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The distributional implications of short-term income mobility: evidence for Latin America

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Abstract

In recent years, a branch of the economic literature has analyzed household income movements in longitudinal datasets. Previous research has shown that household income is considerably more volatile in Latin America than in developed economies, though little is known so far about the distributional implications of such income changes. This paper exploits the unique database built in Beccaria et al. (2022) from Latin American household surveys for seven countries in 2002-2015 to analyze the impact of household income movements on income distribution. I combine the analysis from traditional indicators in the literature with a novel methodology that quantifies this precise phenomenon and allows for comparisons and rankings across population groups and countries. My results show that Latin American economies feature less equalizing mobility than developed countries, although variability between countries is considerable. Moreover, the mobility pattern observed benefitted essentially all households other than those in the right tail of the income distribution. Finally, I provide more specific results for population groups defined in terms of gender and educational attainment.

Keywords: income mobility, income distribution, Great Gatsby curve, mobility curve.

JEL: D31, O15, J60.

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1 Introduction

In recent years, a branch of the economic literature has analyzed household income movements. The well-known study of static income distributions can be greatly enriched when the analysis shifts to the issue of how household incomes change over time. The highly influential work of Gary Fields has established consensus on the idea that income mobility is an intrinsically multifaceted phenomenon—though much of previous work has focused on income mobility understood as volatility (therefore, a negative feature of the household’s income flow), some of the literature has emphasized the positive role of income mobility as an intertemporal income equalizer.

Friedman (1962) is usually credited with the first insight on the relevance of income mobility in the analysis of social inequality: “Consider two societies that have the same distribution of annual income. In one there is great mobility and change so that the position of particular families in the income hierarchy varies widely from year to year. In the other, there is great rigidity so that each family stays in the same position year after year. Clearly, in any meaningful sense, the second would be the more unequal society”. The recent literature has delved into this matter in two broad senses—firstly, by studying how income inequality is associated to intergenerational income mobility and, secondly, by analyzing how households’ income flow affects the shape of the distribution in a given period. This paper contributes to the latter branch.

The question of the distributional implications of income mobility is of particular importance in Latin America for two reasons. On one hand, because it is the most unequal region in the world in terms of income distribution. On the other hand, because as shown in Beccaria et al. (2022), Latin American economies feature a degree of short-term income mobility that is quite larger than that observed in developed countries. Therefore, quantifying the effects of income mobility on the shape of the distribution would help clarify to which extent such movements can be considered a determinant of the distributional results we observe.

This paper exploits the unique database built by Beccaria et al. from Latin American household surveys for seven countries in 2002-2015 to analyze the impact of household income movements on income distribution. I combine the analysis from traditional indicators in the literature with a novel methodology that quantifies this precise phenomenon and allows for comparisons and rankings across time and countries. My results show that the average level of equalizing mobility in Latin America is considerably lower than that reported for developed countries in previous literature, although there is substantial variability between countries in the sample. Moreover, the mobility pattern observed benefitted essentially all households other than those in the right tail of the income distribution. Finally, I find that mobility had a larger equalizing effect on the incomes of low-educated households *vis-à-vis* high-educated ones, while no general pattern arises for gender.

The rest of the paper is structured as follows. Section 2 provides a brief review of existing literature on the subject. Section 3 describes the database used. Section 4 explains the methodology applied. Section 5 reports the results of the empirical exercises. Finally, section 6 offers some

concluding remarks.

2 Literature review

The study of intergenerational income mobility (that is, the analysis of the link between the income levels of parents and children) has a long tradition in the economic literature¹. By contrast, the last few decades have seen growing interest in a related but different phenomenon, the observed changes in household incomes over shorter periods of time, usually referred to as intragenerational income mobility or, more generally, short-term income mobility. A wide range of research has shown this attribute of intertemporal income distributions also has interesting implications in the domain of observed cross-sectional inequality.

Friedman’s original intuition on the fact that income inequality can be seen as less of a concern in societies that feature greater levels of mobility was mirrored in Krugman (1992) and further developed in Gardiner and Hills (1999), while the formal building blocks for further research were laid in the seminal papers of Atkinson et al. (1988) and Shorrocks (1978). Fields (2006) distinguishes six concepts of income mobility, one of which is labeled “mobility as an equalizer of longer-term incomes”. This is the precise interpretation mobility is given in this paper, as well as in much other empirical work and in relevant public policy agendas.

Several papers have measured this type of mobility using data from developed countries: Aaberge et al. (2002), Gustaffson (1994) and Bjorklund (1993) for Scandinavian countries; Auten et al. (2013) and Buchinsky and Hunt (1999) for the United States; Bayaz-Ozturk et al. (2014), Maasoumi and Trede (2001) and Burkhauser and Poupore (1997) for Germany; Cantó (2000) for Spain; Jarvis and Jenkins (1998) for the United Kingdom. As data availability is the most relevant obstacle in this research field, evidence for developing countries is much more scarce, although some relevant contributions exist: Castro (2011) for Chile; Woolard and Klasen (2007) for South Africa; Wodon (2001) and Fields et al. (2015) for Mexico and Argentina (the latter also including Venezuela).

Although these papers vary greatly in terms of data sources and methodological approaches, three main findings emerge as general lessons for current research. Firstly, inequality in intertemporal income is shown to be systematically lower than in cross-sectional income (a natural consequence of the convexity of the inequality measures generally used). Secondly, international comparisons based on cross-sectional inequality often provide misleading results, a particularly important point in the traditional debate on whether the American economy can be deemed less egalitarian than some European ones that feature stronger welfare states (specifically, those of Scandinavian countries and Germany). Finally, mobility levels vary greatly across population groups defined in terms of gender, age or educational level, as well as according to the income concept used (notably, pre-transfers versus post-transfers income).

¹See Banco de Desarrollo de América Latina (2022) for an extense analysis of this phenomenon in Latin America

3 Data

The database used in this paper was built in Beccaria et al. (2022) from regular household surveys carried out by the national statistical institutes of the selected countries. Most Latin American countries do not feature longitudinal household surveys, however, most household surveys do use a rotational sampling scheme, which can be exploited to build short panels.

This kind of scheme implies that the total sample is divided into household groups, with each group remaining in the sample in observation periods or waves. Therefore, for each wave of the survey, one of these groups enters the sample while another one leaves. Consequently, it is possible to trace changes of a given proportion of the sample along the waves. The only case with a longitudinal survey is Peru, although the panel covers a few years only. However, the rotating schemes differ among countries and the only common window of observation among them is the year. Hence, it is only possible to analyze changes in income resulting from comparing two successive observations of each household with a one-year interval between them.

The Argentinean data was taken from the Encuesta Permanente de Hogares (EPH), which is conducted by the Instituto Nacional de Estadística y Censos (INDEC). For Brazil, micro-data from the Pesquisa Mensal de Emprego (PME), which is conducted by the Instituto Brasileiro de Geografia e Estatística (IBGE), will be employed. This survey, however, only gathers information on labor incomes. For Costa Rica, the Encuesta de Hogares de Propósitos Múltiples (EHPM) and the Encuesta Nacional de Hogares (that replaced the former in 2010), conducted by the Instituto Nacional de Estadística y Censos (INEC), were used. For Ecuador, we resort to the Encuesta Nacional de Empleo, Desempleo y Subempleo (ENEMDU), conducted by the Instituto Nacional de Estadística y Censos (INEC). The Encuesta Nacional de Ocupación y Empleo (ENOE) is the source of data for Mexico. Like Brazil, this survey measures labor income only. In the case of Peru, data from longitudinal panels built from sub-samples of the Encuesta Nacional de Hogares (ENAHO), the regular household survey conducted by the Instituto Nacional de Estadística e Informática (INEI), were used. Finally, the Paraguayan Encuesta Continua de Empleo (ECE) is carried out by the Dirección General de Estadística, Encuestas y Censos. The periods covered in each country are the following: 2003-2015 for Argentina and Brazil, 2006-2013 for Costa Rica, 2004-2015 for Ecuador, 2005-2015 for Mexico, 2010-2015 for Paraguay and 2002-2010 for Peru. The analysis is restricted to urban areas since not all surveys are nationally representative. Moreover, the comparison of income mobility in rural areas among countries with different types of agricultural production (and, hence, different production cycles) is difficult to assess with data coming from the type of surveys employed in this study.

I have excluded from calculations households with zero reported total income, or with zero reported labor income when Brazil and Mexico are included. I have also dropped households that include workers who report zero wage or individuals whose age or gender show inconsistencies.

4 Methodology

Most descriptive analysis of equalizing income mobility are carried out using Shorrocks' mobility index (Shorrocks (1978)). Let (y^1, y^2, \dots, y^T) be a sequence of N -dimensional vectors, each describing the income distribution at time $t = 1, 2, \dots, T$ in an economy populated by N agents and let $I(y)$ be a measure of the inequality of the distribution of income vector y . Then, Shorrocks' Mobility index (SM) is given by:

$$SM = 1 - \frac{I(\bar{y})}{\sum_{t=1}^T w_t I(y^t)} \quad (1)$$

Where $w_t = \sum_{i=1}^N y_i^t / \sum_{i=1}^N \bar{y}_i$ and \bar{y} is the vector that contains the mean of each individual's income over time. If $I(y)$ is convex (as is the case for most inequality measures used in the literature), then inequality evaluated at the time mean vector \bar{y} must be smaller than the weighted average of the values of $I(y^t)$ over time, thus making SM bounded between 0 and 1. For the inequality measure we will use the conventional Gini index.

Although this measure provides information on how much equalizing income mobility there is in a certain economy, it does not offer a way to characterize such mobility. To that end, we will complement this analysis with the estimation of mobility curves as defined in Aaberge and Mogstad (2014). This methodology builds from an analogy with the more familiar Lorenz curves: a mobility curve shows, for each income percentile, how much its intertemporal income differs from the one it would receive if the income process were completely immobile—if each individual's relative position in the cross-sectional distribution of income were constant over time.²

Formally, let $L(\bar{y}; u)$ be the Lorenz curve associated to the income distribution given by \bar{y} and $u \in [0; 1]$. Then, the mobility curve is given by:

$$M(u) = L(\bar{y}^R; u) - L(\bar{y}; u) \quad (2)$$

Where \bar{y}^R is the counterfactual intertemporal income distribution, where each individual's initial position in the income distribution is preserved in the second period. This implies that an individual's income may grow as a consequence of a general rise in incomes (economic growth) but no redistribution takes place—this is the interpretation that must be given to the immobility concept. A subsequent relevant concept is the derivative of the mobility curve, given by:

$$M'(u) = \frac{F^{-1}(\bar{y}; u)}{\frac{1}{N} \sum_{i=1}^N \bar{y}_i} - \frac{F^{-1}(\bar{y}^R; u)}{\frac{1}{N} \sum_{i=1}^N \bar{y}_i^R} \quad (3)$$

Where $F(\bar{y}; z)$ is the empirical distribution function of \bar{y} evaluated at income value z , so that $F^{-1}(\bar{y}; u)$ is the inverse of such distribution function evaluated at percentile u . This measure has a

²Bratberg et al. (2017) build on Aaberge and Mogstad's approach to develop a similar methodology that focuses on rank and income share mobility rather than on income mobility

straightforward interpretation: it is positive (negative) for those percentiles that are better (worse) off because of income mobility.

5 Results

5.1 Shorrocks' mobility index

It is not straightforward to find comparable values of SM across published work. Reported values for different countries and time periods differ strongly in three important methodological choices: the time window over which the measure is calculated, the income concept defined and the inequality measure used. Table 1 summarizes the results found in the literature so far.

Table 1: Reported values of SM in the literature

Source	Country	Time period	Window (years)	Income concept	Inequality measure	SM
Aaberge et al. (2002)	Denmark	1980-1990	11	Total household income	Gini	0.0780
	Sweden	1980-1990	11	Total household income	Gini	0.1540
	USA	1980-1990	11	Total household income	Gini	0.0920
	Denmark	1986-1990	5	Total household income	Gini	0.0540
	Norway	1986-1990	5	Total household income	Gini	0.0750
	Sweden	1986-1990	5	Total household income	Gini	0.0970
	USA	1986-1990	5	Total household income	Gini	0.0600
Bayaz-Ozturk et al. (2014)	Germany	1984-1988	5	Household per capita income	Theil	0.2120
		2002-2006	5	Household per capita income	Theil	0.1520
	USA	1984-1988	5	Household per capita income	Theil	0.1310
		2002-2006	5	Household per capita income	Theil	0.1520
Bjorklund (1993)	Sweden	1951-1958	8	Total individual income	Gini	0.2625
		1960-1967	8	Total individual income	Gini	0.2483
		1966-1973	8	Total individual income	Gini	0.2767
		1974-1981	8	Total individual income	Gini	0.3183
		1982-1989	8	Total individual income	Gini	0.3433
Buchinsky and Hunt (1999)	USA	1981-1982	2	Individual labor income	Generalized entropy	0.1480
		1990-1991	2	Individual labor income	Generalized entropy	0.0720
		1981-1984	3	Individual labor income	Generalized entropy	0.2350
		1988-1991	3	Individual labor income	Generalized entropy	0.1350
		1981-1986	6	Individual labor income	Generalized entropy	0.2530
		1986-1991	6	Individual labor income	Generalized entropy	0.1800
		1981-1988	8	Individual labor income	Generalized entropy	0.2650
		1984-1991	8	Individual labor income	Generalized entropy	0.2210
Burkhauser and Poupore (1997)	USA	1983-1988	6	Individual labor income	Theil	0.1200
	Germany	1983-1988	6	Individual labor income	Theil	0.2130
Cantó (2000)	Spain	1985-1992	1	Household per capita income	Gini	0.0800
			1.5	Household per capita income	Gini	0.0900
			2	Household per capita income	Gini	0.1100
			1	Total individual income	Gini	0.0700
			1.5	Total individual income	Gini	0.0900
Castro 2011	Chile	1996-2001	5	Household per capita income	Gini	0.1000
Gustaffson (1994)	Sweden	1971-1980	2	Total individual income	Gini	0.0580
			10	Total individual income	Gini	0.3070
Jarvis and Jenkins (1998)	UK	1991-1994	2	Total household income	Gini	0.0500
			3	Total household income	Gini	0.0800
			4	Total household income	Gini	0.0900
Maasoumi and Trede (2001)	Germany	1984-1989	2	Household per capita income	Generalized entropy	0.1126
	Germany		3	Household per capita income	Generalized entropy	0.1052
	Germany		4	Household per capita income	Generalized entropy	0.0983
	Germany		5	Household per capita income	Generalized entropy	0.0941
	USA		2	Household per capita income	Generalized entropy	0.2079
	USA		3	Household per capita income	Generalized entropy	0.2061
	USA		4	Household per capita income	Generalized entropy	0.2040
USA	5	Household per capita income	Generalized entropy	0.2106		
Woolard and Klasen (2007)	South Africa	1993-1998	6	Household per capita income	Gini	0.1050

The time window length and the value obtained for SM are positively correlated, as the reduction in inequality associated to mobility is naturally higher if the time period over which incomes are

allowed to move is longer. Since the database used in this paper features panels that cover one-year time windows, the results in Cantó for Spain in the 80s are comparable to ours (the income concept and the inequality measure used also coincide).

Table 2: Estimated values of SM for Latin America 2002-2015

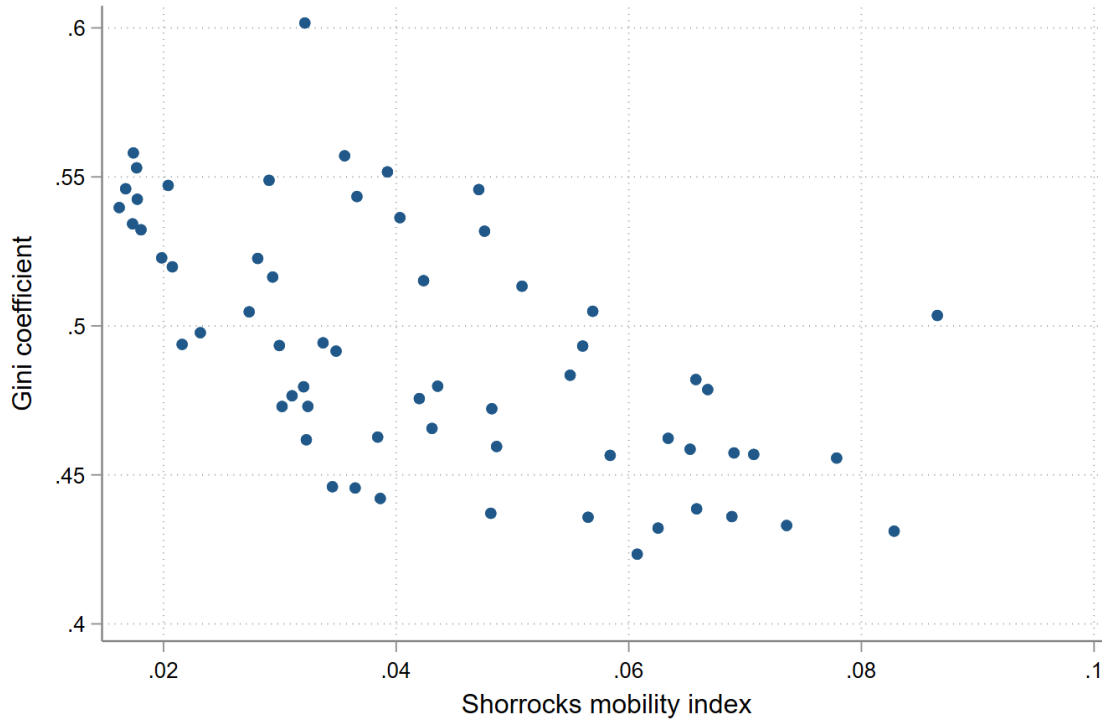
Country	Time period	All income sources		Labor income only	
		Total income	Per capita income	Total income	Per capita income
Argentina	2003-2015	0.047	0.0356	0.0236	0.0187
Brazil	2003-2015			0.0238	0.0191
Costa Rica	2006-2013	0.0418	0.0348	0.045	0.0394
Ecuador	2004-2015	0.0556	0.0511	0.0602	0.0532
Mexico	2005-2015			0.0682	0.0586
Paraguay	2010-2015	0.056	0.052	0.0515	0.0448
Peru	2002-2010	0.0489	0.0432	0.0438	0.0378

These results show smaller values for SM than reported by Cantó. In Latin American countries, the Gini coefficient of intertemporal household per capita income is lower than the observed Gini in a magnitude that ranges from 3.5% (Costa Rica) to 5.2% (Paraguay), in contrast to the 8% found by Cantó. The difference is slightly larger when the Gini coefficient is calculated from total household income. Alternatively, when only labor income is considered (which allows for the inclusion of Brazil and Mexico in the estimation sample), results for per capita income range from 1.9% (Argentina) to 5.9% (Mexico). Even though it is not strictly a valid comparison, the level of equalizing mobility found is lower than that reported for most developed countries (including the USA, Sweden, Spain and Germany) although fairly similar to the one reported for the UK.

Some recent literature has explored the correlation between intergenerational income mobility and cross-sectional income inequality. This relation has been termed “the Great Gatsby curve” and has been shown to be downward sloping in many countries³. Figure 1 shows the scatterplot for SM and the Gini coefficient in our data, where we also find negative correlation. This “short-term Great Gatsby curve” has strong implications as it means that income changes over short periods of time are also associated to a more equitable income distribution in a given period, as long as such changes imply lower inequality in the distribution of intertemporal income.

³The first use of the concept is attributed to Krueger (2012), while Corak (2013) was the first published paper to provide a formal treatment of it. See Durlauf et al. (2022) for a modern revision on the subject and Neidhöfer (2019) for results for Latin American countries in the context of intergenerational educational mobility

Figure 1: Great Gatsby curve for Latin America 2002-2015

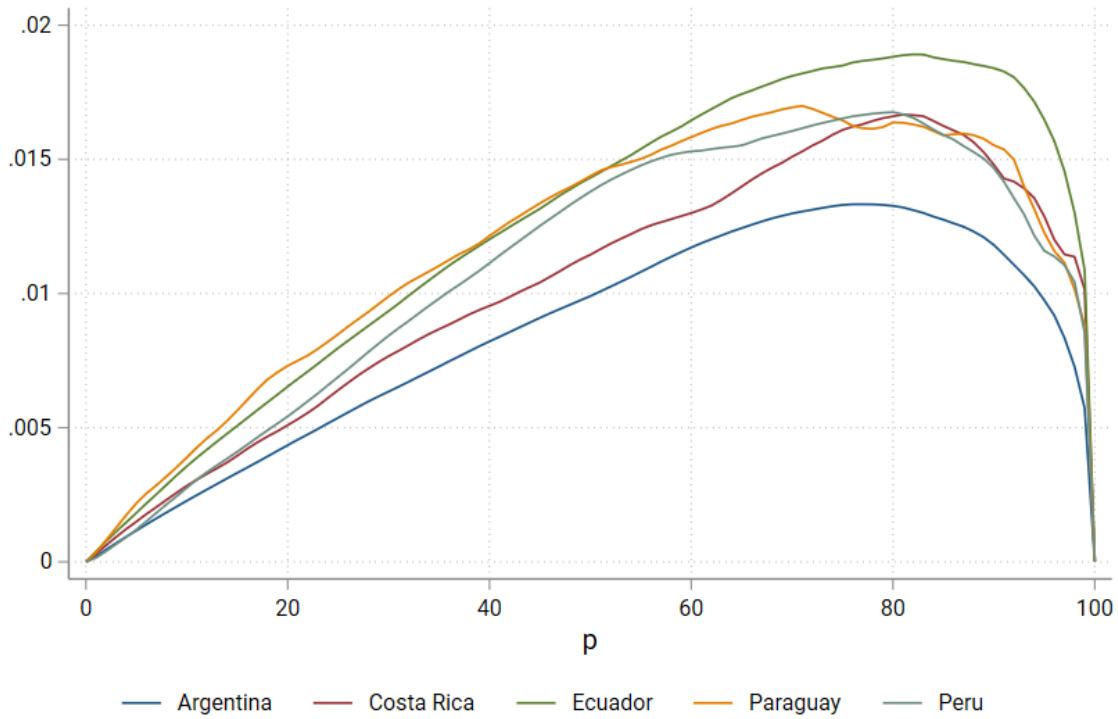


Each point corresponds to one country-year observation

5.2 Mobility curves

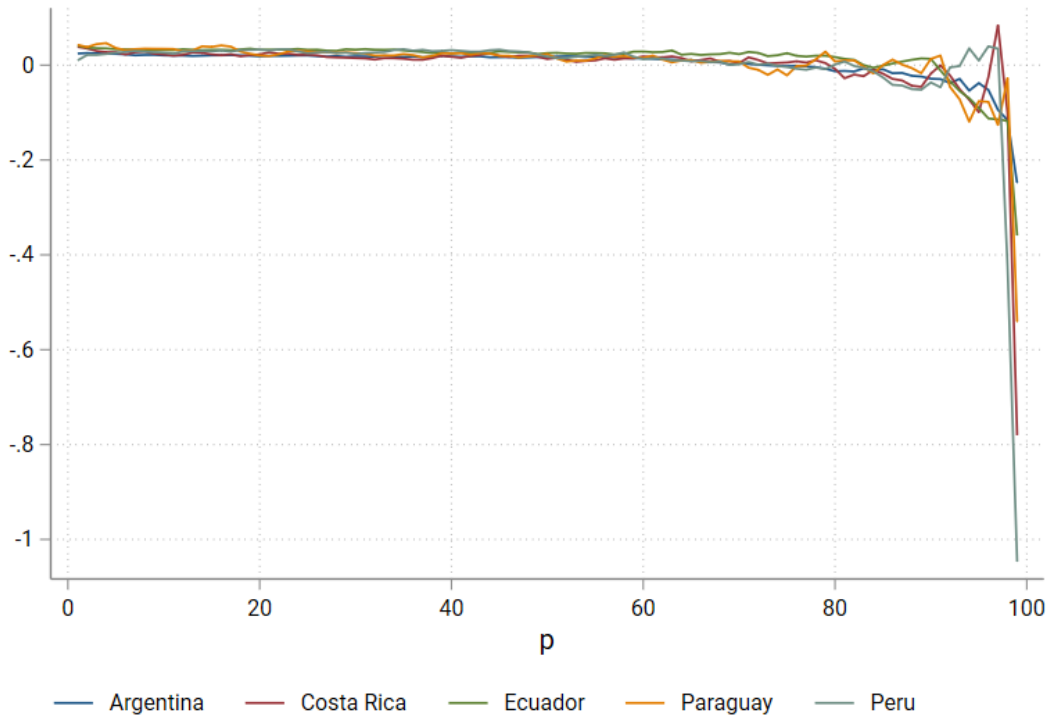
We now move on to the analysis of mobility curves. Aaberge and Mogstad show that the higher of two non-intersecting mobility curves unambiguously features more income mobility than the lower—in our data, this indicates that Argentina has the lowest level of equalizing income mobility in the sample. Not much can be said for the remaining four countries, as their mobility curves do intersect, though the one for Ecuador remains on top from the median to the right tail. Curves for Costa Rica, Paraguay and Peru are fairly similar and cross one another several times.

Figure 2: Mobility curves, household income per capita 2002-2015



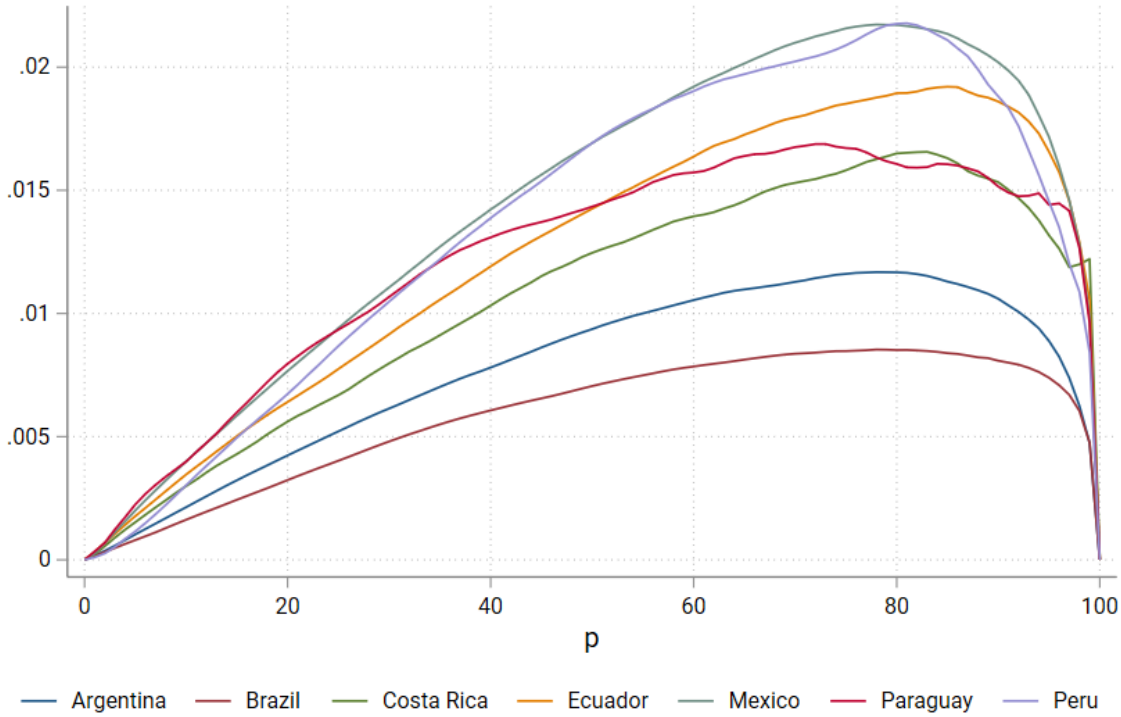
The derivatives of these mobility curves show a remarkable pattern—all of them are positive up to percentile 70, when some cross the horizontal axis, and almost all values become negative after percentile 90. This finding has powerful implications as it shows income mobility was beneficial, not only for households in the left tail of the income distribution, but for essentially all that cannot be deemed rich. Only households in the highest income decile have seen a decline in their relative position as a consequence of income movements. Income mobility in the region has certainly had equalizing effects.

Figure 3: Derivative of mobility curves, household income per capita 2002-2015



Changing the income definition from total per capita income to labor per capita income enables the inclusion of Brazil and Mexico in the comparison. These countries are interesting since, as shown in figure 4, they lie at opposite ends of the ranking—while Brazil is unambiguously the country with the lowest level of equalizing mobility in the sample, Mexico’s curve is found at the top, although crossing those of Peru and Paraguay a few times.

Figure 4: Mobility curves, household labor income per capita 2002-2015



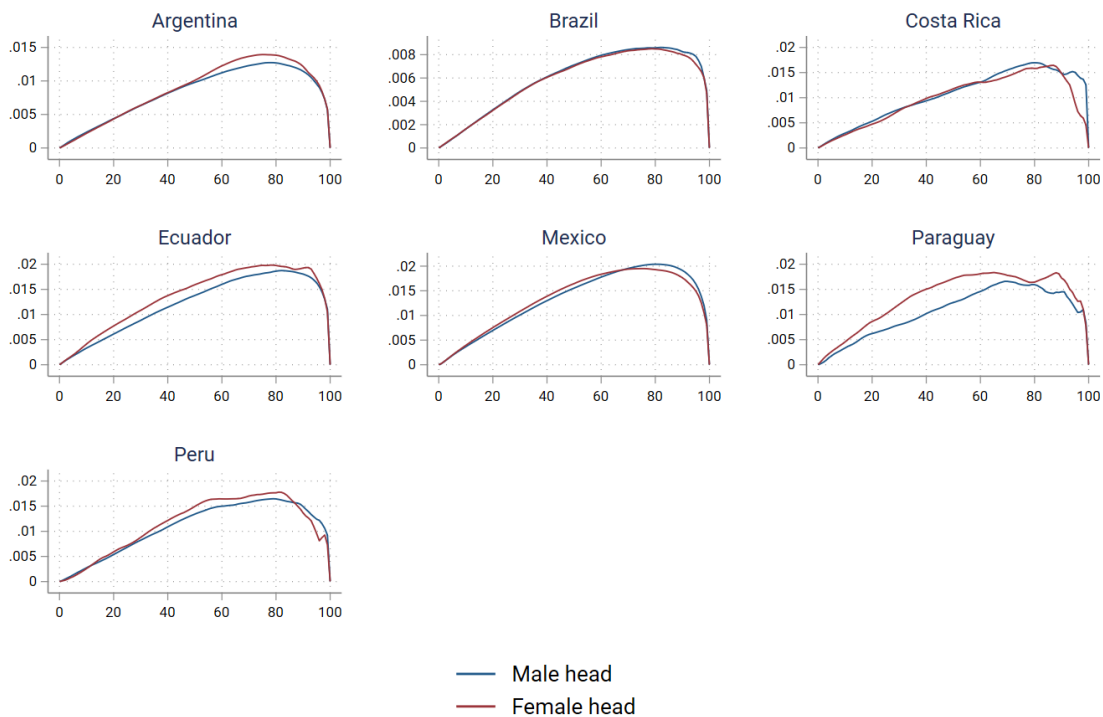
Finally, the derivatives of these mobility curves are essentially equal to those analyzed before, with approximately constant positive values up to percentile 80, when the sign is reversed. These results indicate that the income equalization process observed in the region was led mostly by labor income, the main source of revenue for Latin American households.

5.3 Heterogeneity

In what follows I investigate whether specific patterns arise when the preceding analysis is used to compare two specific population groups. Previous work has shown that, as is the case in the analysis of income distribution, income mobility is strongly associated to individual attributes, particularly those that affect labor market insertion. Therefore, I will explore two of the most relevant dimensions that influence an individual's work status—gender and educational attainment.

5.3.1 Gender

Figure 5: Mobility curves by gender of household head



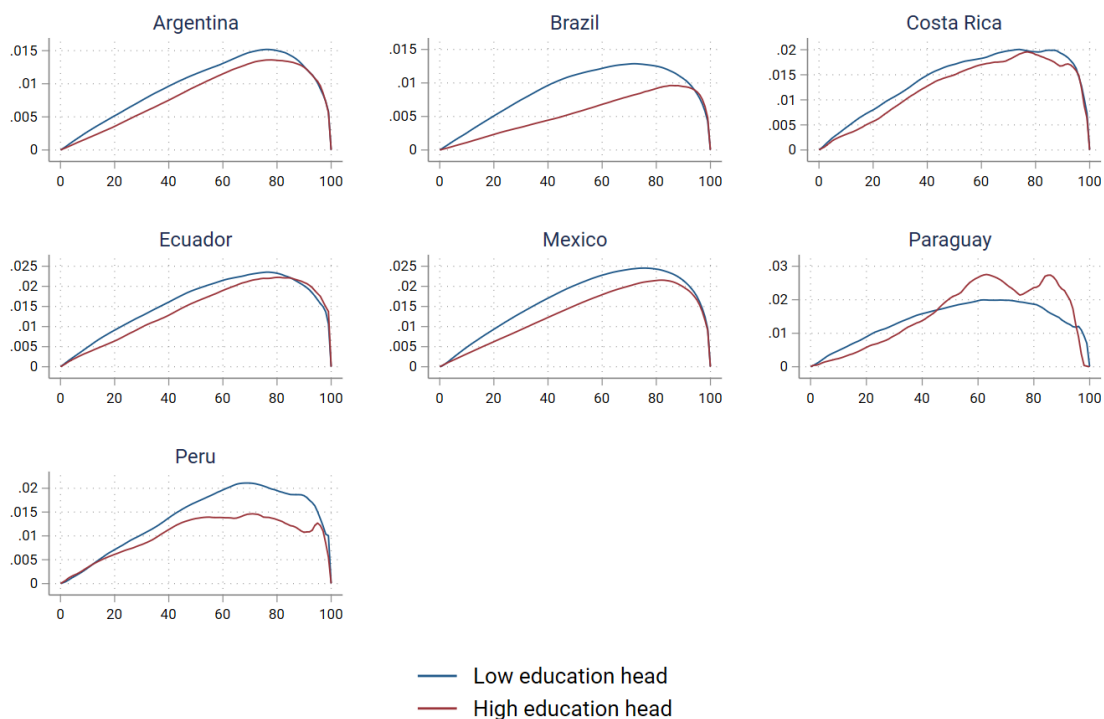
Curves for Brazil and Mexico calculated from household labor income, total household income used for the other countries

Figure 5 shows that there is not a clear pattern for gender. The mobility curve for households with a female head lies above that of households with a male head in Argentina, Ecuador and Paraguay, while the opposite is true for Brazil. However, in Mexico, Costa Rica and Peru, the curves cross each other (actually, more than once in the latter two) so that dominance cannot be established. These mixed results indicate that there is not a clear gender pattern in the reduction of inequality observed in the sample.

The period under analysis saw considerable improvement in gender equality indicators in the labor market, such as raises in female labor force participation and reductions of the wage gender gap (Gasparini and Marchionni (2015), Gasparini et al. (2018)). However, this exercise shows that the positive effects of income mobility were not different for males and females on average.

5.3.2 Education

Figure 6: Mobility curves by educational attainment of household head



Curves for Brazil and Mexico calculated from household labor income, total household income used for the other countries

The story is quite different when we turn to educational attainment of the household head as the segmentation criterion. Figure 6 shows results that compare mobility curves obtained for households whose head did not finish secondary education to those calculated for households whose head holds a college degree. Unlike the previous exercise, results now do point in a definite direction—except for Paraguay, the mobility curve for households with low-education heads features higher mobility than that for high-education heads. In fact, in the three largest countries in the sample (Argentina, Brazil and Mexico), the distance between the two curves is rather large for a considerable range of the income distribution.

This result is consistent with the derivatives of mobility curves discussed previously. In fact, the changes in income distribution observed in Latin America in the 2000s involved a considerable reduction in income inequality, clearly favoring households located in the left tail of the distribution. This new approach based on mobility curves indicates that yearly changes in households' incomes yielded an intertemporal income distribution that is more favorable to those with low human capital

endowment. This finding is consistent with a broad literature that emphasizes the great reduction in income inequality in Latin America at least in the first decade of the century (Gasparini et al. (2016),Maurizio et al. (2021))

6 Concluding remarks

Previous research has shown that household income is more unstable in Latin American countries than in developed economies, mostly due to high labor informality, weak labor market institutions and low non-labor income. This is a strong concern from a policy perspective as most households in these economies do not have access to financial markets that enable them to insure against income risk—and probably those who do are the ones who need it the least.

This paper extends this literature in a new dimension, the analysis of the equalizing potential of such income variability. We have shown that such equalizing effects are lower in Latin American economies than reported for some European countries. However, we have also found evidence of considerable variability across Latin American countries, with Mexico, Peru and Ecuador showing the greatest reductions in income inequality as a consequence of income mobility in short time windows.

One salient feature of the mobility process observed in Latin America in 2002-2015 is that essentially all but households in the highest income decile benefited from it in terms of their relative position in the aggregate income distribution. In fact, mobility curves show an approximately constant slope for households below the 80th percentile of per capita income, which means mobility was about as beneficial for the poor as for families with income levels close to the median.

Although the region saw considerable reduction in gender gaps during most of the period under analysis, the findings reported in this paper indicate that income variability did not affect men and women differently. However, a pattern does arise for educational attainment, with more educated households benefitting from mobility considerably more than less educated ones.

Establishing the determinants of the shape of the mobility curve is an exciting challenge for future research. Although hypotheses linking these results to macroeconomic variables are enticing, I have not found evidence of statistically significant correlations between mobility and traditional macroeconomic performance indicators such as gross domestic product growth or inflation. This does not imply that the macro regime is irrelevant for income mobility, although further analysis is needed to establish conclusions. The role of social policy also deserves attention as previous literature has shown it to be associated to income instability (?).

References

Aaberge, R., Bjorklund, A., Jantti, M., Palme, M., Pedersen, P., Smith, N., and Wennemo, T. (2002). Income inequality and income mobility in the scandinavian countries compared to the

- united states. *The Review of Income and Wealth*, 48(4):443–469.
- Aaberge, R. and Mogstad, M. (2014). Income mobility as an equalizer of permanent income. *Statistics Norway Research Department Discussion Paper*, 769.
- Atkinson, A., Courguignon, F., and Morrison, C. (1988). Earnings mobility. *European Economic Review*, 32:619–632.
- Auten, G., Gee, G., and Turner, N. (2013). New perspectives on income mobility and inequality. *National Tax Journal*, 66(4):893–912.
- Banco de Desarrollo de América Latina (2022). *Desigualdades heredadas. El rol de las habilidades, el empleo y la riqueza en las oportunidades de las nuevas generaciones*. CAF.
- Bayaz-Ozturk, G., Burkhauser, R., and Couch, K. (2014). Consolidating the evidence on income mobility in the western states of germany and the united states from 1984 to 2006. *Economic inquiry*, 52(1):431–443.
- Beccaria, L., Maurizio, R., Trombetta, M., and Vazquez, G. (2022). Short-term income mobility in latin america in the 2000s: intensity and characteristics. *Socio-Economic Review*, 20(3):1039–1067.
- Bjorklund, A. (1993). A comparison between actual distributions of annual lifetime income: Sweden 1951-89. *The Review of Income and Wealth*, 39(4):377–386.
- Bratberg, E., Davis, J., Mazumder, B., Nybom, M., Schnitzlein, D., and Vaage, K. (2017). A comparison of intergenerational mobility curves in germany, norway, sweden, and the us. *Scandinavian Journal of Economics*, 119(1):72–101.
- Buchinsky, M. and Hunt, J. (1999). Wage mobility in the united states. *The Review of Income and Wealth*, 81(3):351–368.
- Burkhauser, R. and Poupore, J. (1997). A cross-national comparison of permanent inequality in the united states and germany. *The Review of Economic and Statistics*, 79(1):10–17.
- Cantó, O. (2000). Income mobility in spain: how much is there? *The Review of Income and Wealth*, 46(1):85–102.
- Castro, R. (2011). Getting ahead, falling behind and standing still. income mobility in chile. *Estudios de Economía*, 38(1):243–258.
- Corak, M. (2013). Income inequality, equality of opportunity, and intergenerational mobility. *Journal of Economic Perspectives*, 27(3):79–102.

- Durlauf, S. N., Kourtellos, A., and Tan, C. M. (2022). The great gatsby curve. *SSRN Electronic Journal*.
- Fields, G. (2006). The many facets of income mobility. In McGillivray, M., editor, *Inequality, poverty and well-being*, pages 123–142. United Nations University.
- Fields, G., Duval-Hernandez, R., Freije, S., and Puerta, M. L. S. (2015). Earnings mobility, inequality and economic growth in argentina, mexico and venezuela. *The Journal of Economic Inequality*, 13:103–128.
- Friedman, M. (1962). *Capitalism and freedom*. University of Chicago Press.
- Gardiner, K. and Hills, J. (1999). Policy implications of new data on income mobility. *The Economic Journal*, 109(453):91–111.
- Gasparini, L., Cruces, G., and Tornarolli, L. (2016). Chronicle of a deceleration foretold income inequality in latin america in the 2010s. *Revista de Economía Mundial*, (43).
- Gasparini, L. and Marchionni, M. (2015). *Bridging gender gaps? The rise and deceleration of female labor force participation in Latin America*. Center for distributive, labor and social studies.
- Gasparini, L., Marchionni, M., and Edo, M. (2018). *Brechas de género en América Latina. Un estado de situación*. Banco de Desarrollo de América Latina.
- Gustaffson, B. (1994). The degree and pattern of income mobility in sweden. *The Review of Income and Wealth*, 40(1):67–86.
- Jarvis, S. and Jenkins, S. (1998). How much income mobility is there in britain? *The Economic Journal*, 108:428–443.
- Krueger, A. (2012). The rise and consequences of inequality in the united states. Speech, Center for American Progress. https://obamawhitehouse.archives.gov/sites/default/files/krueger_cap_speech_final_remarks.pdf.
- Krugman, P. (1992). The rich, the right, and the facts. The American Prospect 11. <https://prospect.org/economy/rich-right-facts-deconstructing-inequality-debate/>.
- Maasoumi, E. and Trede, M. (2001). Comparing income mobility in germany and the united states using generalized entropy mobility measures. *The Review of Economic and Statistics*, 83:551–559.
- Maurizio, R., Beccaria, L., and Monsalvo, A. (2021). Labour formalization and inequality: The distributive impact of labour formalization in latin america since 2000. *Development and Change*, 53(1):117–165.

- Neidhöfer, G. (2019). Intergenerational mobility and the rise and fall of inequality: Lessons from latin america. *The Journal of Economic Inequality*, 17(4):499–520.
- Shorrocks, A. (1978). The measurement of mobility. *Econometrica*, 46:1013–1024.
- Wodon, Q. (2001). Income mobility and risk during the business cycle: Comparing adjustments in labor markets in two latin american countries. *Economics of Transition*, 9:449–461.
- Woolard, I. and Klasen, S. (2007). Determinants of income mobility and household poverty dynamics in south africa. *The Journal of Development Studies*, 41:865–897.