CAF - WORKING PAPER #2021/14
First version: December 14, 2021 (current)

Intergenerational mobility in education in Latin America

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This document provides a comprehensive analysis of intergenerational mobility in Latin America, focusing on the association between parental education and the education of their children. It updates the estimates provided by Neidhöfer et al. (2018), and shows additional heterogeneities by country, cohort, gender, and city size. A positive trend in intergenerational mobility is found in most countries in the region. In particular, it is observed that the upward mobility of children from the bottom of the distribution has been increasing for decades. This encouraging picture is seriously challenged by the educational disruptions caused by the COVID-19 pandemic.

KEYWORDS
intergenerational mobility, education, Latin America

CAF - DOCUMENTO DE TRABAJO #2021/14
Primera versión: Diciembre 14, 2021 (actual)

Movilidad intergeneracional en educación en América Latina

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Este documento proporciona un análisis exhaustivo de la movilidad intergeneracional en América Latina, centrándose en la asociación entre la educación de los padres y la educación de sus hijos. Actualiza las estimaciones proporcionadas por **?**, y muestra heterogeneidades adicionales por país, cohorte, género y tamaño de ciudad. En la mayoría de los países de la región se encuentra una tendencia positiva en la movilidad intergeneracional. En particular, se observa que la movilidad ascendente de los niños de la parte inferior de la distribución ha ido aumentando durante décadas. Este panorama alentador se ve seriamente desafiado por las interrupciones educativas causadas por la pandemia del COVID-19.

KEYWORDS
movilidad intergeneracional, educación, América Latina

1 | INTRODUCTION

Drawing from a long lasting literature in sociology, the study of intergenerational mobility established in modern economics since the pioneering works of Becker and Tomes (1979) and Becker and Tomes (1986). In their models, the transmission of economic inequality from one generation to the next is shown to be mainly related to the inheritability of abilities, of other endowments, and parental investments. The strength of this relationship is indicative for equality of opportunity. An usual way to summarize intergenerational mobility is by measuring the correlation between children's and parents' outcomes.

In this document we document and analyze the development of intergenerational mobility in Latin America. In particular, we focus on the association of parental education with the education of their children. Measuring intergenerational persistence of education (rather than income or occupation) with surveys that include retrospective information has several main advantages. First, education is an important driver of human development. Second, it is a meaningful proxy of social status. Third, it is time-invariant in adulthood. Fourth, retrospective information on the educational attainments of parents are usually a reliable source of information. However, focusing on education hides important differences across countries and over time with respect to changing life chances and equality of opportunity related to other dimensions of economic well-being. Hence, in companion reports we complement the analysis by measuring intergenerational persistence in other socio-economic dimensions.

The rest of this document is organized as follows. In section 2 we discuss the methodology to compute intergenerational mobility in education, whereas in section 3 we present our main data source: the Latinobarómetro survey. Section 4 discusses the results, and Section 5 concludes. The whole set of summary statistics by country and cohort are presented in the Appendix at the end of the document.

2 | MEASUREMENT OF EDUCATIONAL MOBILITY

In this section we describe the computed indexes of educational persistence (i.e. the lack of intergenerational mobility in education). The key variables refer to educational outcomes of parents and children. The indexes are estimated separately for each cohort and country.

A widely used measure for the intergenerational persistence of education is the slope coefficient (β) from a linear regression where the education of children is the dependent and the education of their parents the independent variable, both measured in years of education.

$$Y^c = \alpha + \beta Y^p + \epsilon \tag{1}$$

Here, Y are the years of education of parents and children, respectively, α is a constant, and ϵ the error term. β reflects the degree of regression to the population mean between the two generations. The slope coefficient can be standardized to control for differences in the standard deviation (σ) of education in the children's and parents' generation:

$$r = \beta . \frac{\sigma^p}{\sigma^c} \tag{2}$$

Hereby, r controls for changes in inequality in the distribution of years of education (see

Jäntti and Jenkins, 2015).

We also estimate Spearman's rank correlation (ρ) applied to the rank of parents and children in their respective distribution of years of education. This index captures the pure relative dimension of intergenerational persistence (see Chetty et al., 2014a; Chetty et al., 2014b; Nybom and Stuhler, 2016). Higher values of β, r, and ρ indicate a stronger association between parents' and children's education and hence lower intergenerational mobility.

Further intuitive measures of absolute persistence of education are so-called transition probabilities. We focus on the probability of children from disadvantaged social background to complete high school (following Neidhöfer et al., 2018). This measure of upward mobility from the bottom of the distribution offers an intuitive picture of the opportunity structure of the society. It is insightful to display the probability of children from advantaged background to attain a secondary degree. The comparison of both indexes, and their trends, offers a comprehensive view on absolute educational persistence and absolute upward mobility. We compute two different indicators:

The probability of (absolute) upward mobility

$$M = \text{Prob}(Y^c \geqslant s | Y^p < s) \tag{3}$$

and the probability of (absolute) persistence at the top

$$M = \text{Prob}(Y^c \geqslant s | Y^p \geqslant s). \tag{4}$$

The indicators yield the probabilities of children to achieve at least the educational degree s, namely a completed secondary schooling degree (usually 12 years of education), conditional on their parents' education. Advantaged families ($Y^p \geqslant s$) are hereby defined as those where at least one of the parents attained a secondary degree or more, while disadvantaged families ($Y^p < s$) as those where both parents did not complete secondary education.

3 | DATA SOURCE

Our main data source is the annual opinion survey Latinobarómetro. The most important feature of the Latinobarómetro survey for a study on this topic is the inclusion of retrospective questions on parental education (since 1998) that is not a universal characteristic found in all household surveys for Latin America (see Neidhöfer, 2019). Another main advantage of Latinobarómetro is that it is specifically developed for cross-country analyses and uses the same questionnaire and codification of survey items in all countries and survey waves. Here, we use all available survey waves from 1998 to 2018.

The survey includes 18 Latin American countries, while its representativeness reached 100% of the total population in all countries around 2000. It has been shown that estimates of educational attainment and its distribution deriving from Latinobarómetro are highly comparable to estimates obtained with national household surveys (Neidhöfer et al., 2018). Latinobarómetro includes retrospective information on the parent with the highest educational degree. Indeed, measuring intergenerational persistence including only the parent with the highest educational degree is the way that is commonly followed in the economics and sociology literature (see Black and Devereux, 2011). For both, parents and children, completed years of education is coded as a metric variable that ranges from 0 (no schooling)

to 15 (completed university degree).

The sample comprises individuals born between 1940 and 1999, who were at least 20 years old when surveyed. The age limit ensures that individuals have a higher likelihood to have completed their education, while the main restriction criteria is the availability of information on own and parental education. Since parental education is retrieved through retrospective questions, whether individuals and their parents reside in the same household is not relevant for inclusion in the sample. The estimates are obtained weighting each observation by the inverse probability of selection, normalizing the weights over the survey waves, and controlling for sex, and survey year fixed effects. The full sample comprises 250,630 observations; between 11,787 and 18,465 observations per survey wave. Table A.1 shows all the estimates, as well as the number of observations for each country and cohort.

4 | RESULTS

4.1 | Intergenerational mobility in Latin America

Figure 1 shows the unweighted mean over all Latin American countries of three of the measures of intergenerational persistence described in Section 2: the slope coefficient, the correlation coefficient, and the rank correlation. The linear correlation between years of education of children and parents remained roughly unchanged over time. The correlation coefficient was close to 0.5 in the early 40s and in the early 80s. However, there are some signs of falling persistence for the more recent generations. The correlation coefficient for those born in the 90s is about 0.42. The rank correlation coefficient shows a similar pattern. Interestingly, in contrast to a rather stable correlation coefficient r and rank correlation ρ, the slope coefficient β has been falling significantly over time in Latin America. The levels of mobility, measured by the slope coefficient, experienced by people born in the 80s and 90s is significantly higher than the mobility experienced by individuals born in previous decades. The slope coefficient went from above 0.5 in the cohorts born in the 40s, to below 0.35 in the cohorts born in the 90s. The difference between the time patterns of the slope coefficient β and the correlation coefficient r can be explained recalling the relationship between the slope and correlation coefficient: $\beta = r.\frac{\sigma^c}{\sigma^p}$, where σ is the standard deviation of years of education. While in older cohorts, educational inequality was higher for the children's generation than for their parents, the strong education expansion in the region implied a fall over time in the ratio of standard deviations (Torche, 2021). The development of the indicators over time can, thus, be interpreted in the sense that although intergenerational mobility of education has been rising, until the youngest cohort this mobility was rather unlikely to lead to rank changes in the distribution of education. This shows that it is necessary to complete the picture of intergenerational mobility of education in Latin America with further measures of absolute upward mobility and persistence at the top of the distribution.

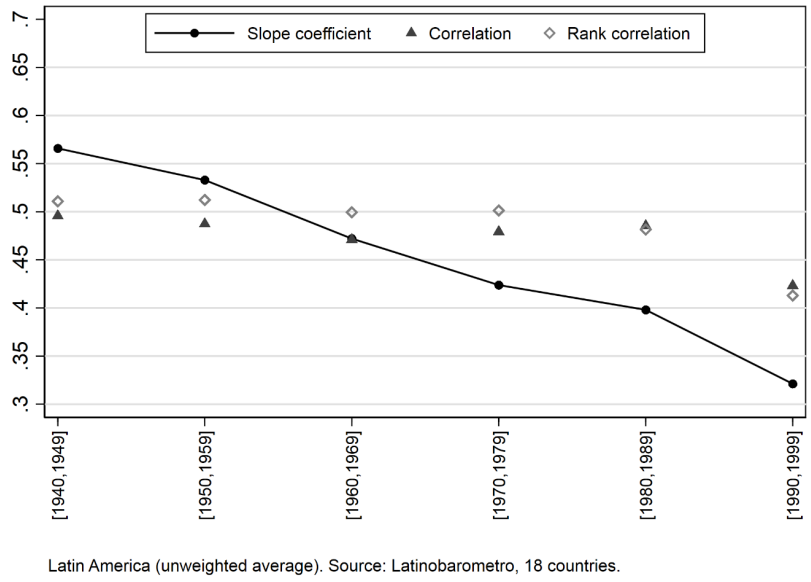


FIGURE 1 Intergenerational mobility: regional averages.
Source: Latinobarómetro, 18 countries.

Figure 2 shows the results for the transitional probabilities. The likelihood of individuals with low-educated parents to complete secondary schooling increased from a regional average of less than 20% in the 1940s to over 40% in the 1990s. The likelihood of individuals with high-educated parents to complete secondary schooling, which was almost four times higher than the likelihood of individuals with low-educated parents, is less than two times higher for the youngest cohort. Overall, intergenerational mobility of education in Latin America is characterized by a strong degree of persistence at the top of the distribution, and a closing gap driven by a substantially increasing likelihood of individuals with low-educated parents to complete secondary schooling.

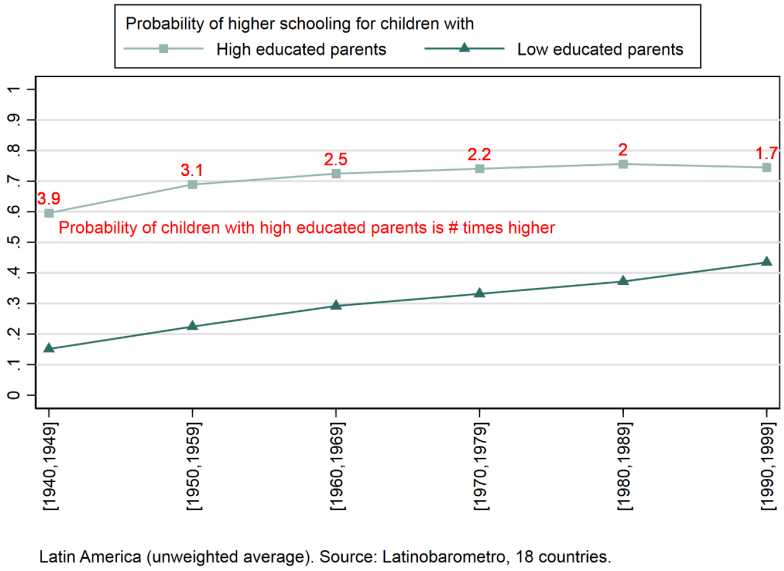


FIGURE 2 Transition probabilities: regional averages.
Source: Latinobarómetro, 18 countries.

On average, the likelihood of children with low-educated parents to complete secondary education increased by 28 percentage points from the 1940s to the 1990s. However, the regional average hides significant cross-country differences in intergenerational mobility. While in some countries secondary education completion reached high levels, in others constantly low levels of mobility are observed.

Figure 3 shows the change in absolute upward mobility in percentage points in all countries over the period of analysis. In all Latin American countries upward mobility increased by more than ten percentage points, but in some, especially El Salvador, Guatemala, Nicaragua, and Honduras, it is still on very low levels. Conversely, in many countries upward mobility reached high levels close or higher than 50%. After having observed these heterogeneities across countries and cohorts in the region, in the next section we will analyze the existing heterogeneities within countries.

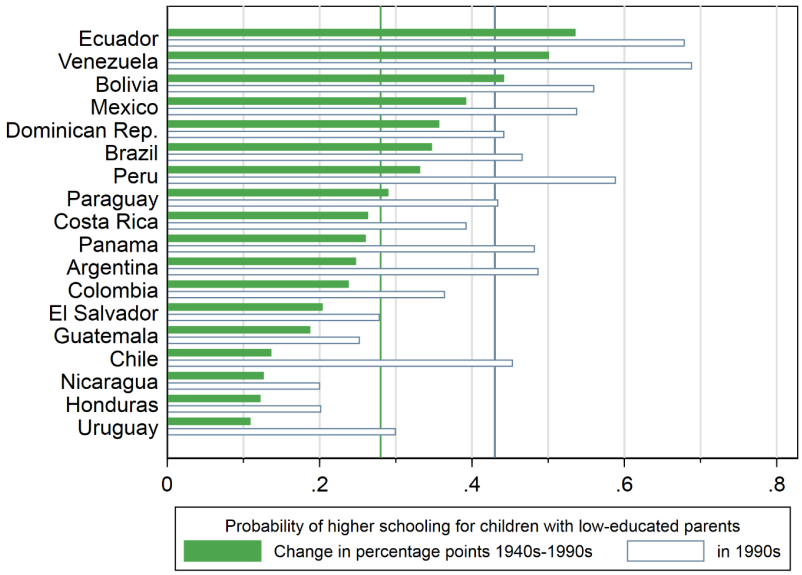


FIGURE 3 Probability of children of low-educated parents: cross country ranking in level of 1990s cohort and change between 1940s and 1990s.

Source: Latinobarómetro, 18 countries.

4.2 | Heterogeneities

In this section we analyze heterogeneities in intergenerational mobility within countries, namely by gender and city-size. Figure 4 shows the regional average likelihood of male and female individuals with distinct parental background to complete secondary schooling. In both cases, and for both sexes, we observe an upward trend. However, on average the upward mobility of women is steeper and surpasses the upward mobility of men in the two youngest cohorts. Figure 5 shows that this phenomenon applies to most countries in the region. While in the 1940s women with low-educated parents were less likely to complete secondary schooling in most countries, in more recent times only in few countries secondary school completion rates of men are substantially higher.

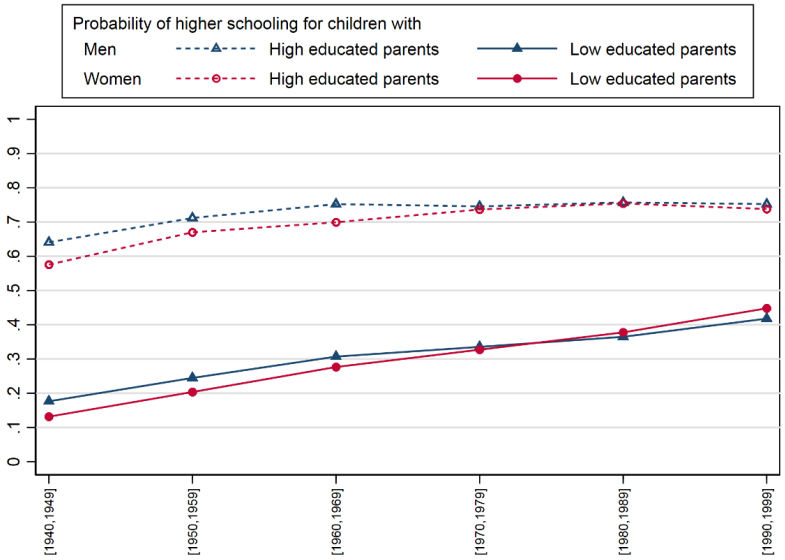


FIGURE 4 Upward mobility and top persistence of male and female. *Source:* Latinobarómetro, 18 countries.

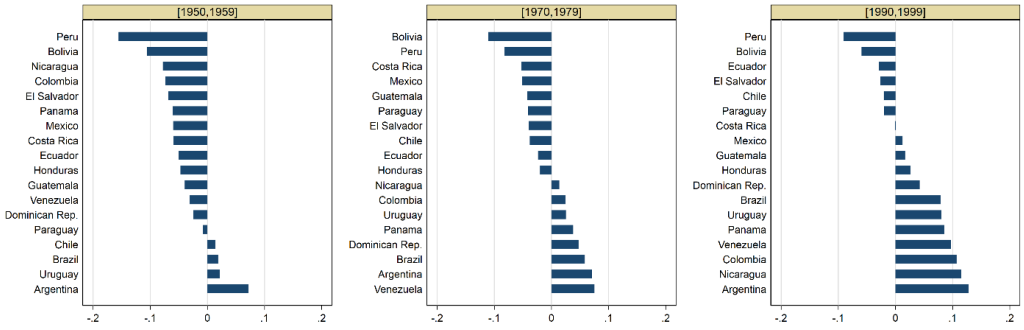


FIGURE 5 Difference in the likelihood of secondary school completion of female with low-educated parents vs. male with low-educated parents.

Source: Latinobarómetro, 18 countries.

Figure 6 and Figure 7 show the heterogeneity in intergenerational mobility by city-size. As shown in Figure 6, the likelihood to complete secondary schooling is higher in large cities than in small ones. Furthermore, although the trend in the likelihood of individuals from low-educated families to complete high school is positive regardless of the city size, the inequality between top persistence and upward mobility is lower in large cities. Indeed, the resulting degree of intergenerational persistence measured by the slope coefficient, which takes into account the entire distribution of years of schooling, shows that mobility is higher in large cities. Hence, the more widespread educational opportunities offered by larger cities seem indeed to contribute to higher educational investments and higher social mobility over time. However, as shown in Figure 8, usually there is a high correlation between the mobility experienced by cohorts in different city types across countries. This suggests that the overall institutional framework of the country remains an important factor for educational mobility.

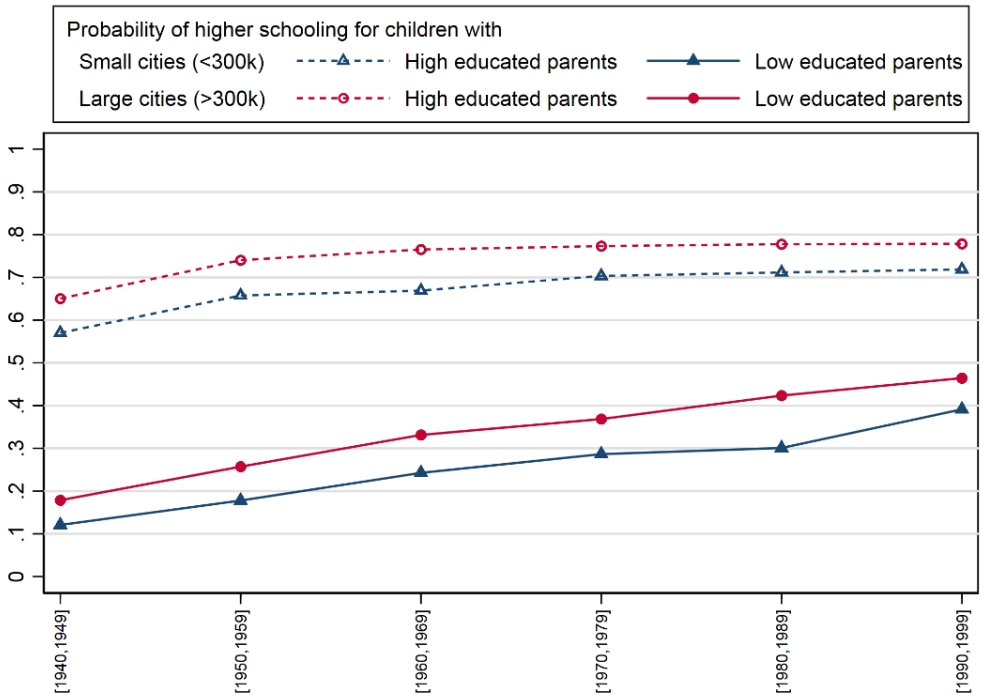


FIGURE 6 Upward mobility and top persistence by city-size.
Source: Latinobarómetro, 18 countries.

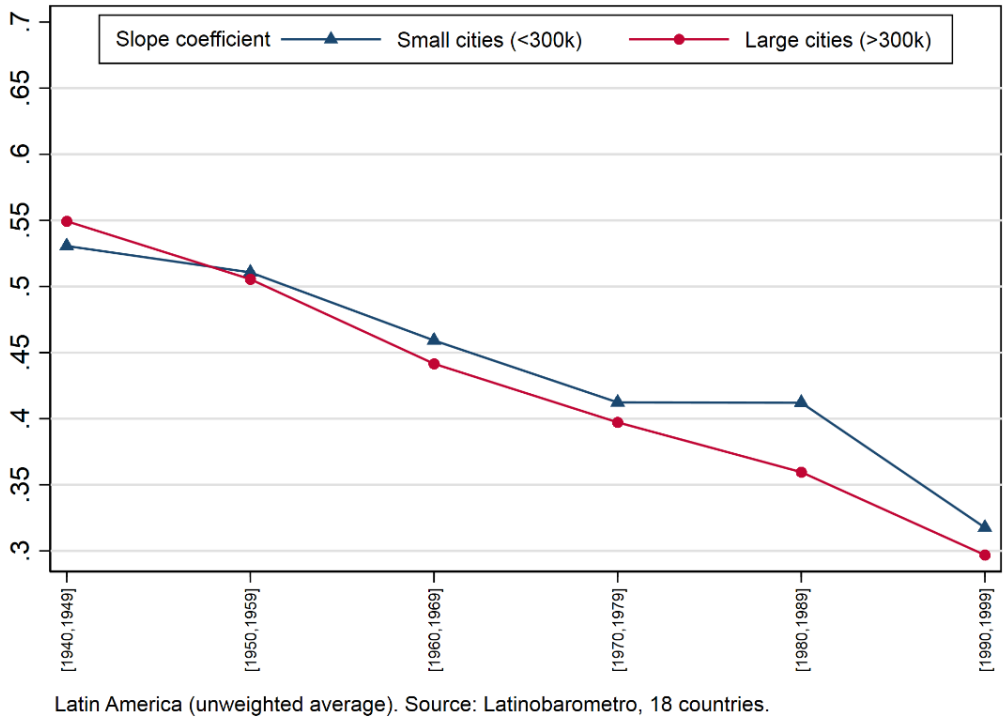
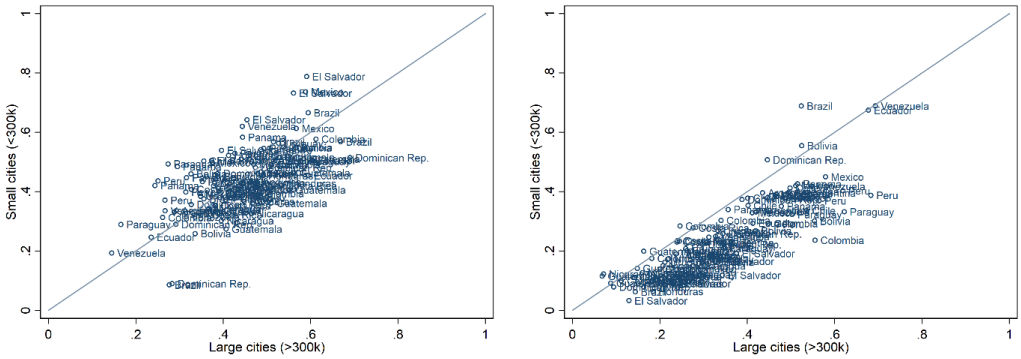


FIGURE 7 Slope coefficient by city-size.
Source: Latinobarómetro, 18 countries.



(a) Slope coefficient

(b) Upward mobility

FIGURE 8 Correlation between the mobility in small and large cities.
Source: Latinobarómetro, 18 countries.

4.3 | Transition probabilities based on quantiles

To provide further benchmark indicators for persistence at the top and bottom of the distribution, we re-estimate the probability to complete secondary education of individuals with distinct parental background. In the main analysis, low-educated parents are defined as parents whose level of education is lower than a completed secondary degree, while high-educated parents as parents with at least a completed secondary degree. For this additional analysis, we choose an alternative specification based on the distribution of years of education in the parental generation. Low-educated parents are parents in the bottom tercile of the distribution, while high-educated parents are parents in the top tercile of the distribution. The estimates are shown in Figure 9. As is evident, the trends are mostly unchanged and the inequality in higher schooling attainment is also similar to the estimates in the main analysis.

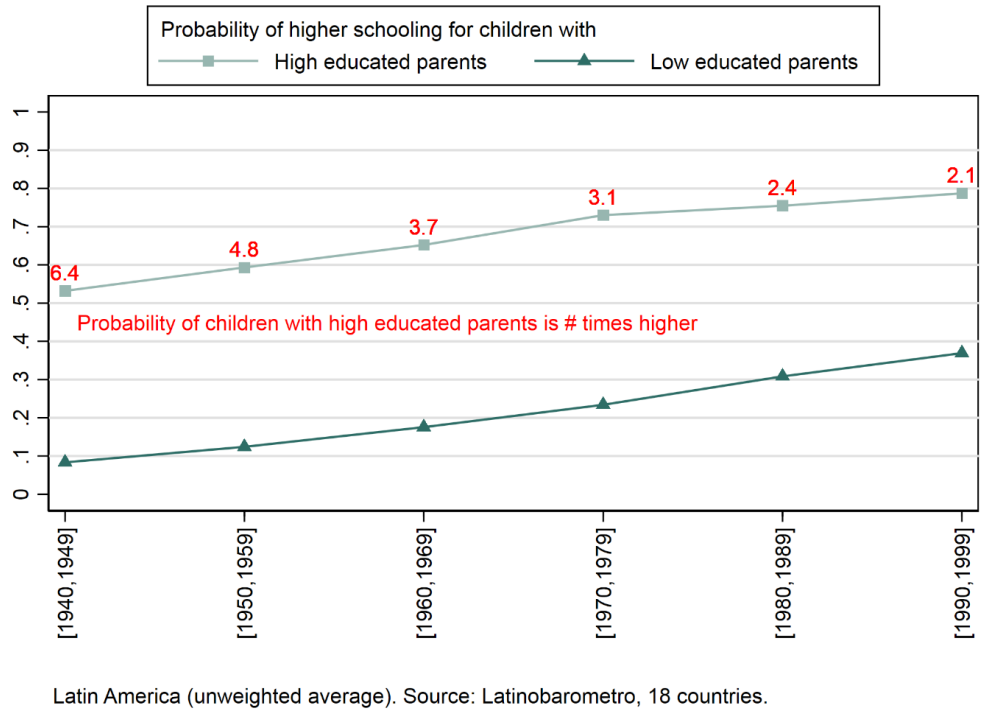


FIGURE 9 Probability of higher schooling: parental education measured with respect to the entire distribution (low-educated parents: bottom tercile of the distribution; high-educated parents: top tercile of the distribution).

Source: Latinobarómetro, 18 countries.

5 | EDUCATIONAL DISRUPTIONS DUE TO COVID-19

The positive trend in educational mobility experienced in Latin America is seriously challenged by the COVID-19 pandemic. The shock on human capital is likely to have long lasting consequences, especially for children of low-educated families. The main channel of the educational disruptions is the closure of educational facilities established in most countries to limit the spread of the disease. In November 2020, around eight months after the beginning of the pandemic, 97% of children in the region were still out of classrooms (UNICEF, 2020). In the current analyses on the impact of school closures on learning outcomes, the heterogeneity in the learning losses experienced by students of different socioeconomic background is largely documented (e.g. Engzell et al., 2021). This dynamic is further exacerbated by the economic shocks suffered by households during the COVID-19 pandemic. School closures and lowered incomes are likely to decrease human capital investments for children living in poorer households in particular. These effects are likely to be irreversible and have negative consequences on the chances of upward mobility of the affected population throughout their lives.

Neidhöfer et al. (2021) estimate the potential impact of the pandemic on the accumulation and allocation of human capital, and simulate its consequences for intergenerational persistence of education and equality of educational opportunities in Latin America. Hereby, their approach considers several variables that show considerable variation across Latin American countries: closure and reopening of educational facilities; online and offline interventions aimed at facilitating learning at home; the distribution of internet coverage among

socio-economic groups; epidemiological parameters affecting the likelihood of infection and death of household members; household income losses; and, social assistance measures designed to mitigate the pandemic-related income losses. Their findings show that, despite that educational mitigation policies were able to partly reduce learning losses in some countries, the pandemic puts at risk the educational attainments of the most vulnerable and equality of opportunity. The likelihood of children from low educated families to complete high-school could fall by 20 percentage points or more, reversing decades of progress made in Latin America in terms of access to education among children from disadvantaged households.

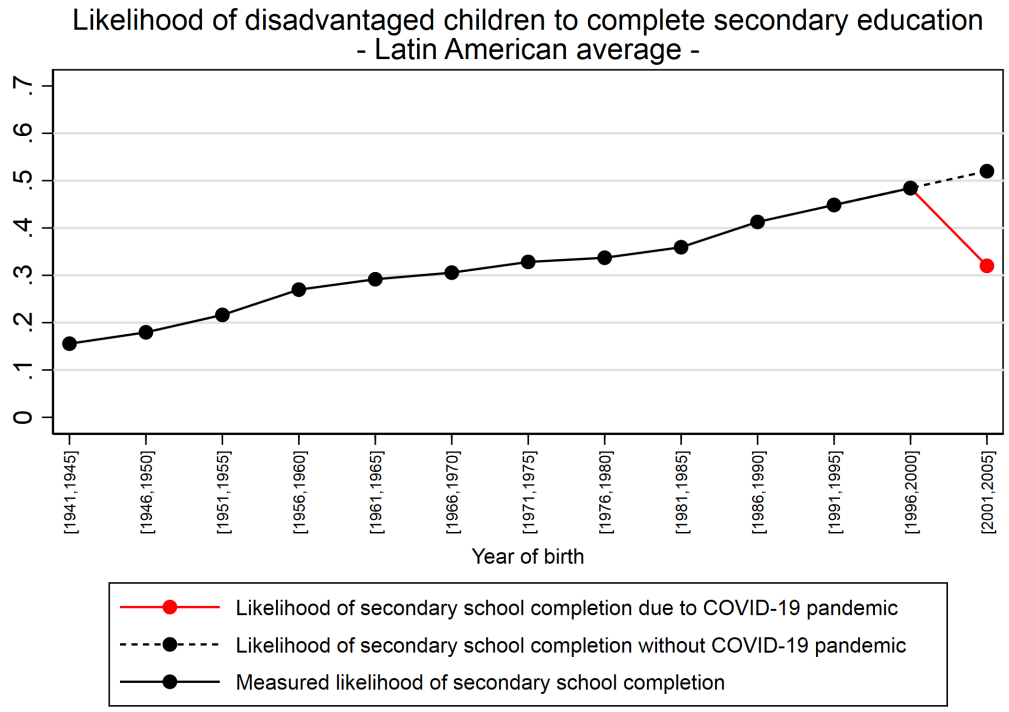


FIGURE 10 Educational disruptions due to COVID-19.
Source: Neidhöfer et al. (2021).

Figure 10, drawn from Neidhöfer et al. (2021), shows the projected trend in the average degree of absolute educational upward mobility (i.e. the likelihood of secondary school completion for individuals whose parents did not complete high school) for the region. The graph shows the simulated degree of educational upward mobility of the cohort closest to high school completion in 2020, namely the 2001-2005 birth cohort, with and without the impact of the COVID-19 shock. As can be seen in the Figure such a decrease in high school graduation rates of disadvantaged children would bring the region several decades back. The resulting rather low average degree of educational upward mobility was lastly reported in Latin America for cohorts born in the 1960s (see also Neidhöfer et al., 2018).

6 | CONCLUSIONS

In this document we provided a comprehensive analysis on intergenerational mobility in Latin America. In particular, we focus on the association of parental education with the education of their children. Our results show a positive trend in intergenerational mobility in most countries in the region. Furthermore, we estimate intergenerational mobility patterns by gender and city-size and uncover interesting heterogeneities across and within countries. Especially, the upward mobility of children from the bottom of the distribution has been rising for decades. However, this encouraging picture is seriously challenged by the educational disruptions caused by the COVID-19 pandemic, which are likely to have long lasting consequences.

Finally, focusing on education hides important differences across countries and over time with respect to changing life chances and equality of opportunity related to other dimensions of economic well-being. In companion reports we complement the analysis by measuring intergenerational persistence in other dimensions of socio-economic status.

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A | APPENDIX

| Intergenerational mobility in Latin America: Indicators by country and cohort

TABLE A.1 Estimates for each country and cohort

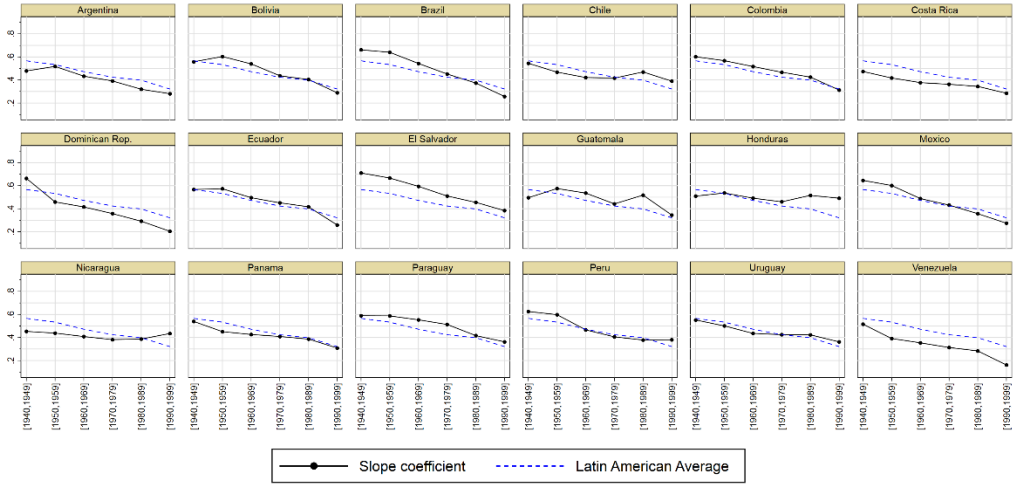
Country	Cohort	Slope coeff.	Correlation coeff.	Rank corr.	Absolute Upward Mobility	Absolute Persistence	#Obs.
Argentina	[1940,1949]	0.48	0.5	0.5	0.24	0.74	2162
Argentina	[1950,1959]	0.52	0.54	0.53	0.31	0.81	2758
Argentina	[1960,1969]	0.43	0.5	0.49	0.4	0.83	3233
Argentina	[1970,1979]	0.39	0.5	0.48	0.42	0.84	3785
Argentina	[1980,1989]	0.32	0.46	0.44	0.49	0.84	3061
Argentina	[1990,1999]	0.28	0.42	0.42	0.49	0.81	867
Bolivia	[1940,1949]	0.56	0.5	0.55	0.12	0.59	1479
Bolivia	[1950,1959]	0.6	0.53	0.58	0.17	0.8	2081
Bolivia	[1960,1969]	0.54	0.52	0.57	0.26	0.8	3047
Bolivia	[1970,1979]	0.44	0.51	0.57	0.34	0.85	4155
Bolivia	[1980,1989]	0.4	0.53	0.55	0.45	0.89	3631
Bolivia	[1990,1999]	0.29	0.45	0.46	0.56	0.91	1114
Brazil	[1940,1949]	0.66	0.5	0.49	0.12	0.64	1517
Brazil	[1950,1959]	0.64	0.52	0.52	0.19	0.75	2439
Brazil	[1960,1969]	0.54	0.48	0.5	0.27	0.77	3424
Brazil	[1970,1979]	0.45	0.48	0.48	0.34	0.76	3972
Brazil	[1980,1989]	0.37	0.46	0.48	0.42	0.81	3132
Brazil	[1990,1999]	0.26	0.4	0.41	0.47	0.79	713
Chile	[1940,1949]	0.54	0.63	0.64	0.32	0.83	1896
Chile	[1950,1959]	0.47	0.58	0.61	0.32	0.8	2765
Chile	[1960,1969]	0.42	0.56	0.57	0.39	0.84	3676
Chile	[1970,1979]	0.42	0.55	0.51	0.4	0.85	3722
Chile	[1980,1989]	0.47	0.61	0.54	0.46	0.89	2537
Chile	[1990,1999]	0.39	0.48	0.46	0.45	0.9	706
Colombia	[1940,1949]	0.6	0.52	0.53	0.13	0.55	1462
Colombia	[1950,1959]	0.57	0.5	0.52	0.19	0.72	2349
Colombia	[1960,1969]	0.52	0.5	0.54	0.28	0.73	3658
Colombia	[1970,1979]	0.47	0.52	0.51	0.34	0.81	4222
Colombia	[1980,1989]	0.42	0.54	0.52	0.38	0.84	3336
Colombia	[1990,1999]	0.31	0.45	0.37	0.36	0.71	930
Costa Rica	[1940,1949]	0.47	0.43	0.39	0.13	0.55	1111
Costa Rica	[1950,1959]	0.42	0.39	0.38	0.24	0.67	1923
Costa Rica	[1960,1969]	0.38	0.4	0.39	0.25	0.65	2738
Costa Rica	[1970,1979]	0.36	0.43	0.43	0.24	0.63	3276
Costa Rica	[1980,1989]	0.34	0.42	0.4	0.29	0.61	2701
Costa Rica	[1990,1999]	0.29	0.39	0.4	0.39	0.7	743
Dominican Rep.	[1940,1949]	0.66	0.54	0.49	0.09	0.56	642
Dominican Rep.	[1950,1959]	0.46	0.39	0.41	0.2	0.45	957
Dominican Rep.	[1960,1969]	0.42	0.4	0.41	0.28	0.53	1559
Dominican Rep.	[1970,1979]	0.36	0.38	0.37	0.33	0.6	1953
Dominican Rep.	[1980,1989]	0.29	0.37	0.36	0.38	0.66	2266
Dominican Rep.	[1990,1999]	0.2	0.27	0.25	0.44	0.64	776
Ecuador	[1940,1949]	0.57	0.5	0.54	0.14	0.61	1817
Ecuador	[1950,1959]	0.57	0.51	0.53	0.25	0.74	2212
Ecuador	[1960,1969]	0.5	0.48	0.51	0.37	0.81	3486
Ecuador	[1970,1979]	0.45	0.51	0.53	0.43	0.86	4421
Ecuador	[1980,1989]	0.42	0.51	0.52	0.46	0.87	3505
Ecuador	[1990,1999]	0.26	0.45	0.44	0.68	0.93	961
El Salvador	[1940,1949]	0.71	0.54	0.49	0.08	0.58	1390
El Salvador	[1950,1959]	0.67	0.57	0.59	0.14	0.74	1918
El Salvador	[1960,1969]	0.59	0.52	0.56	0.21	0.75	2454
El Salvador	[1970,1979]	0.51	0.54	0.58	0.26	0.77	3761
El Salvador	[1980,1989]	0.46	0.52	0.55	0.23	0.68	2781
El Salvador	[1990,1999]	0.38	0.49	0.5	0.28	0.65	807

Source: own calculations based on Latinobarómetro.

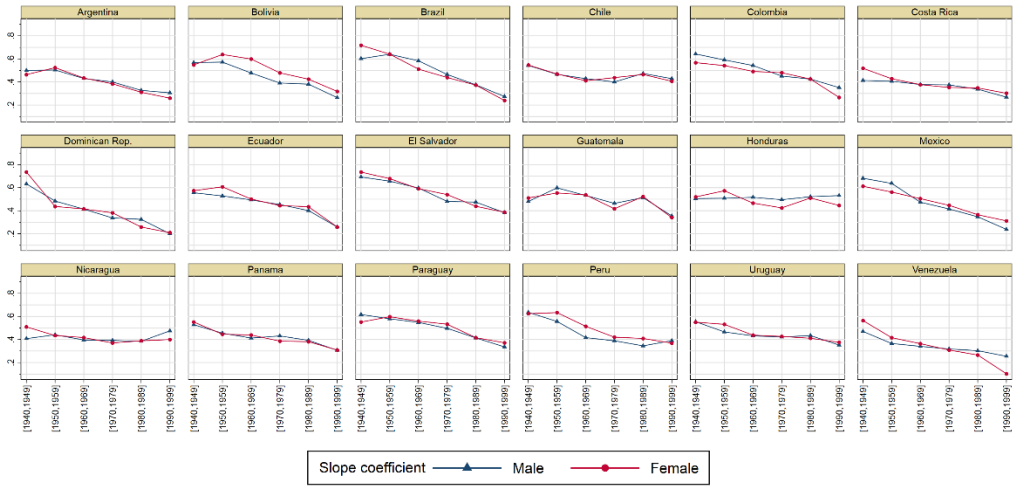
Estimates for each country and cohort (cont.)

Country	Cohort	Slope coeff.	Correlation coeff.	Rank corr.	Absolute Upward Mobility	Absolute Persistence	#Obs.
Guatemala	[1940,1949]	0.5	0.41	0.57	0.06	0.43	1115
Guatemala	[1950,1959]	0.58	0.49	0.57	0.09	0.53	1615
Guatemala	[1960,1969]	0.54	0.45	0.58	0.15	0.59	2368
Guatemala	[1970,1979]	0.44	0.42	0.57	0.18	0.55	3516
Guatemala	[1980,1989]	0.52	0.49	0.5	0.16	0.63	2647
Guatemala	[1990,1999]	0.34	0.34	0.32	0.25	0.45	960
Honduras	[1940,1949]	0.51	0.4	0.44	0.08	0.5	1262
Honduras	[1950,1959]	0.54	0.43	0.46	0.11	0.6	1835
Honduras	[1960,1969]	0.49	0.42	0.47	0.15	0.59	2540
Honduras	[1970,1979]	0.46	0.46	0.53	0.14	0.59	3618
Honduras	[1980,1989]	0.52	0.52	0.52	0.13	0.62	3176
Honduras	[1990,1999]	0.49	0.51	0.5	0.2	0.6	961
Mexico	[1940,1949]	0.65	0.52	0.49	0.15	0.36	1393
Mexico	[1950,1959]	0.6	0.53	0.54	0.24	0.54	1957
Mexico	[1960,1969]	0.49	0.48	0.5	0.36	0.72	2648
Mexico	[1970,1979]	0.43	0.51	0.53	0.45	0.79	3346
Mexico	[1980,1989]	0.36	0.48	0.5	0.53	0.86	2618
Mexico	[1990,1999]	0.27	0.39	0.41	0.54	0.83	868
Nicaragua	[1940,1949]	0.45	0.39	0.46	0.07	0.4	909
Nicaragua	[1950,1959]	0.44	0.38	0.47	0.13	0.54	1681
Nicaragua	[1960,1969]	0.41	0.38	0.46	0.18	0.63	2515
Nicaragua	[1970,1979]	0.38	0.42	0.5	0.2	0.6	3402
Nicaragua	[1980,1989]	0.39	0.45	0.46	0.18	0.53	2955
Nicaragua	[1990,1999]	0.43	0.51	0.49	0.2	0.58	990
Panama	[1940,1949]	0.54	0.5	0.55	0.22	0.71	1346
Panama	[1950,1959]	0.45	0.44	0.49	0.35	0.79	1903
Panama	[1960,1969]	0.43	0.47	0.53	0.41	0.78	2703
Panama	[1970,1979]	0.41	0.49	0.5	0.44	0.76	3376
Panama	[1980,1989]	0.39	0.5	0.47	0.42	0.77	2431
Panama	[1990,1999]	0.31	0.44	0.37	0.48	0.75	661
Paraguay	[1940,1949]	0.59	0.53	0.54	0.14	0.67	1148
Paraguay	[1950,1959]	0.59	0.52	0.53	0.17	0.68	1659
Paraguay	[1960,1969]	0.55	0.52	0.52	0.21	0.7	2269
Paraguay	[1970,1979]	0.51	0.52	0.52	0.27	0.77	3030
Paraguay	[1980,1989]	0.42	0.47	0.45	0.39	0.79	3199
Paraguay	[1990,1999]	0.36	0.41	0.35	0.43	0.8	1034
Peru	[1940,1949]	0.63	0.56	0.61	0.26	0.78	1439
Peru	[1950,1959]	0.6	0.57	0.62	0.39	0.87	2432
Peru	[1960,1969]	0.47	0.52	0.57	0.46	0.87	3422
Peru	[1970,1979]	0.41	0.52	0.54	0.5	0.85	4412
Peru	[1980,1989]	0.38	0.54	0.52	0.53	0.87	3497
Peru	[1990,1999]	0.38	0.54	0.53	0.59	0.93	1023
Uruguay	[1940,1949]	0.55	0.51	0.51	0.19	0.64	2379
Uruguay	[1950,1959]	0.5	0.49	0.47	0.24	0.7	2874
Uruguay	[1960,1969]	0.44	0.46	0.44	0.24	0.69	3097
Uruguay	[1970,1979]	0.42	0.48	0.46	0.22	0.64	3561
Uruguay	[1980,1989]	0.42	0.51	0.5	0.24	0.61	2479
Uruguay	[1990,1999]	0.36	0.4	0.45	0.3	0.59	708
Venezuela	[1940,1949]	0.52	0.45	0.43	0.19	0.59	1358
Venezuela	[1950,1959]	0.39	0.4	0.4	0.31	0.67	2364
Venezuela	[1960,1969]	0.35	0.41	0.4	0.4	0.77	3671
Venezuela	[1970,1979]	0.31	0.39	0.42	0.45	0.81	4339
Venezuela	[1980,1989]	0.28	0.36	0.38	0.53	0.83	3117
Venezuela	[1990,1999]	0.16	0.28	0.3	0.69	0.85	817

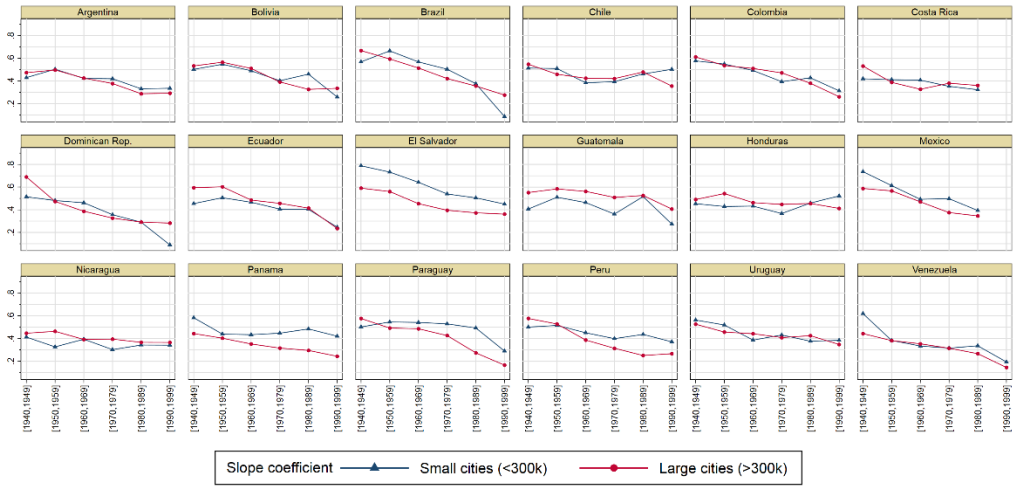
Source: own calculations based on Latinobarómetro.



(a) By country

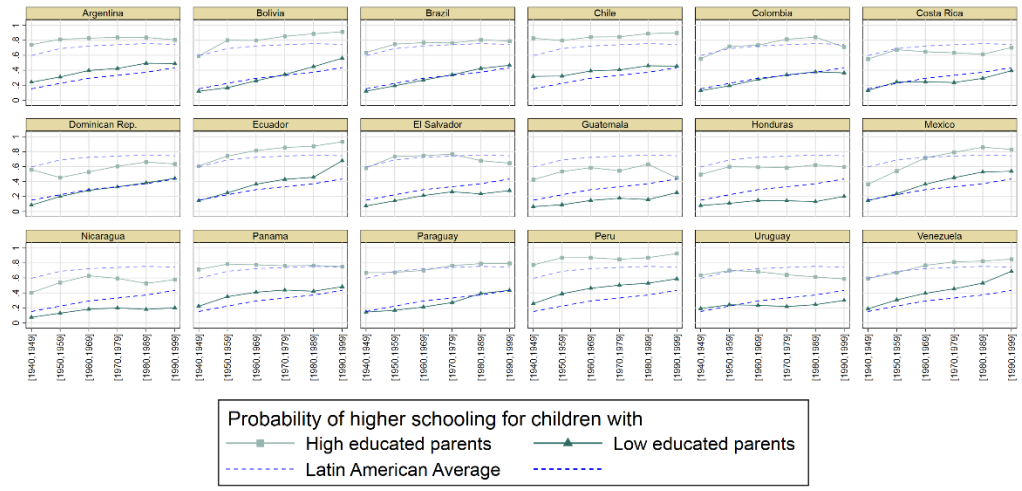


(b) By country and gender

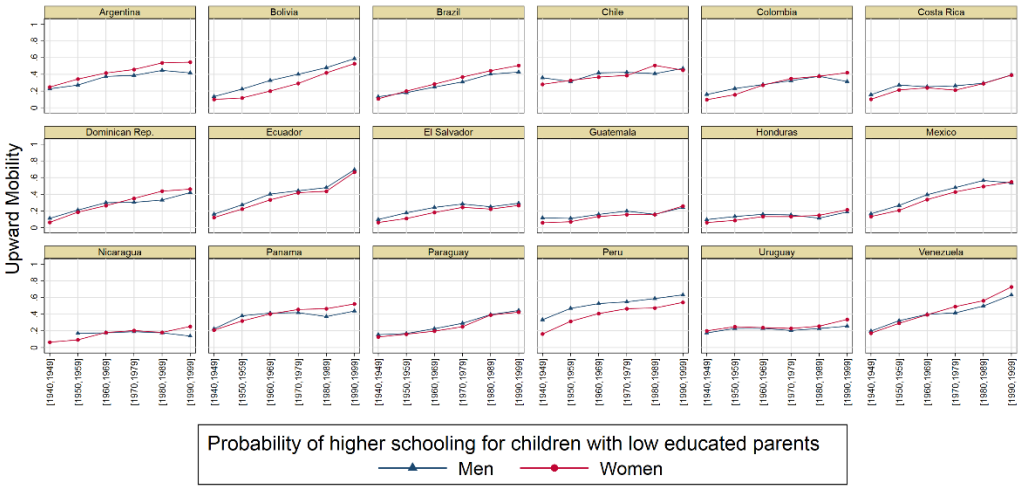


(c) By country and city-size

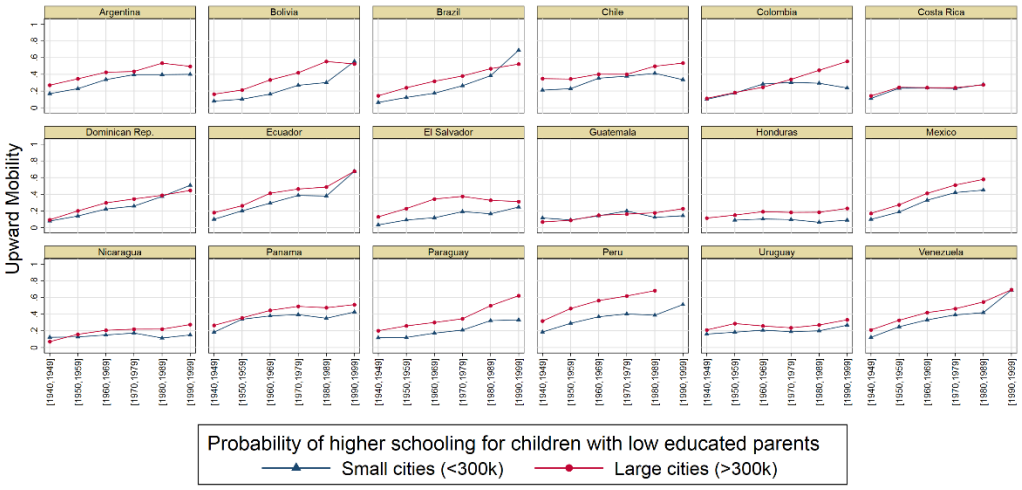
FIGURE A.1 Slope coefficient. *Source:* own calculations based on Latinobarómetro.



(a) Probability of higher schooling for children by parents' education level



(b) Probability of higher schooling for children with low educated parents by gender



(c) Probability of higher schooling for children with low educated parents by city-size

FIGURE A.2 Absolute upward mobility. *Source:* own calculations based on Latinobarómetro.