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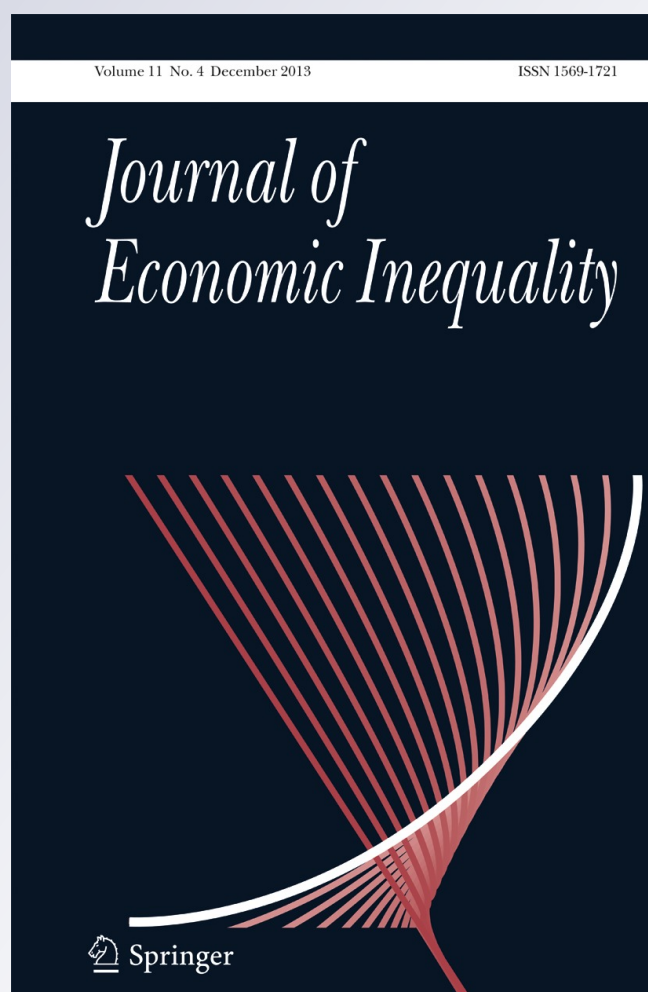
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Urban poverty and labor market dynamics in five Latin American countries: 2003–2008

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Abstract Latin America experienced a long period of sustained growth since 2003 that positively impacted social and labor market indicators, including poverty. This paper contributes to the understanding of this process as it carries out a comparative study of poverty dynamics in five Latin American countries during 2003–2008. It analyzes the extent to which countries with different levels of poverty incidence diverge in terms of poverty exit and entry rates, identifies the relative importance of the frequency and impact of events associated to poverty transitions and examines how these events affect households with different characteristics. For this, a dynamic analysis of panel data is carried out using regular household surveys. Sizeable rates of poverty movements were observed in all five countries and it was found that a large proportion of household experienced positive events, mainly related to the labor market; however, only a small fraction of them actually exited poverty. Demographic events and public cash transfers proved to be of little relevance; in particular, the latter did not contribute much either to intensify poverty exits or to prevent poverty entries. Households with children experienced more (less) negative (positive) events

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than those without children. It appeared therefore that even when the economy behaved reasonably well at the aggregate level, high levels of labor turnover and income mobility (even of a negative nature) still prevail, mainly associated to the high level of precariousness and the undeveloped system of social protection that characterize the studied countries.

Keywords Labor market • Latin America • Poverty dynamics • Social policy

JEL Classifications I32 • I38 • J68 • O54

1 Introduction

Latin America experienced six years of sustained growth from 2003 to 2008.¹ Per capita GDP increased at an average annual rate of 3.4 % during this period, an unprecedented pace for such a long period in the region. This performance had a positive impact on social and labor market indicators as well as on income distribution. Less inequality and higher incomes resulted in lower rates of poverty and extreme poverty and a decrease in the number of poor people. These improvements are in contrast to the situation in the eighties and nineties. However, despite the progress achieved during this period of economic expansion, 32 % of Latin American people still lived in poverty in 2010, and 13 % lived in extreme poverty according to ECLAC [13] methodology.

The factors associated with the level and evolution of poverty in individual countries have been the subject of an extensive amount of research. A number of studies have also been carried out to compare levels and changes of employment, inequality and poverty among Latin American countries. However, few studies have been conducted on poverty dynamics in individual countries in the region; in particular, the factors related to poverty transitions have received a limited amount of attention. And no studies comparing poverty dynamics among Latin American countries were identified.²

An analysis of the nature and intensity of poverty dynamics is important for policy design because even when the overall level of poverty is low or remains unchanged, a large number of households may be exiting and entering poverty. Furthermore, analyzing poverty transitions contributes to an understanding of the ways in which events that trigger entry into or exit from poverty are exclusively related to the labor market, to changes in household composition or to specific public policies. Changes in poverty levels do not behave randomly; rather, they differ significantly between households with different characteristics, and this fact must be taken into account.

¹After a deceleration in 2009, per capita GDP grew again at high levels in 2010 and 2011.

²There are, however, several comparative studies of Latin American countries on income mobility, a subject related to that of poverty mobility. Fields et al. [16] is one of them, and references are there made to at least two other comparative studies. Fields and his associates have analyzed panel data for several Latin American Countries exploring income mobility pattern, finding that in most cases (countries and periods) convergence prevails (i.e. income grows more for those with initial less income).

The aim of this paper is to study poverty dynamics in five Latin American countries, with an emphasis on a comparative approach. In particular, the objectives are (1) to estimate the role of the labor market, non-labor incomes and changes in household composition in transitions into and out of poverty; (2) to evaluate whether the observed differences in household poverty flows can be mostly related to differences in the probability of certain types of events or by the variable impacts of these events; and (3) to determine the extent to which household composition and the characteristics of household members affect these transitions.

The number of longitudinal surveys of Latin American countries that can be used to follow households over a long period of time is limited. However, household surveys with rotating samples can be used to construct panels of households that were interviewed in at least two successive periods. Five countries, Argentina, Brazil, Costa Rica, Ecuador and Peru, were selected for the analysis on the basis of the availability of this type of data. This selection of countries offers a varied picture of poverty incidence in the region. According to ECLAC, these countries can be classified as low poverty (Argentina and Costa Rica), middle-low poverty (Brazil) and middle-high poverty (Ecuador and Peru) in the Latin American context. This group of countries showed, the same positive behavior that Latin America as a whole: their average GDP grew 6.5 % per year between 2003 and 2008 which compares with 5.8 % for the average of Latin America. According to ECLAC figures, average poverty incidence rate for the five countries fell from 38 % to 23 % in the urban areas, while for Latin America the figures are 38 % and 28 % respectively.³ If Argentina is excluded from the five countries, even the figures of the averages of the selected cases come closer to the Latin America average (6 % regarding GDP growth, and the poverty incidence rates are 36 % and 25 %). At the beginning of Section 4 a data on poverty rates for each country is included.

Such behavior during the first decade of this century has resulted in a situation in which poverty rates have been lower in recent years than in the beginning of the nineties.

The next section describes the data sources used. Section 3 presents the approach and methodology. Section 4 focuses on the dynamics of poverty; the transition matrix was first estimated, and then the factors directly associated with exit and entry rates were calculated. Section 5 presents final remarks.

2 Data sources

The data used in this research came from regular household surveys carried out by the national statistical institutes of the selected countries. The data focus on labor market variables, but they also include information on other social and demographic household characteristics. To identify possible factors associated with shifts into and out of poverty, databases must identify the poverty status of each household and individual as well as other relevant socio-economic and demographic information measured at different points in time.

³In all cases, non-weighted averages.

There are no longitudinal surveys for Latin American countries that follow households over long periods of time.⁴ For this study, however, dynamic data were constructed using the rotating sample scheme of household surveys. With these data, the households that stayed in poverty and those that left it during the “n” periods in which the households remained in the sample can be determined.⁵ They include household information based on a probabilistic two-stage sample that is divided into groups that joined and groups that left the sample during different time periods.

The Argentinean data were taken from the *Encuesta Permanente de Hogares* (EPH), which was conducted by the *Instituto Nacional de Estadística y Censos* (INDEC). For Brazil, micro-data from two surveys, the *Pesquisa Mensal de Emprego* (PME) and the *Pesquisa Nacional por Amostra de Domicílios* (PNAD), both of which were conducted by the *Instituto Brasileiro de Geografia e Estatística* (IBGE), were used. Given that the PME only collects information about labor income, non-labor income was imputed to estimate total family income and the poverty status of households. Machado and Perez Ribas' [24] methodology.⁶ was used with microdata from the PNAD⁷ For Costa Rica, the *Encuesta de Hogares de Propósitos Múltiples* (EHPM), conducted by the *Instituto Nacional de Estadística y Censos* (INEC), was used; for Ecuador, the *Encuesta Nacional de Empleo, Desempleo y Subempleo* (ENEMDU), conducted by the *Instituto Nacional de Estadística y Censos* (INEC), was used; and for Peru, data from the panel survey attached to the *Encuesta Nacional de Hogares sobre Condiciones de Vida y Pobreza* (ENAHO), the regular household survey conducted by the Instituto Nacional de Estadística e Informática (INEI), were used.

To obtain a comparable dataset for each country, transitions were defined for a one-year interval between observations. The data cover the following years: 2003–2006 for Argentina, 2003–2006 for Brazil, 2006–2008 for Costa Rica, 2004–2008 for Ecuador and 2002–2006 for Peru. Because not all the surveys are nationally representative and given that poverty and labor markets in rural areas and urban centers can behave differently, the analysis was restricted to urban areas.

3 Approach and methodology

The absolute criterion for identifying poverty seemed to be more appropriate than a relative criterion for Latin America, as there is plenty of evidence that a substantial

⁴The only exception was the *Encuesta de Caracterización Socioeconómica* (CASEN Panel) from Chile. This survey provides three observations of households in five-year intervals (1996, 2001 and 2006). Thus, it is a highly valuable source of information for medium- and long-term occupational and welfare changes, but it is not quite adequate for the analysis presented in this article because most of the analyzed events affect household poverty status in the short term.

⁵A limitation of panel data is that the proportion of households that are actually interviewed in two successive periods may be less than expected according to the sample rotation scheme due to attrition, which can introduce sample bias if attrition is not random. However, not enough information was available for all countries to discern between the loss of data associated with the survey rotation scheme and the loss of data from sample attrition. This inability prevented us from applying an attrition bias correction for all countries.

⁶Adapted from Elbers et al. [14].

⁷This procedure was possible because the survey questionnaires are similar and the size and representativeness of the sample are nearly identical for metropolitan areas.

proportion of people in the region still lack the resources needed to satisfy basic needs. Thus, the “income approach” was employed; households were identified as poor if their total income was below some poverty line.⁸ This line is the value of a normative basket of goods and services that allows the satisfaction of basic needs.⁹

At least the following alternatives of specific poverty lines were available for the five selected countries: those calculated by ECLAC,¹⁰ lines estimated by national agencies (usually employed for official estimates of poverty incidence) and those computed by the World Bank (US\$1.25 for extreme poverty—and the double for poverty—at 2005 Purchasing Power Parity); however, only the first and the third explicitly contemplate the issue of international comparability. In this paper we considered the normative budgets employed by ECLAC to regularly estimate the incidence of poverty in Latin American countries. ECLAC’s methodology is consistent with the theoretical underpinnings of the absolute poverty line approach. Each poverty line accounts for specific consumption patterns and reflects the amount of local currency needed to buy a basket of goods and services that satisfies the same set of basic needs in each country.¹¹ According to Sen’s conceptualization, although different goods and services may be consumed in each country, the different poverty lines should be nearly equal in terms of capabilities.¹² There have been controversies on the most adequate approach to compare poverty measures at the international level: those methodologies such as that used by ECLAC that take into account specific national aspects or the norm established by the World Bank, as each of them presents advantages and shortcomings.¹³ In any case, the exercise to be developed here also considers an upper and a lower bound centered in the value of the poverty line.

The dynamics of poverty in developed countries have received a considerable amount of research attention.¹⁴ Previous studies have focused on long spells of poverty, poverty traps, or the difference between chronic and transient poverty. A number of studies have also attempted to identify the factors that drive the process whereby a household becomes poor, exits poverty, or remains in poverty for a long

⁸Given that household surveys do not inquire intra-household distribution of income (or expenditure), the household itself is the unit of analysis—i.e. that to be identified as poor or non-poor. When a household’s total income is lower than the poverty line corresponding to this household (i.e. given its size and composition), the household is classified as poor and all of its members are also considered as poor.

⁹The extensive literature on poverty measurement methods has also pinpointed various theoretical and empirical difficulties. See, for example, Feres [15], Ravallion [32] and Rio Group [33].

¹⁰Estimates are usually disseminated through *Social Panorama*, an annual institutional publication.

¹¹In an Annex of Beccaria et al. [7] further details of ECLAC’s method are presented.

¹²For a discussion of this topic, see Sen [35, 36].

¹³See, for example, the discussion in the September issue of **In Focus** a publication of UNDP’s International Poverty Centre that includes articles by T.N Srinivasan, M. Ravallion and N. Kakwani (among other authors). In some of these papers, and also elsewhere [12], it is also mentioned that the World Bank lines appear as too low for most Latin American countries; furthermore, the relationship between poverty incidence computed by using these lines and GDP is rather weak.

¹⁴For example, Lillard and Willis [23], Bane and Ellwood [4], Jenkins and Schluter [21], Cantó et al. [9], Ruggles and Williams [34], McKernan and Ratcliffe [26], Ballantyne et al. [3], Stevens [38], Jenkins and Rigg [20], Devicienti [11], Biewen [8], Arranz and Cantó [2] and Aassve et al. [1].

period of time, while others have used structural models that relate economic and household demographic decisions to poverty dynamics.

This study estimates poverty entry and exit rates in relation to household events and compared five Latin American countries.¹⁵ We followed Bane and Ellwood's approach by only considering observed episodes directly associated with poverty entry and exit; no attempt was made to analyze family arrangements or strategies that could have led to such episodes. The short observation window, even for households that were followed for the entire period during which they were part of the survey, is a major limitation for attempts to estimate more structural models. Some of the identified events could have been the result of other events associated with the observed transition.¹⁶ Consequently, because events could have been endogenous, *they were not interpreted as transition factors—exogenous events—but as events associated with transitions*.¹⁷ However, because a household becomes poor when its income per adult equivalent (ipae), defined as the total household income divided by the number of equivalent adults in the household, falls below the poverty line per adult equivalent, either the numerator or the denominator must change for a household to enter or exit poverty. This transition occurs when a household experiences at least one of the types of events identified in this study. We only considered episodes associated with poverty entry and exit; those that could have *prevented* a transition were not considered.

Identifying which of the situations experienced by households were associated with poverty transitions was difficult because an individual can experience multiple events simultaneously. In this study, an exhaustive list of mutually exclusive events was built. However, categories that combine two or more events were also considered to cover all (i.e., 100 % of) possible cases. In order to illustrate the classification of events, we can consider the situation of a household leaving poverty. Such transition occurs if its total nominal income rises, if the households' size falls, or due to a combination of both episodes leading to an increase in the ipae. These changes are the consequence of different events experienced by the members of the households. The rise in a household's total nominal income can be the result of one member getting a job or facing a wage increase while, for example, the death of one of them leads to a smaller household size. Therefore, we first distinguish between the latter type of events—of demographic character—and the others. Among non-demographic events, we consider in the first place those exclusively related to labor market events (e.g. changes in the number of employed members, changes in the number of working hours, changes in hourly earnings) or to non-labor income events (e.g. changes in income from pensions or in transfers, specially those related to social policies). We also take into account those episodes affecting simultaneously labor and non-labor

¹⁵Studies of the poverty dynamics in some Latin American countries include those by Beccaria and Maurizio [6], Cruces and Wodon [10], Herrera and Roubaud [18], Machado and Perez Ribas [24], Maurizio et al. [25], Paz [28], Perez Ribas and Machado [29], Baulch and Hoddinott [5], Neilson et al. [27], Slon and Zúñiga [37].

¹⁶For example, an event leading to a rise in the income per adult equivalent (ipae) could give rise to another episode that also causes the ipae to rise. In our analysis, both factors were assumed to occur simultaneously.

¹⁷Moreover, the available information does not provide adequate instruments to address the problem of endogeneity.

incomes. However, some events lead to an exit from poverty by affecting both, the nominal income and the size of the household—e.g. the arrival of an employed person to the household that could increase the nominal ipae; hence, this type of events are considered as demographic events leading to labor or non-labor income changes. The procedure is similar for entries to poverty.

Following table lists the events that could trigger exits (entries) from (to) to poverty according to this definition and provides an example of each.

Event	Description	Example
Non-demographic events (the number of members in the household does not change).		
I	Exclusively labor income events.	
1	Growth (reduction) in the number of employed persons not linked to an entry (exit) of labor income earners to (from) the household, maintaining the total number of household members.	A member of the household that was unemployed or out of the labor force (employed) starts working (becomes un-employed or leaves the labor force).
1.1.	Growth (reduction) in the number of members who are registered wage earners.	A member of the household that was unemployed or out of the labor force (employed as a registered wage earner) finds a job as registered wage earner (becomes unemployed or leaves the labor force).
1.2.	Growth (reduction) in the number of members who are non-registered wage earners.	A member of the household that was unemployed or out of the labor force (employed as a non-registered wage earner) finds a job as non-registered wage earner (becomes unemployed or leaves the labor force).
1.3.	Growth (reduction) in the number of members who are non-wage earners.	A member of the household that was unemployed or out of the labor force (employed as independent worker) finds a job as independent worker (becomes unemployed or leaves the labor force).
2	Growth (reduction) in total hourly wage of members employed in both observations, maintaining the total number of household members and worked hours.	A member of the household receives a wage increase (reduction): she/he earns more (less) working the same amount of hours).
3	Growth (reduction) in the number of working hours of members employed in both observations, maintaining the total number of household members and hourly wage.	A member of the household earns more (less) because she/he works more (less) hours.
4	Growth (reduction) in the number of working hours and in the total hourly wage of members employed in both observations, maintaining the total number of household members.	One or more employed members of the household receive an hourly wage increase (reduction) and work more (less) hours.

Event	Description	Example
5	Growth (reduction) in the total monthly wage of members employed in both observations and in the number of employed members, not linked to an entry (exit) of labor income earners to (from) the household, maintaining the total number of household members.	A member of the household that was unemployed or out of the labor force (employed) starts working (becomes unemployed or leaves the labor force) and one member who already worked received an increase (reduction) in her/his wage.
II.	Exclusively non-labor income events	
6	Growth (reduction) in the income from pensions not linked to the entry (exit) of pension recipients to (from) the household. The total number of household members remains constant.	A member of the household receives an increase (reduction) in her/his pension.
7	Growth (reduction) in public monetary transfers (social policy) not linked to the entry (exit) of recipients to (from) the household. The total number of household members remains constant.	A member of the household receives an increase (reduction) in her/his from a cash transfer program.
8	Growth (reduction) in other non-labor incomes not linked to the entry (exit) of non-labor income earners to (from) the household. The total number of household members remains constant.	A member of the household receives more (less) money from remittances from abroad.
III.	Labor and non-labor income events	
9	Growth (reduction) in labor and non-labor incomes not linked to an entry (exit) of labor or non-labor income earners to (from) the household, maintaining the total number of household members.	An employed member of the household receives a wage increase (reduction) and a retired member of the household receives an increase (reduction) in her/his pension.
Demographic or combination events (the number of members in the household changes).		
IV.	Exclusively demographic events	
10	Reduction (growth) in the total number of household members; the total nominal income remains constant.	A member of the household who has no income marries and leaves. (A baby is born to the family).
V.	Demographic events leading to income changes	
11	Growth (reduction) in the number of labor or non-labor income earners due to the fact that some members enter (exit) the household.	A (new) member who works and has an income arrives to (leaves) the household.
VI.	Combination of demographic and income events	
12	Growth (reduction) in total nominal income (irrespective of the source of income change) and reduction (growth) in the number of household members.	A member of the household receives a wage reduction (increase) and is born to the household a baby (a member of the household dies).
VII.	Events not classified	

By constructing mutually exclusive events, the distribution of poverty transitions associated with particular events could be estimated. The entry (S_1) and exit (S_2) rates were defined as the probabilities of moving from state i/j in period “ t ” to state j/i in “ $t + 1$ ”, and the states were “poor” and “non-poor”. Assuming that the sample space was partitioned among R mutually exclusive events, the probability of moving from state “ i ” to state “ j ”, S_{ij} , was equal to the sum of the probabilities of transition associated with each event:

$$P(S_{ij}) = \sum_{r=1}^R P(S_{ij}, E_r) \quad (1)$$

where

S_{ij} indicates a transition from state “ i ” in period “ t ” to state “ j ” in period “ $t + 1$ ”; $i \neq j$;
 E_r indicates the occurrence of event “ r ”; and R : 1, 2, ..., R .

Following Jenkins and Schluter [21], this distribution can be decomposed into two factors: the probability that the at-risk population (in the case of exits from poverty, poor households) experiences such an event and the probability that the event triggers poverty entries or exits, conditional on the [previous] occurrence of the event (conditional probability). This probability can be written as

$$P(S_{ij}) = \sum_{r=1}^R P(S_{ij}|E_r)P(E_r) \quad (2)$$

4 Poverty dynamics in five Latin American countries

As indicated, this section analyses poverty dynamics and the events associated to the indentified movements. Before that, and in order to place that discussion into a broad perspective, it is worth briefly mentioning how the selected countries behaved in terms of poverty incidence. In the Section 1, it was indicated that the average of the five cases here studied followed the general trend experienced by Latin America in terms of poverty rates;¹⁸ data on Table 1 showed that all countries reduced their figures of relative incidences, being Argentina the case with the larger fall and Costa Rica that with the less intensive reduction. Furthermore, there are no important differences between changes in rates computed in terms of persons or of households and, also, that panel data (those to be used to measure poverty dynamics) reproduce reasonable well the differences of the incidence rates of the cross section data, except in the case of Costa Rica.

¹⁸It should be remembered that figures on poverty rates included in the Introduction are those from ECLAC for 2003 and 2008, while in Table 1 authors' estimates are included and they refer to different specific periods.

Table 1 Poverty rate (%)

	Panel data		Cross section data	
	Households	Population	Households	Population
Argentina 2003–2006				
2003	39.30	52.01	39.46	51.36
2004	28.76	38.70	29.78	40.12
2005	25.02	34.77	24.70	33.84
2006	19.96	28.85	19.17	26.85
Brazil 2003–2004				
2003	31.81	36.91	34.53	40.80
2004	28.66	34.04	32.45	38.33
2005	25.66	29.29	28.51	34.07
2006	25.62	29.79	29.02	34.67
Costa Rica 2006–2008				
2006	24.74	27.01	28.56	31.80
2007	22.95	24.29	23.70	25.66
2008	23.12	25.32	21.93	23.66
Ecuador 2004–2008				
2004	42.63	48.43	44.76	51.48
2005	37.34	42.66	41.09	47.84
2006	35.55	40.77	38.92	41.59
2007	30.21	35.21	33.59	39.62
2008	30.66	36.02	32.39	38.02
Peru 2002–2006				
2002	38.33	44.19	35.60	30.25
2003	35.31	42.45	28.46	33.41
2004	42.15	49.51	31.94	37.44
2005	45.43	50.67	34.57	41.30
2006	30.79	35.20	25.12	28.71

Author's elaboration based on data from ECLAC and National Statistics Institutes

4.1 Transition matrix

The entry rates were computed as the share of non-poor households in year “t” that became poor in year “t + 1”. The exit rates were then the share of poor households in year “t” that became non-poor in year “t + 1”. The entry and exit rate averages for the respective periods under consideration, shown in Table 1, indicate the importance of the poverty flows, even in low incidence countries such as Costa Rica.

As expected, the probability of being poor in a given period was strongly conditioned by the situation during the previous observation; poverty in the current period was more likely for households that were poor in the previous period. However, more information is necessary to make conclusive statements about true dependence on the initial state.

Although there appeared to be a positive relationship between the incidence of poverty and entry rates and a negative correlation between poverty and exit rates, these regularities do not hold in every case. Argentina, for instance, had the lowest entry and exit rates, and Ecuador had the highest poverty rate, although the entries were lower than those observed in Peru.

Table 2 also presents the transition matrices for households with and without children separately. Higher poverty rates among households with children were due

Table 2 Intensity of poverty transitions: entry and exit rates

Rates	Poverty line at 100 %			Poverty line at 90 %			Poverty line at 110 %		
	Total households	with children	Households without children	Total households	with children	Households without children	Total households	with children	Households without children
Argentina, Period 2003–2006.									
Entry	0.0795*** [0.00265]	0.124*** [0.00536]	0.0548*** [0.00281]	0.0710*** [0.00248]	0.112*** [0.00498]	0.0467*** [0.00258]	0.0878*** [0.00299]	0.135*** [0.00634]	0.0633*** [0.00306]
Exit	0.334*** [0.00684]	0.281*** [0.00769]	0.485*** [0.0138]	0.369*** [0.00756]	0.314*** [0.00856]	0.536*** [0.0151]	0.298*** [0.00652]	0.242*** [0.00691]	0.450*** [0.0128]
Brazil, Period 2003–2006. ^a									
Entry	0.132***	0.159***	0.115***	0.119***	0.145***	0.102***	0.142***	0.169***	0.127***
Exit	0.420*** [0.00759]	0.310*** [0.00870]	0.636*** [0.0126]	0.446*** [0.00812]	0.331*** [0.00937]	0.669*** [0.0131]	0.393*** [0.00714]	0.283*** [0.00811]	0.606*** [0.0121]
Costa Rica, Period 2006–2008.									
Entry	0.109*** [0.00791]	0.128*** [0.0117]	0.0879*** [0.0104]	0.0957*** [0.00728]	0.111*** [0.0107]	0.0776*** [0.00967]	0.121*** [0.00850]	0.142*** [0.0126]	0.0994*** [0.0111]
Exit	0.452*** [0.0223]	0.456*** [0.0282]	0.444*** [0.0369]	0.500*** [0.0244]	0.530*** [0.0306]	0.450*** [0.0406]	0.433*** [0.0207]	0.439*** [0.0253]	0.424*** [0.0357]

Table 2 (continued)

Rates	Poverty line at 100 %			Poverty line at 90 %			Poverty line at 110 %		
	Total households	Households with children	Households without children	Total households	Households with children	Households without children	Total households	Households with children	Households without children
Ecuador. Period 2004–2008.									
Entry	0.153*** [0.00376]	0.184*** [0.00527]	0.110*** [0.00506]	0.138*** [0.00347]	0.166*** [0.00482]	0.0962*** [0.00469]	0.168*** [0.00405]	0.199*** [0.00566]	0.126*** [0.00554]
Exit	0.368*** [0.00660]	0.337*** [0.00720]	0.503*** [0.0154]	0.403*** [0.0720]	0.378*** [0.00789]	0.514*** [0.0168]	0.338*** [0.00616]	0.307*** [0.00671]	0.468*** [0.0144]
Peru. Period 2002–2006.									
Entry	0.208*** [0.00880]	0.254*** [0.0116]	0.126*** [0.0119]	0.189*** [0.00829]	0.230*** [0.0108]	0.113*** [0.0114]	0.229*** [0.00966]	0.273*** [0.0127]	0.156*** [0.0136]
Exit	0.385*** [0.0132]	0.367*** [0.0141]	0.494*** [0.0328]	0.427*** [0.0143]	0.411*** [0.0153]	0.534*** [0.0359]	0.347*** [0.0121]	0.327*** [0.0128]	0.463*** [0.0329]

Standard errors in brackets

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

^aMetropolitan areas of Recife, Salvador, Belo Horizonte, Rio de Janeiro, São Paulo and Porto Alegre

Source: Author's elaboration based on data from national household surveys

to both higher entry rates and lower exit rates, amounting to longer episodes of poverty. This observation was true for every country in this study except Costa Rica, where households with children have both higher entry and exit rates. The size of the gap between households with children and all other households was different for entries and exits for every country except Brazil, where it was similar. In other countries, the biggest differences between households with and without children were found in terms of poverty entries.

4.2 Factors directly associated with exit rates

General overview

This section focuses on an analysis of events associated with poverty exits, using the decomposition stated in Eq. 2. The factors directly associated with exits are examined first because, as seen above, the level of poverty in these countries declined during the study timeframe.

Table 3 presents poverty exit rates disaggregated by the types of event experienced by households. The results, presented in column 3, are the product of the frequency of each of these events (column 1) and the conditional probability of exiting poverty when the event occurs (column 2).

An important finding is that, in all countries, a high proportion of the initially poor households experienced a positive event that had the potential to lift them out of poverty (column 1). This positive finding is at least partly linked to specific characteristics of the analyzed period, during which economic growth and poverty reduction prevailed. However, of the households that experienced a positive event, no more than approximately 50 % of them actually exited poverty. Thus, high rates of poverty appear to be unrelated to the occurrence of too few positive events; rather, these high rates occur because these events are not strong enough to allow families to escape poverty (column 2).

The observed differences in exit rates among countries are almost entirely a reflection of differences of the conditional probability, given that poor households in all the countries analyzed faced similar odds of experiencing a positive event. One reason for this finding is that the poverty gap tends to be larger in countries with a higher poverty rate, making it more difficult to exit poverty even after experiencing an increase in household income.

The events exclusively related to the labor market were the most relevant among those associated with poverty exits (Table 3, column 3). The second most important group of events was related to the combined growth of non-labor and labor incomes. Thus, the labor market has clearly played an important role in the improvement of household living conditions in recent years through both exclusively labor market events and those accompanied by increases in non-labor income. Together, these account for 60–80 % of the exit rates in the countries during the period of study. Depending on the country, these events were followed in importance by exclusively non-labor income events, as was the case for Brazil and Argentina, or those that combined demographic and income events, as in Costa Rica, Ecuador and Peru.

For exclusively demographic events, such as a reduction in the number of household members, these events barely affected changes in poverty in all of the countries. This finding is consistent with those of other studies, which generally concluded that changes in income or in the number of employed household members were

Table 3 Decomposition of the exit rate from poverty^a

Events ^b	Argentina period 2003–2006				Brazil period 2003–2006 ^c				Costa Rica period 2006–2008				Ecuador period 2004–2008				Peru period 2002–2006			
	P(event)		P(S/E)		P(event)		P(S/E)		P(event)		P(S/E)		P(event)		P(S/E)		P(event)		P(S/E)	
	(1)	(2)	(1)*(2)	Exit =(3)	(1)	(2)	(1)*(2)	Exit =(3)	(1)	(2)	(1)*(2)	Exit =(3)	(1)	(2)	(1)*(2)	Exit =(3)	(1)	(2)	(1)*(2)	Exit =(3)
Non demographic																				
I - Exclusively labor income events																				
1	37.27	40.80	15.17	30.56	37.93	11.59	40.55	63.64	25.81	36.84	44.56	16.41	27.64	42.58	11.77					
	7.0	37.7	2.6	7.7	46.5	3.6	10.0	74.7	7.5	4.9	40.8	2.0	6.0	38.2	2.3					
1.1	1.3	75.8	1.0	3.0	56.3	1.7	3.7	91.9	3.4	0.5	67.3	0.3	0.8	55.4	0.4					
1.2	3.8	26.2	1.0	2.7	36.1	1.0	2.9	70.9	2.1	2.2	37.6	0.8	2.8	34.5	1.0					
1.3	1.9	33.5	0.6	2.0	46.0	0.9	3.4	89.0	2.0	2.2	38.5	0.9	2.4	35.6	0.9					
2	10.8	31.0	3.3	10.8	21.4	2.3	9.2	45.3	4.2	11.9	37.9	4.5	5.8	35.6	2.1					
3	3.6	22.8	0.8	2.1	18.7	0.4	3.1	21.4	0.7	4.2	21.0	0.9	3.8	30.1	1.1					
4	8.7	43.4	3.8	4.1	42.4	1.7	8.2	51.9	4.3	9.0	51.6	4.6	4.9	51.3	2.5					
5	7.2	64.2	4.6	5.9	60.8	3.6	10.1	91.9	9.3	6.9	64.0	4.4	7.1	52.7	3.7					
II - Exclusively non-labor income events																				
6	9.3	35.9	3.3	14.4	69.1	9.9	8.1	20.7	1.7	5.8	39.6	2.3	3.6	32.7	1.2					
	5.8	42.2	2.4	11.8	77.8	9.2	4.9	26.1	1.3	0.7	53.7	0.4	0.2	57.0	0.1					
7	1.5	3.8	0.1	–	–	–	2.2	0.0	–	0.9	0.0	–	0.1	0.0	–					
8	2.0	42.1	0.8	2.6	29.4	0.8	1.1	38.1	0.4	4.1	45.8	1.9	3.3	32.5	1.1					
III - Labor and non-labor income events																				
9	11.6	57.6	6.7	15.1	72.0	10.9	9.2	63.2	5.8	12.5	55.2	6.9	13.0	64.9	8.4					

Demographic & combined events																
IV - Exclusively demographic	10	5.9	18.6	0.8	3.1	22.2	0.7	2.8	24.7	0.7	5.6	18.0	1.0	6.2	21.2	1.3
V - Demographic leading to income changes	11	1.6	27.7	0.4	1.7	47.0	0.8	0.7	40.5	0.3	2.4	49.6	1.2	2.1	39.5	0.8
VI - Combination of demographic and income	12	6.4	58.4	3.1	4.7	79.9	3.7	6.8	71.2	4.9	7.6	69.4	5.3	8.5	68.9	5.9
VII - Events not classified		6.0	48.3	2.8	6.7	65.5	4.4	10.5	73.7	7.7	7.1	53.4	3.8	10.7	62.0	6.6
%With events		78.1	43.1	32.3	76.2	55.1	42.0	78.8	59.6	46.9	77.8	47.4	36.9	71.6	50.2	36.0
%Without events		21.9	0.0	0.0	23.8	0.0	–	21.2	0.0	0.0	22.2	0.1	0.0	28.4	3.6	1.0
Total households		100.0	0.0	32.3	100.0	0.0	42.0	100.0	0.0	46.9	100.0	0.0	36.9	100.0	0.0	37.0
Total with events		2,376,054	0	0	1,937,678	0	0	67,634	0	0	1,823,099	0	0	3,237,279	0	0
Total without events		664,892	0	0	604,587	0	0	18,198	0	0	519,960	0	0	1,280,932	0	0
Total households		3,040,946	0	0	2,542,265	0	0	85,832	0	0	2,343,059	0	0	4,518,211	0	0

^aDecomposition based on Eq. 2

^bFor a description of the events see Table in Section 3

^cMetropolitan areas of Recife, Salvador, Belo Horizonte, Rio de Janeiro São Paulo and Porto Alegre

All estimations are significant at 1 %

Source: Authors' elaboration based on data from national household surveys

the events most frequently associated with exits from poverty, while changes in household composition were less important.¹⁹ This result is not surprising because the yearly observation window is likely too short to observe household demographic changes and such events are typically less frequent.

Given the important role of the labor market in transits out of poverty, the events associated with these changes deserve more attention. The most frequent were either wage growth (Argentina and Ecuador) or a rise in the number of employed household members (Brazil, Costa Rica and Peru) (Table 3). Regarding the latter, the additional employed members most commonly acquired wage earning jobs that were not registered in the social security system. In fact, in Ecuador and Peru, exits from poverty associated with this type of job are more frequent than exits linked to household members obtaining a registered job. These exits, together with those derived from an increase in the number of employed members obtaining self-employed jobs, explain most of the increases in the number of employed members in initially poor households that exit poverty. In the other three countries, even if the importance of registered occupations for poverty exits was greater, the probability of obtaining a non-registered job was still high. This result underscores the ongoing relevance of labor precariousness that prevails in the region and its association with poverty.

A rise in income from pensions was the most important non-labor event in Argentina, Brazil and Costa Rica, while an increase in other non-labor income was more frequent in Ecuador and Peru. The second type mostly includes donations from one household to another. In Ecuador, in particular, these were generally remittances from migrants working in foreign countries, an expected result given the importance of this type of income flow in this country.

Another important finding is that public transfers played almost no role in explaining exits from poverty. This finding is particularly worrisome given the presence and extension of conditional cash transfers (CCTs) such as *Bolsa Familia* in Brazil, *Programa Jefes* in Argentina, *Plan Juntos* in Peru, *Bono de Desarrollo Humano* in Ecuador and *Avancemos* in Costa Rica in recent years. We mention possible explanations for this result below.

Decomposing the exit probabilities according to Eq. 2, poverty exits were more associated with higher frequencies of either simple or combined labor events than with the frequencies of other types of events (column 1). To a lesser extent, exits linked to labor events also had a relatively high conditional probability given occurrence of the event (column 2).

The importance of wage increases for poverty exits are related to the higher frequency of this event relative to other events, whereas the conditional probability of exiting poverty following this event was lower than the odds of exiting poverty when a household member gets a job. This result was also expected, given that the total increase in household income associated with a family member obtaining a job was typically larger than an increase in income for an already employed household member.

It is important to highlight the differences in this decomposition depending on the type of job found. We previously indicated that obtaining a non-registered job is a relevant event for poverty exits. In particular, members of poor households are much more likely to obtain non-registered jobs than registered ones. This result

¹⁹For example, Bane and Ellwood [4] and Ruggles and Williams [34].

is extremely important because getting a registered job is associated with a higher probability of exiting poverty than other types of employment in every country studied, given higher average wages for registered jobs. For example, a member of a poor household in Argentina who finds a registered job is nearly three times more likely to bring a household out of poverty than one who finds a non-registered job. This occurrence clearly shows that labor precariousness and informality reduce opportunities to escape poverty in Latin America.

Public cash transfers appear to be relatively unimportant for poverty exits because this type of event was not as frequent as others and because of its lower conditional probability. Different factors could explain the measured scarce role of public transfers in exits from poverty. First of all, this type of income flow could be underreported in surveys. Furthermore, as mentioned earlier, non-labor income in Brazil was imputed with information from PNAD; thus, the households that actually received cash transfers were not identified. Thus, the impact of this type of income on poverty transitions may have been underestimated. Second, as indicated in previous studies these transfers more effectively reduce extreme poverty than poverty,²⁰ the variable analyzed in this study, as the amount of the transfer is rather small. At the same time, in some cases, the cash transfer programs are of limited coverage.

Third, our analysis only considered urban areas, while some programs are focused in rural areas. Fourth, the time period is also important because some of the CCTs in these countries began recently, and the panels built for this study were unable to capture them. Other programs also started well before the timeframe of the current study, making it unlikely that the data captured new entries into the program. Furthermore, households that benefited from these programs saw their incomes increase when they entered these programs but not necessarily during the period under study. Fifth, until now, we have only analyzed the association between these transfers and aggregate exit rates, but CCTs in the region generally focus on households with children. Finally, one aspect of the methodology could also explain these findings. The analysis was based on an exhaustive list of mutually exclusive events. Thus, the identified role of CCTs resulted from the frequency and conditional probability of experiencing only an increase in the amount of this type of income. If another source of income had also changed between observations, these changes were classified together as a combined event, reducing the visibility of these public transfers.

Households with and without children The incidence of poverty in households with children has been shown to be higher than that in households without children, and this phenomenon has been linked to lower exit rates and higher entry rates. Consequently, we distinguish between poverty transitions among households with and without children.

The results suggest that events solely related to the labor market were the most important factors for households with and without children.²¹ In all cases, their relative importance was greater for households with children. The opposite is true for non-labor events, which were important for households without children, a situation

²⁰See, for example, Perez Ribas et al. [30], Villatoro [40], ILO [19], Perova and Vakis [31] and Veras Soares et al. [39].

²¹Results for different types of households are not presented here for reasons of space. See Beccaria et al. [7].

associated with the increase in pension incomes in Argentina, Brazil and Costa Rica. This result seems reasonable given that elderly household members are less likely to have young offspring and that these households are also more likely to experience an increase in pension income. In Peru and Ecuador, the increase in other non-labor income was the most significant non-labor event for households without children.

The relative importance of the increase in the number of employed members vis-à-vis the rise in wages was higher for households without children than for those with children. This result could, at least in part, be linked to differences in household composition between these two groups; the first group of households was more likely to include young individuals entering the labor market. Again, members of both household types tended to find jobs not registered in the social security system.

As mentioned, changes in household composition were relatively unimportant for poverty exits. In this context, household composition changed more frequently for households without children in Argentina and Peru. The opposite situation was found in the other countries. Finally, public transfers other than pensions did not significantly influence either type of household.

One important factor from the decomposition of the exit rates from poverty is that the conditional probabilities associated with each type of event were systematically higher for households without children, whereas the proportion of poor households experiencing some event was similar for both types of households. Therefore, the first of these two factors explains much of the difference in exit rates between these groups.²²

4.3 Factors directly associated with entry rates

General overview Table 4 shows the factors associated with poverty entries. A high share of non-poor households experienced negative events that reduced their ipae by between 38 % and 67 %. These events led to a fall into poverty in approximately one third of cases, thus explaining the large flows into poverty previously mentioned. Hence, a non-negligible group of households moved into poverty even when poverty incidence was declining, as in recent years in the analyzed countries. This result also stresses the importance of analyzing poverty flows that underlie static indicators of poverty incidence.

Unlike the case for exit rates, the most important differences between the countries was related to the frequency of events, while the conditional probabilities were broadly similar. For example, the probability of entering poverty in Peru was twice as high as that in Argentina, a result driven by a higher frequency of negative events in the former country.

As was the case for exits from poverty, exclusively labor events were the most common source of poverty entries; between 30 and 50 % of movements into poverty coincided with a negative labor event, such as a job loss or a decrease in labor incomes or working hours (column 3). The only exception was Brazil, where this proportion was only 25 %, and most entries were related to declines in non-labor income.

²²In the case of Costa Rica, households with children experienced events that could lift them out of poverty more frequently. However, as was the case in other countries, these households registered a lower conditional probability of exiting poverty.

Table 4 Decomposition of the entry rate to poverty^a

Events ^b	Argentina				Brazil				Costa Rica				Ecuador				Peru			
	period 2003–2006				period 2003–2006 ^c				period 2006–2008				period 2004–2008				period 2002–2006			
	P(event)	P(S/E)	Entry	=(3)	P(event)	P(S/E)	Entry	=(3)	P(event)	P(S/E)	Entry	=(3)	P(event)	P(S/E)	Entry	=(3)	P(event)	P(S/E)	Entry	=(3)
	(1)	(2)	(1)*(2)		(1)	(2)	(1)*(2)		(1)	(2)	(1)*(2)		(1)	(2)	(1)*(2)		(1)	(2)	(1)*(2)	
Non demographic																				
I - Exclusively labor income events																				
1	14.2	23.81	3.34		12.2	23.87	2.90		24.9	23.13	5.75		21.9	29.34	6.42		18.9	32.87	6.22	
	3.2	37.1	1.2		2.4	45.9	1.1		6.4	37.0	2.4		3.0	35.6	1.1		4.0	47.4	1.9	
1.1	0.9	37.8	0.3		1.2	46.2	0.5		3.3	43.5	1.4		0.6	29.1	0.2		1.2	40.1	0.5	
1.2	1.2	34.2	0.4		0.7	46.9	0.3		1.7	24.6	0.4		1.0	37.0	0.4		1.2	59.4	0.7	
1.3	1.0	40.0	0.4		0.6	44.0	0.3		1.4	36.8	0.5		1.4	37.5	0.5		1.5	43.4	0.7	
2	4.6	15.7	0.7		4.5	13.7	0.6		8.7	12.7	1.1		8.8	25.7	2.3		5.7	24.1	1.4	
3	2.4	13.6	0.3		1.6	13.3	0.2		2.5	21.1	0.5		2.7	17.6	0.5		1.9	25.5	0.5	
4	2.6	23.0	0.6		2.4	17.8	0.4		3.0	12.2	0.4		4.7	28.1	1.3		3.7	29.3	1.1	
5	1.4	40.0	0.5		1.4	40.6	0.5		4.2	32.5	1.4		2.7	48.4	1.3		3.6	38.5	1.4	
II - Exclusively non-labor income																				
6	7.6	14.5	1.1		17.4	25.7	4.5		3.7	13.2	0.5		5.1	18.9	1.0		4.8	14.8	0.7	
	4.1	10.1	0.4		14.6	27.3	4.0		1.6	18.4	0.3		1.0	15.0	0.2		0.8	8.8	0.1	
7	0.4	39.8	0.2		–	–	–		0.1	0.0	–		0.1	4.7	0.0		0.0	0.0	0.0	
8	3.1	17.2	0.5		2.8	17.4	0.5		2.0	10.0	0.2		4.0	20.2	0.8		4.0	15.9	0.6	
III - Labor and non-labor income																				
9	2.3	31.3	0.7		5.9	32.3	1.9		3.6	24.0	0.9		6.5	37.3	2.4		11.0	40.1	4.4	

Table 4 (continued)

Events ^b	Argentina period 2003–2006			Brazil period 2003–2006 ^c			Costa Rica period 2006–2008			Ecuador period 2004–2008			Peru period 2002–2006		
	P(event)	P(S/E)	Entry	P(event)	P(S/E)	Entry	P(event)	P(S/E)	Entry	P(event)	P(S/E)	Entry	P(event)	P(S/E)	Entry
	(1)	(2)	(1)*(2) =(3)	(1)	(2)	(1)*(2) =(3)	(1)	(2)	(1)*(2) =(3)	(1)	(2)	(1)*(2) =(3)	(1)	(2)	(1)*(2) =(3)
Demographic & combined events															
IV - Exclusively demographic	5.7	8.1	0.5	4.6	9.9	0.5	6.9	3.5	0.2	8.4	8.4	0.7	9.4	9.1	0.9
V - Demographic leading to income changes	11	3.2	9.7	0.2	2.1	14.6	0.3	9.4	0.0	2.8	24.7	0.7	2.4	23.1	0.5
VI - Combination of demographic and income	12	1.8	47.3	0.8	2.6	42.2	1.1	2.9	36.1	1.0	5.4	43.5	2.4	11.9	5.5
VII - Events not classified	3.0	28.5	0.7	5.2	28.2	1.5	6.2	43.2	2.7	6.8	25.3	1.7	8.2	39.8	3.2
%With events	37.7	20.5	7.3	50.0	25.2	12.6	48.5	22.9	11.1	57.1	26.8	15.3	66.5	32.3	21.5
%Without events	62.3	0.7	0.4	50.0	1.1	0.6	51.5	0.1	0.1	42.9	0.6	0.3	33.5	1.2	0.4
Total households	100.0	0.0	7.7	100.0	0.0	13.2	100.0	0.0	11.2	100.0	0.0	15.6	100.0	0.0	21.9
Total with events	2,495,096	0	0	3,176,849	0	0	133,090	0	0	2,358,521	0	0	4,291,020	0	0
Total without events	4,122,423	0	0	3,177,618	0	0	141,326	0	0	1,774,813	0	0	2,161,061	0	0
Total households	6,617,519	0	0	6,354,467	0	0	274,416	0	0	4,133,334	0	0	6,452,081	0	0

^aDecomposition based on Eq. 2

^bFor a description of the events see Table in Section 3

^cMetropolitan areas of Recife, Salvador, Belo Horizonte, Rio de Janeiro São Paulo and Porto Alegre

All estimations are significant at 1 %

Source: Authors' elaboration based on data from national household surveys

Reductions of both labor and non-labor income were also significant in some of the countries.

Exclusively demographic events were also relatively unimportant for poverty entries, but they appeared to play a larger role than that played for exits. An increase in the number of household members was more relevant to poverty mobility than the loss of a household member. In this context, demographic events seemed to be somewhat more significant in Peru and Ecuador. As was the case for exits, changes in income from cash transfer policies - reductions in this case - played no role for entries into poverty.

The loss of a job by a household member was the most important event among exclusively labor events in all countries except Ecuador, where wage reduction appeared to be the most relevant. The conditional probability of entering poverty following a job loss was significantly higher than the conditional probability associated with a reduction of labor income. In fact, in Argentina, Brazil and Costa Rica, the greater impact of leaving an occupation was strictly due to the fact that a decline in household income following such an event was greater than the loss of income resulting from a decline in wages.

Again, occupation type must also be considered when analyzing entry rates. Specifically, the high frequency at which non-registered jobs were lost by members of non-poor households suggests that this type of employment was both more common and more unstable. Moreover, in Argentina and Costa Rica, the conditional probability that a job loss would lead to poverty was, as expected, higher for registered workers than for non-registered workers. This result was due to the higher wages generally associated with registered occupations.

Households with and without children An interesting result appeared when comparing poverty entries for households with and without children: no substantial difference in the total frequency of events for each household type was observed.²³ However, the impacts of these events (i.e., the conditional probability) on poverty entries differed substantially. In particular, the probability of entering poverty given the occurrence of a negative event in a household with children was approximately 10 p.p. higher than that for all other households.

Finally, labor market events were the most important factor for both types of families. Nevertheless, as was the case for exits from poverty, these were more relevant for households with children, while non-labor income and demographic events were more important in households without children.

4.4 Analysis of sensitivity to the poverty line and measurement errors

In order to assess the robustness of the results, two additional analyses were performed. The first one was the analysis of the sensitivity of poverty dynamics to changes in the poverty line. As shown in Table 1, transition matrices were constructed for poverty lines that shifted up and down by 10 %, resulting in poverty lines at 90 % and 110 % of the originals. In almost all cases, the entry rates were monotonically increasing in the poverty line, while the opposite occurred for the exit rates. The

²³Results for different types of households are not presented here for reasons of space. See Beccaria et al. [7].

only exception was Argentina, where the entry rate initially fell and then grew with increases in the poverty line. The behaviors of households with and without children were the same for different poverty lines. The same procedure was applied to the decomposition of exit and entry rates (Eq. 2), and the conclusions were not changed.²⁴

The second analysis has to do with potential measurement errors bias. As income is subject to measurement errors in household surveys, the degree of income mobility calculated from panel data coming from this source –the one here employed– could overestimate “true” mobility intensity (see [17]). This could also lead to an overestimation of our measurement of poverty mobility.²⁵ Various methods have been proposed and employed in order to try to evaluate such error and consequently to correct mobility figures.²⁶ However, given the objective of this paper, they do not seem to be adequate as they could also reduce transitory movements, precisely some of those we are interested in identifying.²⁷

As an indirect way to provide some evidence on the impact of measurement errors, an alternative measurement of mobility rates and of the relevance of the different events was carried out. It results from imposing a restriction to the definition of a change in a household’s nominal income: it was considered that a change occurs only if the difference between income in “ t ” and in “ $t + 1$ ” is larger than 10 % (otherwise, “ $t + 1$ ” income was considered equal to “ t ” income). The resulting poverty mobility rates are not very different from the ones already reported in terms of intensity of mobility, and the conclusion reached on the factors associated to poverty mobility.²⁸

5 Final remarks

The research summarized in this document had three objectives: (1) to estimate the role of the labor market, non labor incomes and household composition in transitions into and out of poverty; (2) to determine if the observed differences in household poverty flows could be mostly associated with differences in the probability of certain types of events or by the differing impacts of these events, that is, the conditional probability that their poverty status would change after a given event occurred; and (3) to determine the extent to which household composition and the characteristics of household members affected both probabilities. The results of this study allow us to draw the following conclusions.

In methodological terms, the relevance of the dynamic analysis was confirmed not only for evaluating the intensity of poverty entry and exit flows but also for identify-

²⁴These results were not included in this document for the sake of brevity, but they are available in Tables 5 and 6 of the on-line attachment in the JOEI website.

²⁵As shown, for example, by Lee et al. [22].

²⁶See, for example, Glewwe [17] and the references there included.

²⁷We also face limitations when attempting to implement the methods suggested for assessing those errors as it was not possible to identify the complementary information required for such evaluation, especially information comparable for the five countries included in this study. In terms of the methods discussed by Glewwe [17], no employer data were available and no adequate instrumental variable could be identified.

²⁸These results are available in Tables 7, 8 and 9 of the on-line attachment.

ing the factors directly associated with these transitions. To do this, an exhaustive list of mutually exclusive (single or combined) events was defined and, then, the distribution of poverty transitions associated with particular events was estimated. This distribution, in turn, was decomposed into two factors: the probability that the at-risk population experiences such an event and the probability that the event triggers poverty entries or exits, conditional on the previous occurrence of the event. This is the first study to apply this methodology in a cross-national comparative way in Latin American countries.

Regarding the results, an important finding is that a high proportion of initially poor households in every country experienced a positive event that could help them exit poverty. However, only a small proportion of these households actually exited poverty, while the others experienced increases in income that were not sufficient to change their poverty status. This result suggests that the difficulty of exiting poverty is more related to the fact that the additional income is not sufficient to escape these situations than it is to the inability of household members to obtain new incomes, for example, by getting a new job.

Another relevant outcome is that events exclusively related to the labor market were the most important in every country in this study. In some countries, changes in the number of employed household members were more important, while income modifications were more important in other countries. However, labor precariousness was an important factor in each of the countries in this study. In particular, the jobs obtained by poor households were often not registered in the social security system, implying a lack of social benefits and a considerably reduced positive impact on families' incomes, which further contributes to the ongoing phenomenon of the working poor.

The high levels of poverty movements in the region appeared to be directly linked to high occupational and wage instability. Households were frequently and negatively affected by macroeconomic and labor market cycles, while public policies that limit their negative effects or strengthen their positive effects appeared to be limited. Even when the economy behaved reasonably well at the aggregate level, the characteristics of the labor market still generated high levels of labor turnover, with negative consequence on well being given the undeveloped system of social protection.

When the events associated with entries into and exits from poverty were analyzed separately for households with and without children, the share of households experiencing a positive event that could lead to an exit from poverty was similar, but the effect on household income was much greater for households without children, increasing the odds that households in this group would exit poverty. For the case of entries, households with children were those that registered a higher probability of entering poverty after experiencing an event that reduced their income per adult equivalent. This result supports the idea that children in Latin America are among the most vulnerable, not only because their families are more likely to move into poverty when exposed to negative shocks but also because they do not have the necessary tools to quickly exit that situation.

Regarding policy recommendations, these results support an expansion and re-shaping of antipoverty strategies, through labor market policies and other more universal approaches. Priority should be given to efforts that aim to prevent low and medium-low income workers from facing income-reducing events and mitigate their negative impacts. A central preoccupation of these strategies should be, on

the one hand, a reduction in the share of highly unstable informal and precarious employment and, on the other hand, an extension of the unemployment assistance.

Increasing the probability of leaving poverty should also be another important part of antipoverty policies. This involves addressing both the demand and the supply sides of the labor market to improve job quality. Wage levels must also be considered an objective because getting a job is no guarantee of leaving poverty, particularly when a large portion of jobs are informal. A higher minimum wage policy can be an effective tool, especially if it also affects wages in the informal sector.

Finally, countries must increase both the coverage and the amount of the public cash transfers, which are generally very low, and combine them with other labor and social protection policies, at least until the labor market generates enough jobs with incomes sufficient to enable poverty exits.

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