.466	0.122	0.578	
Incomplete secondary educ.	0.559	0.755	0.663	0.376	0.571	
Complete secondary educ.	0.381	0.925	0.823	0.780	0.627	
Incomplete tertiary educ.	0.040	0.157	0.253	0.513	0.197	
Complete tertiary educ.	0.017	0.084	0.150	0.737	0.196	
Rural (share)	0.453	0.068	0.153	0.045	0.258	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles – Costa Rica

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	15.2	14.9	40.6	28.1	1.3	100.0
Urban	8.7	11.6	40.0	37.9	1.9	100.0
Rural	24.5	19.5	41.4	14.3	0.4	100.0
Incidence in 2013 - total	8.5	10.6	37.7	39.2	4.0	100.0
Urban	5.1	7.1	34.0	48.1	5.8	100.0
Rural	14.0	16.4	43.8	24.7	1.1	100.0
Share rural in 2000	66.5	54.0	42.1	21.0	11.8	41.3
Share rural in 2013	62.8	59.0	44.3	24.1	10.9	38.2
Transition probabilities - total						
Extreme poverty	42.7	20.2	33.9	2.1	1.1	100.0
Moderate poverty	26.8	19.2	40.9	11.9	1.3	100.0
Vulnerable class	10.0	13.8	42.2	33.1	0.8	100.0
Middle-class	1.2	3.4	22.1	66.6	6.6	100.0
High-income	0.0	0.4	0.7	49.2	49.7	100.0
Transition probabilities - urban						
Extreme poverty	30.1	21.4	43.5	3.3	1.7	100.0
Moderate poverty	14.1	16.9	50.3	17.3	1.3	100.0
Vulnerable class	4.8	8.6	42.2	43.8	0.6	100.0
Middle-class	0.8	1.9	17.7	71.5	8.1	100.0
High-income	0.0	0.5	0.5	44.5	54.5	100.0
Transition probabilities - rural						
Extreme poverty	48.3	19.7	29.6	1.6	0.8	100.0
Moderate poverty	35.5	20.7	34.4	8.2	1.3	100.0
Vulnerable class	17.0	20.8	42.2	18.9	1.0	100.0
Middle-class	2.7	8.4	37.4	49.7	1.8	100.0
High-income	0.0	0.0	1.5	73.3	25.2	100.0
% of chronic poverty - total	89.8	58.3				74.4
Urban	78.1	38.5				56.0
Rural	95.1	71.9				84.6
% future-poor - total			73.4	30.0	3.4	53.1
Urban			63.3	23.9	3.1	41.8
Rural			86.9	50.9	4.5	75.6
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	21.6	7.4	37.7	33.3	100.0	
Male household head	0.740	0.745	0.786	0.798	0.777	
Household size	5.426	5.216	4.542	4.183	4.664	
Number of children (aged 0-5)	0.825	0.735	0.473	0.379	0.537	
Adult members	0.224	0.229	0.188	0.199		
Self-employed	0.331	0.329	0.322	0.283	0.311	
Salaried	0.668	0.778	1.295	1.411	1.160	
Unemployed	0.190	0.178	0.111	0.080	0.123	
Inactive	1.203	1.102	0.972	0.910	1.011	
Primary education or less	0.803	0.484	0.480	0.137	0.436	
Incomplete secondary educ.	0.416	0.826	0.900	1.029	0.833	
Complete secondary educ.	0.008	0.031	0.046	0.073	0.045	
Incomplete tertiary educ.	0.034	0.119	0.215	0.677	0.322	
Complete tertiary educ.	0.002	0.023	0.060	0.325	0.133	
Rural (share)	0.732	0.387	0.477	0.175	0.425	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles – Dominican Republic

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	24.0	17.7	34.9	21.9	1.4	100.0
Urban	17.6	15.1	38.1	27.3	1.9	100.0
Rural	35.5	22.5	29.3	12.3	0.5	100.0
Incidence in 2013 - total	22.7	20.7	38.7	17.2	0.8	100.0
Urban	18.5	18.7	40.3	21.5	1.1	100.0
Rural	31.3	24.7	35.6	8.4	0.0	100.0
Share rural in 2000	53.1	45.5	30.1	20.2	11.5	35.9
Share rural in 2013	45.1	39.0	29.9	15.8	1.4	32.6
Transition probabilities - total						
Extreme poverty	50.5	34.7	14.7	0.1	0.0	100.0
Moderate poverty	13.9	36.4	48.1	1.5	0.0	100.0
Vulnerable class	2.8	16.5	69.4	11.1	0.1	100.0
Middle-class	0.1	2.2	42.4	53.8	1.6	100.0
High-income	0.0	0.0	3.7	83.2	13.0	100.0
Transition probabilities - urban						
Extreme poverty	45.2	36.8	17.8	0.1	0.0	100.0
Moderate poverty	10.3	34.4	53.3	2.0	0.0	100.0
Vulnerable class	2.3	14.4	70.1	13.1	0.1	100.0
Middle-class	0.1	2.2	39.9	55.9	1.9	100.0
High-income	0.0	0.0	1.6	84.8	13.6	100.0
Transition probabilities - rural						
Extreme poverty	57.6	31.9	10.4	0.1		100.0
Moderate poverty	21.5	40.7	37.2	0.6		100.0
Vulnerable class	4.3	22.5	67.6	5.6		100.0
Middle-class	0.0	2.0	55.2	42.7		100.0
High-income	0.0	0.0	56.3	43.7		100.0
% of chronic poverty - total	97.9	65.8				85.1
Urban	96.9	56.0				78.9
Rural	99.2	86.2				94.8
% future-poor - total			82.0	21.9	0.2	62.6
Urban			78.3	17.9	0.2	56.9
Rural			92.7	42.7	0.0	81.8
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	42.6	7.5	31.3	18.7	100.0	
Male household head	0.492	0.464	0.507	0.489	0.494	
Household size	5.100	5.110	4.345	4.086	4.675	
Number of children (aged 0-5)	0.820	0.654	0.517	0.405	0.635	
Adult members						
Self-employed	0.579	0.556	0.712	0.477	0.600	
Salaried	0.542	0.851	0.967	1.208	0.822	
Unemployed	0.132	0.184	0.114	0.101	0.125	
Inactive	1.251	1.170	0.879	0.781	1.041	
Primary education or less	1.189	0.949	0.984	0.398	0.959	
Incomplete secondary educ.	0.353	0.486	0.461	0.325	0.391	
Complete secondary educ.	0.218	0.425	0.397	0.517	0.345	
Incomplete tertiary educ.	0.079	0.245	0.233	0.485	0.216	
Complete tertiary educ.	0.025	0.187	0.129	0.764	0.208	
Rural (share)	0.411	0.150	0.269	0.127	0.294	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles – Ecuador

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	40.8	20.8	27.5	10.1	0.9	100.0
Urban	30.5	21.0	33.4	13.8	1.3	100.0
Rural	59.0	20.3	17.0	3.4	0.3	100.0
Incidence in 2013 - total	13.4	16.4	42.0	26.8	1.4	100.0
Urban	7.9	13.3	43.0	33.9	1.9	100.0
Rural	24.8	22.7	40.1	12.0	0.4	100.0
Share rural in 2000	52.0	35.1	22.2	12.0	11.2	35.9
Share rural in 2013	60.3	45.1	31.0	14.6	8.2	32.6
Transition probabilities - total						
Extreme poverty	34.4	36.6	28.5	0.4	0.1	100.0
Moderate poverty	4.5	22.3	67.1	6.1	0.0	100.0
Vulnerable class	1.0	5.7	63.7	29.5	0.0	100.0
Middle-class	0.1	0.5	18.2	78.8	2.4	100.0
High-income	0.0	0.0	0.2	71.9	27.9	100.0
Transition probabilities - urban						
Extreme poverty	24.1	36.7	38.4	0.7	0.2	100.0
Moderate poverty	3.0	16.7	71.9	8.4	0.0	100.0
Vulnerable class	0.5	3.6	61.2	34.8	0.0	100.0
Middle-class	0.1	0.4	16.2	80.7	2.7	100.0
High-income	0.0	0.0	0.2	71.2	28.6	100.0
Transition probabilities - rural						
Extreme poverty	43.2	36.5	20.0	0.2	0.0	100.0
Moderate poverty	7.1	32.1	58.7	2.1	0.0	100.0
Vulnerable class	2.7	12.7	71.9	12.7	0.0	100.0
Middle-class	0.1	1.5	39.3	59.1	0.0	100.0
High-income	0.0	0.0	0.0	81.8	18.2	100.0
% of chronic poverty - total	87.5	38.1				69.6
Urban	75.5	18.8				50.6
Rural	97.8	71.5				90.4
% future-poor - total			59.1	11.7	0.0	43.0
Urban			49.9	9.5	0.0	34.5
Rural			88.7	34.4	0.0	80.0
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	37.4	16.4	19.9	26.3	100.0	
Male household head	0.491	0.467	0.484	0.499	0.488	
Household size	6.077	5.738	5.027	4.437	5.380	
Number of children (aged 0-5)	1.061	0.856	0.573	0.444	0.768	
Adult members						
Self-employed	0.635	0.585	0.640	0.526	0.599	
Salaried	0.759	1.103	1.361	1.358	1.093	
Unemployed	0.114	0.181	0.084	0.108	0.117	
Inactive	0.994	1.090	0.872	0.825	0.941	
Primary education or less	0.705	0.391	0.462	0.146	0.458	
Incomplete secondary educ.	0.402	0.708	0.550	0.427	0.488	
Complete secondary educ.	0.209	0.605	0.550	0.760	0.487	
Incomplete tertiary educ.	0.065	0.275	0.277	0.683	0.304	
Complete tertiary educ.	0.014	0.100	0.101	0.522	0.179	
Rural (share)	0.619	0.150	0.349	0.066	0.343	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles - Honduras

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2001 - total	47.4	15.5	25.0	11.6	0.5	100.0
Urban	21.7	18.2	38.0	21.1	1.1	100.0
Rural	69.3	13.2	13.9	3.5	0.1	100.0
Incidence in 2013 - total	49.5	17.0	24.9	8.5	0.2	100.0
Urban	27.5	18.8	37.9	15.3	0.5	100.0
Rural	69.2	15.3	13.3	2.3	0.0	100.0
Share rural in 2001	78.9	45.8	30.0	16.4	8.6	53.9
Share rural in 2013	73.7	47.6	28.1	14.1	0.0	52.7
Transition probabilities - total						
Extreme poverty	89.0	8.0	2.6	0.0	0.4	100.0
Moderate poverty	46.6	29.3	22.6	0.8	0.7	100.0
Vulnerable class	21.1	25.7	48.2	4.6	0.4	100.0
Middle-class	3.2	8.6	46.0	41.1	1.1	100.0
High-income	0.0	0.0	6.3	40.6	53.1	100.0
Transition probabilities - urban						
Extreme poverty	68.4	22.1	9.1	0.0	0.5	100.0
Moderate poverty	33.3	34.6	29.5	1.3	1.3	100.0
Vulnerable class	13.8	24.4	55.2	6.2	0.4	100.0
Middle-class	2.4	6.8	45.3	44.2	1.3	100.0
High-income	0.0	0.0	6.3	52.4	41.3	100.0
Transition probabilities - rural						
Extreme poverty	94.8	4.1	0.7	0.0	0.4	100.0
Moderate poverty	64.6	22.2	13.1	0.0	0.0	100.0
Vulnerable class	40.5	29.3	29.3	0.5	0.3	100.0
Middle-class	9.5	23.4	52.6	14.5	0.0	100.0
High-income	0.0	0.1	6.4	3.2	90.3	100.0
% of chronic poverty - total	98.7	77.3				94.0
Urban	95.5	65.1				82.6
Rural	99.6	93.7				98.8
% future-poor - total			89.4	42.9	3.6	74.6
Urban			86.2	38.3	2.7	69.1
Rural			98.2	82.1	6.5	93.4
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	64.3	4.1	23.6	8.0	100.0	
Male household head	0.774	0.759	0.748	0.787	0.769	
Household size	6.489	5.753	4.781	4.310	5.881	
Number of children (aged 0-5)	1.280	0.925	0.598	0.419	1.035	
Adult members						
Self-employed	0.890	0.487	0.512	0.335	0.739	
Salaried	0.462	0.870	1.204	1.452	0.734	
Unemployed	0.192	0.374	0.224	0.223	0.209	
Inactive	1.177	1.153	1.014	0.931	1.117	
Primary education or less	0.706	0.280	0.353	0.107	0.557	
Incomplete secondary educ.	0.549	1.095	0.834	0.694	0.651	
Complete secondary educ.	0.191	0.580	0.590	0.793	0.350	
Incomplete tertiary educ.	0.038	0.170	0.232	0.572	0.132	
Complete tertiary educ.	0.009	0.038	0.090	0.491	0.068	
Rural (share)	0.779	0.231	0.381	0.100	0.608	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles - Panama

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	23.7	14.8	34.0	25.2	2.2	100.0
Urban	11.0	13.1	37.7	34.9	3.3	100.0
Rural	45.4	17.6	27.7	8.9	0.4	100.0
Incidence in 2013 - total	15.6	11.1	36.1	34.7	2.6	100.0
Urban	5.0	7.8	38.2	45.3	3.7	100.0
Rural	36.4	17.5	31.9	13.8	0.5	100.0
Share rural in 2000	70.9	44.1	30.2	13.1	6.2	37.0
Share rural in 2013	78.6	53.2	29.8	13.4	6.2	33.7
Transition probabilities - total						
Extreme poverty	35.6	31.5	31.4	1.5	0.0	100.0
Moderate poverty	3.1	17.1	69.9	9.8	0.0	100.0
Vulnerable class	0.8	4.0	56.1	39.0	0.1	100.0
Middle-class	0.1	0.3	12.9	84.0	2.7	100.0
High-income	0.0	0.0	0.1	59.6	40.3	100.0
Transition probabilities - urban						
Extreme poverty	14.8	31.9	49.8	3.5	0.0	100.0
Moderate poverty	2.2	13.3	72.6	11.9	0.0	100.0
Vulnerable class	0.6	2.8	53.8	42.8	0.0	100.0
Middle-class	0.0	0.1	11.6	85.3	3.0	100.0
High-income	0.0	0.0	0.1	58.9	41.0	100.0
Transition probabilities - rural						
Extreme poverty	43.2	31.3	24.7	0.8	0.0	100.0
Moderate poverty	4.4	21.8	66.5	7.3	0.0	100.0
Vulnerable class	1.5	7.1	62.1	29.2	0.1	100.0
Middle-class	0.1	1.3	22.5	74.9	1.2	100.0
High-income	0.0	0.0	0.0	74.1	25.9	100.0
% of chronic poverty - total	91.1	40.2				72.3
Urban	71.7	18.9				42.8
Rural	98.2	66.5				89.8
% future-poor - total			59.1	10.8	0.1	37.2
Urban			50.0	8.1	0.1	28.9
Rural			83.1	30.0	0.0	69.3
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	29.3	11.2	22.1	37.4	100.0	
Male household head	0.487	0.465	0.505	0.485	0.487	
Household size	5.931	5.976	5.114	4.644	5.274	
Number of children (aged 0-5)	0.885	0.685	0.505	0.392	0.594	
Adult members						
Self-employed	0.973	0.805	0.780	0.591	0.768	
Salaried	0.461	0.848	1.268	1.499	1.071	
Unemployed	0.080	0.165	0.150	0.118	0.119	
Inactive	0.716	1.403	0.974	1.078	0.985	
Primary education or less	0.803	0.262	0.401	0.115	0.396	
Incomplete secondary educ.	0.428	0.512	0.470	0.237	0.376	
Complete secondary educ.	0.458	1.174	1.104	0.957	0.868	
Incomplete tertiary educ.	0.096	0.310	0.368	0.543	0.347	
Complete tertiary educ.	0.080	0.375	0.540	1.248	0.652	
Rural (share)	0.598	0.043	0.102	0.012	0.207	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles - Peru

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	34.8	18.2	34.3	12.4	0.4	100.0
Urban	14.6	20.2	46.7	18.0	0.5	100.0
Rural	72.4	14.4	11.3	1.9	0.0	100.0
Incidence in 2013 - total	19.3	13.7	40.5	25.7	0.8	100.0
Urban	9.2	11.8	45.6	32.4	1.0	100.0
Rural	49.9	19.5	25.0	5.6	0.1	100.0
Share rural in 2000	72.7	27.7	11.6	5.3	0.0	35.0
Share rural in 2013	64.4	35.3	15.4	5.4	4.0	24.9
Transition probabilities - total						
Extreme poverty	52.4	26.2	18.2	0.5	2.7	100.0
Moderate poverty	6.3	21.9	62.8	6.8	2.2	100.0
Vulnerable class	1.4	6.6	62.9	28.2	1.0	100.0
Middle-class	0.4	0.6	21.7	74.9	2.3	100.0
High-income	0.0	0.0	0.1	69.5	30.5	100.0
Transition probabilities - urban						
Extreme poverty	28.1	31.5	32.7	0.9	6.8	100.0
Moderate poverty	4.2	16.3	68.3	8.5	2.7	100.0
Vulnerable class	1.1	5.7	62.3	29.8	1.1	100.0
Middle-class	0.5	0.6	21.2	75.5	2.3	100.0
High-income	0.0	0.0	0.0	69.5	30.5	100.0
Transition probabilities - rural						
Extreme poverty	67.4	22.9	9.3	0.2	0.2	100.0
Moderate poverty	13.0	40.3	44.9	1.2	0.5	100.0
Vulnerable class	3.7	16.5	69.6	10.3	0.0	100.0
Middle-class	0.0	4.3	50.6	45.1	0.0	100.0
High-income	0.0	0.0	20.1	70.5	9.4	100.0
% of chronic poverty - total	94.1	55.0				81.8
Urban	85.4	43.6				65.4
Rural	99.5	92.0				98.4
% future-poor - total			73.6	27.2	1.0	58.9
Urban			71.6	26.4	1.0	56.6
Rural			94.7	66.8	0.0	92.3
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	46.3	10.3	25.6	17.9	100.0	
Male household head	0.506	0.516	0.513	0.483	0.505	
Household size	6.663	6.461	5.023	4.662	5.865	
Number of children (aged 0-5)	1.219	1.060	0.619	0.483	0.917	
Adult members						
Self-employed	1.019	0.683	0.785	0.448	0.823	
Salaried	0.454	0.991	1.103	1.484	0.859	
Unemployed	0.149	0.342	0.156	0.158	0.172	
Inactive	0.908	0.985	0.760	0.838	0.865	
Primary education or less	1.243	0.551	0.781	0.248	0.876	
Incomplete secondary educ.	0.464	0.969	0.706	0.649	0.611	
Complete secondary educ.	0.151	0.582	0.457	0.822	0.393	
Incomplete tertiary educ.	0.043	0.152	0.280	0.659	0.225	
Complete tertiary educ.	0.000	0.021	0.046	0.414	0.088	
Rural (share)	0.676	0.112	0.391	0.077	0.438	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles - Paraguay

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	30.6	14.7	33.3	19.8	1.6	100.0
Urban	11.2	12.5	42.6	31.0	2.7	100.0
Rural	54.2	17.4	22.0	6.2	0.3	100.0
Incidence in 2013 - total	15.9	14.0	38.5	30.1	1.5	100.0
Urban	6.6	10.5	40.5	40.3	2.0	100.0
Rural	30.1	19.4	35.4	14.5	0.6	100.0
Share rural in 2000	79.8	53.3	29.7	14.0	7.2	45.0
Share rural in 2013	74.9	54.7	36.4	19.1	17.5	39.6
Transition probabilities - total						
Extreme poverty	31.9	34.3	32.1	1.5	0.2	100.0
Moderate poverty	4.5	15.2	67.8	12.3	0.2	100.0
Vulnerable class	1.1	4.1	62.0	32.6	0.3	100.0
Middle-class	0.0	0.6	14.5	83.2	1.7	100.0
High-income	0.0	0.0	2.1	47.9	50.0	100.0
Transition probabilities - urban						
Extreme poverty	15.5	30.2	51.1	3.0	0.2	100.0
Moderate poverty	1.7	7.9	72.2	18.1	0.1	100.0
Vulnerable class	0.9	2.1	56.7	39.8	0.4	100.0
Middle-class	0.0	0.2	10.2	87.5	2.0	100.0
High-income	0.0	0.0	0.0	48.9	51.1	100.0
Transition probabilities - rural						
Extreme poverty	39.8	36.2	22.9	0.8	0.2	100.0
Moderate poverty	8.4	25.2	61.8	4.3	0.3	100.0
Vulnerable class	1.3	8.1	72.7	17.7	0.1	100.0
Middle-class	0.0	1.9	30.4	67.3	0.4	100.0
High-income	0.0	0.0	8.7	44.9	46.4	100.0
% of chronic poverty - total	96.4	61.0				83.2
Urban	90.6	39.7				64.4
Rural	99.2	90.1				96.7
% future-poor - total			84.3	40.6	13.8	67.6
Urban			77.8	29.8	9.9	58.1
Rural			97.8	80.1	26.0	91.3
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	43.1	8.7	32.6	15.6	100.0	
Male household head	0.482	0.384	0.468	0.466	0.466	
Household size	6.021	5.289	4.898	4.206	5.308	
Number of children (aged 0-5)	1.014	0.826	0.613	0.496	0.786	
Adult members						
Self-employed	0.522	0.426	0.544	0.400	0.502	
Salaried	0.832	1.021	1.199	1.292	1.040	
Unemployed	0.091	0.078	0.068	0.054	0.076	
Inactive	1.245	1.109	0.949	0.816	1.069	
Primary education or less	0.987	0.503	0.678	0.293	0.736	
Incomplete secondary educ.	0.506	0.744	0.703	0.532	0.595	
Complete secondary educ.	0.184	0.594	0.496	0.680	0.399	
Incomplete tertiary educ.	0.049	0.193	0.218	0.543	0.194	
Complete tertiary educ.	0.010	0.077	0.066	0.367	0.090	
Rural (share)	0.633	0.076	0.303	0.065	0.388	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles – El Salvador

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	30.1	18.2	33.9	17.3	0.6	100.0
Urban	14.1	16.2	42.0	26.8	0.9	100.0
Rural	53.9	21.1	21.8	3.1	0.0	100.0
Incidence in 2013 - total	21.6	21.2	41.4	15.4	0.3	100.0
Urban	10.6	18.5	48.4	22.1	0.5	100.0
Rural	40.5	25.9	29.5	4.0	0.1	100.0
Share rural in 2000	72.0	46.8	25.9	7.3	2.6	40.3
Share rural in 2013	69.2	45.1	26.3	9.6	6.8	36.9
Transition probabilities - total						
Extreme poverty	61.8	30.0	8.0	0.1	0.1	100.0
Moderate poverty	19.9	42.3	37.1	0.6	0.0	100.0
Vulnerable class	4.4	19.6	69.2	6.9	0.0	100.0
Middle-class	0.6	3.1	47.3	48.7	0.3	100.0
High-income	0.0	0.9	3.3	90.7	5.0	100.0
Transition probabilities - urban						
Extreme poverty	40.2	44.1	15.6	0.1	0.0	100.0
Moderate poverty	12.7	39.8	46.4	1.0	0.0	100.0
Vulnerable class	2.9	14.4	73.7	9.0	0.0	100.0
Middle-class	0.5	2.5	45.1	51.6	0.4	100.0
High-income	0.0	1.0	1.0	92.4	5.6	100.0
Transition probabilities - rural						
Extreme poverty	72.4	23.1	4.3	0.1	0.1	100.0
Moderate poverty	27.8	45.1	26.9	0.3	0.0	100.0
Vulnerable class	8.2	33.5	57.0	1.3	0.0	100.0
Middle-class	1.7	7.7	62.6	27.9	0.1	100.0
High-income	0.0	0.0	23.7	76.3	0.0	100.0
% of chronic poverty - total	98.9	83.5				92.6
Urban	96.7	70.9				83.3
Rural	99.9	97.3				99.1
% future-poor - total			84.7	29.5	6.5	66.7
Urban			79.9	25.5	5.1	59.9
Rural			97.6	57.4	18.6	90.3
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	43.4	3.5	35.5	17.7	100.0	
Male household head	0.797	0.730	0.725	0.718	0.755	
Household size	6.570	5.940	5.095	4.594	5.676	
Number of children (aged 0-5)	1.200	1.024	0.680	0.494	0.884	
Adult members	0.240	0.240	0.213	0.251		
Self-employed	0.775	0.589	0.536	0.305	0.600	
Salaried	0.720	1.152	1.274	1.444	1.059	
Unemployed	0.079	0.214	0.103	0.157	0.106	
Inactive	1.139	1.063	0.900	0.979	1.023	
Primary education or less	1.128	0.603	0.666	0.262	0.793	
Incomplete secondary educ.	0.239	0.934	0.967	1.098	0.673	
Complete secondary educ.	0.005	0.032	0.059	0.120	0.046	
Incomplete tertiary educ.	0.010	0.099	0.167	0.602	0.173	
Complete tertiary educ.	0.003	0.016	0.036	0.383	0.083	
Rural (share)	0.737	0.138	0.283	0.058	0.435	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.

Annex 4 (continued). Country Profiles - Uruguay

	Extreme poverty	Moderate poverty	Vulnerable class	Middle-class	High-income	Total
Incidence in 2000 - total	--	--	--	--	--	--
Urban	4.8	9.1	37.4	45.8	2.9	100.0
Rural	--	--	--	--	--	--
Incidence in 2013 - total	--	--	--	--	--	100.0
Urban	3.9	6.0	30.2	56.6	3.3	100.0
Rural	--	--	--	--	--	--
Share rural in 2000						
Share rural in 2013	16.2	22.1	21.4	12.9	5.4	16.1
Transition probabilities - total						
Extreme poverty	--	--	--	--	--	--
Moderate poverty	--	--	--	--	--	--
Vulnerable class	--	--	--	--	--	--
Middle-class	--	--	--	--	--	--
High-income	--	--	--	--	--	--
Transition probabilities - urban						
Extreme poverty	5.9	26.9	65.3	1.8	0.1	100.0
Moderate poverty	1.0	7.1	79.6	12.3	0.0	100.0
Vulnerable class	0.0	1.2	49.6	49.1	0.1	100.0
Middle-class	0.0	0.0	7.6	89.5	2.9	100.0
High-income	0.0	0.0	0.0	44.7	55.3	100.0
Transition probabilities - rural						
Extreme poverty	--	--	--	--	--	--
Moderate poverty	--	--	--	--	--	--
Vulnerable class	--	--	--	--	--	--
Middle-class	--	--	--	--	--	--
High-income	--	--	--	--	--	--
% of chronic poverty - total						--
Urban	51.9	6.4				25.2
Rural	--	--				--
% future-poor - total						--
Urban			31.4	2.3	--	19.2
Rural			--	--	--	--
	Chronic poor	Transient poor	Future-poor	Never poor	Total	
% of population	7.3	21.7	13.6	57.3	100.0	
Male household head	0.718	0.782	0.727	0.735	0.743	
Household size	5.527	5.216	3.985	3.344	3.998	
Number of children (aged 0-5)	1.045	0.776	0.339	0.211	0.412	
Adult members						
Self-employed	0.535	0.436	0.385	0.291	0.353	
Salaried	0.685	0.971	1.099	1.057	1.017	
Unemployed	0.492	0.487	0.334	0.208	0.307	
Inactive	0.756	0.897	0.816	0.910	0.883	
Primary education or less	0.535	0.361	0.380	0.209	0.289	
Incomplete secondary educ.	0.701	1.093	0.985	0.786	0.873	
Complete secondary educ.	0.045	0.143	0.188	0.373	0.274	
Incomplete tertiary educ.	0.015	0.058	0.066	0.250	0.166	
Complete tertiary educ.	0.004	0.017	0.037	0.308	0.186	
Rural (share)	--	--	--	--	--	

Source: Authors' calculations based on household survey data from IDB's *Sociometro*.