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# Inter-generational persistence in the ownership of real assets: evidence from Latin America

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We explore inter-generational mobility in assets ownership for Latin America. First, we estimate the inter-generational persistence coefficients in the ownership of real assets such as houses, businesses, land, and commercial stores. Our findings confirm the strong correlation between parents and offspring ownership, even after controlling for education and labor outcomes. Second, we provide evidence pointing to the role of inheritances, assortative mating, health shocks, lack of access to credit, and the intergenerational transmission of personality traits, as potential mechanisms behind the high persistence. To the best of our knowledge, this is the first paper to estimate inter-generational persistence in asset ownership and the mechanisms behind this phenomenon for Latin America, a highly unequal region.

#### KEYWORDS

home ownership, wealth inequality, inter-generational mobility

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CAF - DOCUMENTO DE TRABAJO #2023/02

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# Persistencia intergeneracional en la propiedad de activos reales: evidencia desde América Latina

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En este trabajo, exploramos la movilidad intergeneracional en la tenencia de activos para América Latina. En primer lugar, estimamos los coeficientes de la persistencia internacional en la tenencia de activos reales como viviendas, empresas, tierra y locales comerciales. Los hallazgos confirman que existe una correlación fuerte en la probabilidad de tenencia de estos activos entre padres y sus descendencia, incluso luego de controlar por nivel educativo y resultados en el mercado laboral. En segundo lugar, se brinda evidencia que apunta al rol de la herencia, el apareamiento selectivos, choques en la salud, la falta de acceso al crédito y la transmisión intergeneracional de rasgos intergeneracionales, como mecanismos potenciales detrás de la alta persistencia. Según nuestro conocimiento, este es el primer estudio que estima la persistencia intergeneracional en la propiedad de activos y los mecanismos detrás de este fenómeno en América Latina, una región muy desigual.

## KEYWORDS

propiedad de viviendas, desigualdad de la riqueza, movilidad intergeneracional

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## 1 | INTRODUCTION

Wealth is arguably the best proxy for household welfare; unfortunately, it is very unequally distributed among the population, even more than income.<sup>1</sup> Then, it is not surprising that wealth inequality has been the matter of study for several papers (See, for example, Zucman 2019 and Killewald, Pfeffer y Schachner 2017). A common goal of this literature has been to understand inequality in cross-section data; however, a recent perspective has focused on the issue of inter-generational mobility, defined as the extent to which some key characteristics and outcomes of individuals, such as wealth levels or assets ownership, differ from those of their parents.

Inequality in the population and inter-generational mobility in any outcome are not independent objects. A stylized fact in the recent literature on inequality is the positive association between measures of cross-section inequality (usually Gini coefficients) and measures of (lack of) inter-generational mobility (usually the inter-generational persistence coefficient estimated as in equation 1). This association is known as *the Great Gatsby Curve* (Durlauf, Kourtellos y Tan 2022). One implication of this association is that to fully understand the inequality in a particular outcome at a certain point in time, it is indispensable to understand the persistence of this outcome across generations.

Moreover, socioeconomic inter-generational mobility is, in its own right, an essential subject of study, as it connects to the concept of *equality of opportunity* (Corak 2013). Under low inter-generational mobility, the family background becomes a crucial determinant of people's assets and welfare. Additionally, inter-generational mobility affects the potential of insurance within the family: in a world with high inter-generational mobility, poor parents have better chances of having wealthier offspring and receiving transfers from them.

Hence, a deep exploration of inequality demands an inter-generational perspective. However, measuring inter-generational mobility requires having information on the outcomes of interest for both parents and offspring. Unfortunately, this information requirement is only sometimes met in standard data sets, especially when the subject of interest is wealth or assets holding; and when dealing with developing countries. In fact, in the case of wealth, the measurement of the degree of inter-generational mobility has been restricted to a few developed economies.

In a pioneer work, Charles y Hurst 2003 estimate the inter-generational persistence coefficient (IPC) of the log of wealth to be 0.37 for the case of the US, whereas Boserup et al. 2014, find the value for Denmark to be 0.27. Similarly, Clark y Cummins 2015 estimate the IPC in the UK for five generations during the period 1858 and 2012. Their estimations lie between 0.37 and 0.49. Other studies explore the IPC, not in the level of wealth, but in the position in the wealth distribution, in the so call *rank-rank* estimations. This is the case of Adermon, Lindahl y Waldenström 2018, whose estimations for Sweden lie in the interval 0.3-0.4.

To the best of our knowledge, we are the first to analyze this phenomenon for Latin America, a region highly unequal. In particular, we estimate the coefficient of the inter-generational persistence in the ownership of real assets for several Latin America countries.<sup>2</sup> We not only focus on the house, which represents the primary asset for most families, but

<sup>1</sup>According to the World Inequality Report of 2022, the wealthiest 10 % of the global population currently takes 52 % of worldwide income and owns 76 % of all wealth (see Chancel y col. 2021).

<sup>2</sup>Gandelman y Lluberás 2022 study the wealth distribution for 4 Latin America countries based on household financial surveys, with a focus on inequality and wealth composition. Although they do not estimate the wealth inter-generational persistence coefficients — the standard measure of mobility across generations — they explore (only for Uruguay) how education mobility affects wealth. In particular, they find that having significant inter-generational educational advancement (that is, having more years of education than parents) is associated with greater wealth.

also explore inter-generational persistence in the ownership of a business, a retail store, other houses, and land. Our analysis is based on EMOVI for Mexico and on ECAF, a survey carried out in several Latin American cities.

Our estimations suggest an important inter-generational persistence in the ownership of all these assets. For the case of houses, for example, the lowest persistence is found in ECAF 2021, a case in which the estimated IPC is around 0.12. This implies that the probability of owning a house is 12 percentage points larger for a person whose parents owned a house relative to those whose parents did not. This persistence is sizable considering that the mean of the variable in this survey is around 61 %. The persistence in other assets is even larger, at least in relative terms.

In addition to the estimation of the degree of inter-generational persistence in real assets ownership, we provide suggesting evidence on the role of inheritance, assortative mating, health shocks, lack of access to house loans, and the transmission of personality traits as potential mechanisms behind the high persistence that we found.

Regarding inheritance, we find that controlling for the condition of inheriting the property considerably reduces the persistence coefficient. For example, when using our most recent data set (ECAF 2021), the lowest coefficient reduction is in the case of home ownership, and yet, it is around 33 %. Regarding assortative mating, we find that the offspring of homeowners are more likely to marry each other than in a random match. According to our analysis, this phenomenon accounts for around 25 % of the inter-generational persistence in home ownership.

Regarding health shocks, we first find that self-reported health conditions of parents and offspring are positively correlated. We also find that parents' health conditions affect bequests, home ownership, and the upward mobility of offspring. For example, the conditional probability of receiving an inheritance is 4.7 percentage points larger for people reporting parents with good health conditions than for those reporting parents with bad health conditions. For the case of the probability of owning a house, the difference is 4.8 percentage points. Regarding access to credit, we found that the coefficients of inter-generational persistence are larger in geographical areas with fewer penetrations of house loans.

Finally, we find intergenerational persistence in personality traits such as the *Big Five*, risk aversion, locus of control, and self-control. That is, even after controlling for education and labor outcome, the measure for a particular trait in the parents is a significant predictor of the measure for that trait in the offspring. Moreover, we also find that controlling for these personality traits reduces the IPC in asset ownership, although the reductions seem mild in general. The biggest effect can be observed in business ownership with the survey ECAF 2012, where the IPC coefficient drops by 14 percent after controlling for personality traits.

Although the ideal analysis should also include inter-generational persistence in net wealth (intensive margin) and not only in assets ownership (extensive margin), we believe that this study provides valuable insights into the magnitude of the problem of (lack of) inter-generational mobility in wealth and the main mechanisms behind it.

The remaining sections of the paper are organized as follows. Section 2 describes the main data sets we use, and section 3 briefly describes our approach to estimating mobility and our estimates of inter-generational persistence. In section 4, we discuss the potential mechanisms behind the persistence in asset ownership. Finally, we conclude in section 5 with a brief discussion of the policy implications of our findings.

## 2 | THE DATA

In this study, we analyze two data sets. The first one is the Social Mobility Survey for Mexico, which is nationally representative. The second data set is the CAF Household Survey, which provides data for multiple major metropolitan areas across Latin America.<sup>3</sup> Henceforth; we will refer to these two data sets as EMOVI and ECAF, respectively.

Since 2006, under the coordination of the Espinoza Yglesias Studies Center, three waves are available for EMOVI : 2006, 2011, and 2017. We use all these waves. Regarding ECAF, this data set has been produced annually since 2008 by CAF— Development Bank of Latin America— except for years 2020 and 2022. However, only the 2012 and 2021 waves have information about parents' assets ownership. Hence, we focus on these two waves of ECAF.

We can estimate the coefficients of inter-generational persistence in business and home ownership in all these datasets. In the case of business, ownership is defined by the condition of being an employer. Regarding other real assets; EMOVIs register the ownership of land, additional houses, and shop separately; while the ECAFs bundle them together in a single category ("other assets"). Hence, only for EMOVI, we can compute the inter-generational persistence in these three specific assets. For the ECAF, we estimate the intergeneration persistence in a variable that reflects the possession of any of these three assets.

Unfortunately, the information to explore mechanisms behind the inter-generation persistence is more dispersed across waves. The role of inheritance can only be studied in EMOVI 2011 and ECAF 2021, the role of assortative mating in home ownership in EMOVI 2006, and the role of health shocks in ECAF 2021. Regarding access to credit, except for EMOVI 2006 and EMOVI 2017, all data sets include a question exploring if the house purchase was financed with a bank loan.

Regarding the role of personality traits, ECAF 2012 has measurements of some personality traits but only for one generation. Fortunately, in the year 2015, there exists a wave of EMOVI, not under the coordination of the Espinoza Yglesias Studies Center, that measures some personality traits for both parents and offspring living together; hence, it is suitable to explore inter-generational persistence in such traits as we do in section 4.5. However, this data set does not allow estimating IPCs in the ownership of main real assets, as it does not measure asset ownership in parents. Hence, we limit the use of EMOVI 2015 to the discussion of the role of personality traits<sup>4</sup>.

In Table 1 we show the ownership rate of different real assets when considering people older than 30 years. Around 60-70 % of families declare that they own the house where they currently live, while around 3 % of people own an additional house. Home ownership rates in the regions seem comparable to those in some developed economies. For example, Eyles, Blanden y Machin 2021 reports a home ownership rate of 68 % for the UK. Table 1 also suggests a reduction in the prevalence of house ownership over time. This trend generalizes to other data sets; for example, based on household surveys of 15 countries of Latin America, Gasprini, Ciaschi y Neidhöfer 2021 report that between 1990 and 2019, the home ownership rate dropped about 20 %. As expected, the prevalence of ownership in other real assets is much smaller.

<sup>3</sup>The ECAF 2012 includes Arequipa, Bogotá, Buenos Aires, Caracas, Panama City, Córdoba, Guayaquil, La Paz, Lima, Maracaibo, Medellín, Montevideo, Quito, Rio de Janeiro, Salto, São Paulo and Santa Cruz. The ECAF 2021 includes La Asunción, Bogotá, Buenos Aires, México City, Lima, Montevideo, Panama, Quito, and São Paulo

<sup>4</sup>This data set does identify if the parents of the interviewed person are employers, which is our proxy for business ownership. Hence, it is possible to estimate IPC for business ownership in EMOVI 2015 as we do in section 4.5.

H

CUADRO 1 Assets ownership rate

Survey	EMOVI	EMOVI	EMOVI	ECAF	ECAF
Wave	2006	2011	2017	2012	2021
House	74	70.8	66.7	66.5	61.3
Additional house	3	2.2	4.6	-	-
Business	8.8	7.1	2.4	5.2	4.6
Land	16.7	9.3	7.1	-	-
Space for a shop	10.8	7.6	4.7	-	-
Other assets	26	17.4	13.8	-	13.5
Information on inheritances	-	✓	-	-	✓
Information on assortative mating	✓	-	-	-	-
Information on parents health conditions	-	-	-	-	✓
Information on house loan	-	✓	-	✓	✓
Information on personality trait	-	-	-	✓	-

Note. Estimation is restricted to people older than 30 years old.

### 3 | MEASURING THE INTER-GENERATIONAL MOBILITY IN ASSETS OWNERSHIP IN LATIN AMERICA.

In order to explore the inter-generational persistence in assets ownership, we OLS estimate the following equation

$$y_i = \alpha + \beta y_i^p + \delta X_i + \mu_i, \quad (1)$$

where  $y_i$  is a binary variable that indicates the ownership of the asset under examination, with a value of 1 indicating ownership and 0 indicating otherwise. Additionally, we introduce a binary variable  $y_i^p$  to capture the ownership of the same asset by the parents of individual  $i$ , with a value of 1 indicating ownership by the parents and 0 indicating otherwise. The vector  $X_i$  represents a set of controls.

We provide two different estimations regarding the controls we use. In the first one, *basic controls*, we use controls for geographical areas, gender, age group, and marital status of the person  $i$ . In the second specification, we add to this first set, controls for education (for both, person  $i$  and the parents of person  $i$ ) and controls for person  $i$  labor outcomes.

Equation 1 is standard in the inter-generational mobility literature and  $\beta$ , our coefficient of interest, is a measure of inter-generational persistence in outcome  $y$ . When measuring persistence in assets ownership; the variables  $y_i$  and  $y_i^p$  are both binary; hence, the coefficient  $\beta$  can also be interpreted as the difference, conditional on  $X$ , in the ownership rate of the asset under study between those whose parents own the asset ( $y_i^p = 1$ ) and those whose parents do not own it ( $y_i^p = 0$ ).

Equation 1 is also useful to discuss the connection between the coefficient of inter-generational persistence and the inequality in the cross-section, the so-called *Great Gatsby Curve*. Consider for simplicity a version of 1 with  $\delta = 0$ . In this case, and assuming stationary, the variance in outcome  $y$  is  $\sigma_y^2 = \frac{\sigma_\mu^2}{1-\beta^2}$ ; that is, the variance in the cross-section is increasing in the coefficient of persistence. Hence, understanding inter-generational mobility is crucial

to understand the inequality in the cross-section <sup>5</sup>

### 3.1 | Inter-generational persistence in home ownership

In the context of home ownership, the binary variable  $y_i$  indicates whether an individual is a homeowner, with a value of 1, or not, with a value of 0. Similarly, the binary variable  $y_p$  reflects the ownership of a house by the parents of the individual. In all data sets but ECAF 2012, the ownership of the parents is measured retrospectively by exploring if, at the age of 14, the individual lived in a house owned by their parents,  $y_p = 1$  or not,  $y_p = 0$ . In the case of ECAF 2012, the variable reflects whether the parents of the individual currently own a house  $y_p = 1$  or not  $y_p = 0$ .

Table 2 shows the coefficients of inter-generational persistence in home ownership for the different waves of EMOVI and ECAF. For the case of Mexico (EMOVIs), the persistence coefficients range from about 0.13 to 0.20. Results for ECAFs lie on a similar interval (from 0.12 to 0.16). <sup>6</sup> According to our most recent estimation for Latin American main cities (ECAF 2021), the inter-generational persistence coefficient in home ownership is 0.123; that is, the probability of owning a house is around 12.3 percentage points larger for people whose parents owned a house, relative to those whose parents did not own a house. This suggests a strong role of parental ownership on offspring ownership, given that the average home ownership rate is 61.3% in ECAF 2021.

An interesting result in Table 2 is that the estimations of  $\beta$  are robust to the inclusion of controls for education and labor outcomes. The wealth of parents can affect the wealth of their offspring because of its impact on education and labor outcomes. Wealthier parents invest more in their children's education and have access to higher-quality labor networks, so parents' wealth is expected to correlate with children's human capital and work outcomes. As these outcomes positively correlate to people's wealth and home ownership, omitting education and labor outcomes may lead to an upward-biased estimation of  $\beta$ .

As expected, controlling for those factors reduces the inter-generational persistence coefficient; however, the reduction is modest. The interpretation of these results is that the parent's home ownership (and wealth in general), strongly influences the home ownership (and wealth in general) of the offspring, beyond its potential effects through education and labor outcomes.

Moreover, we find that the parent's education levels do not have the same power in predicting the offspring's home ownership as the parent's ownership status. In fact, the indicator variables reflecting parents' education are in general not associated with offspring home ownership when including parents' home ownership status as well as offspring labor and education outcomes (see table 13 in the appendix). These findings suggest that parents' education may not be enough to understand the persistence of wealth and asset ownership.

Table 2 also shows that the highest values for  $\beta$  are found in 2011 for EMOVI, and in 2012 for ECAF. Speculatively, this could relate to the 2008 global crisis which had an important effect on the financial markets and, specifically, on house loans. Later, we discuss the role of barrier to credit as a potential mechanism behind the inter-generational persistence in house ownership.

<sup>5</sup>The linear specification in 1 may suggest causation from inter-generational persistence to inequality in the cross-section. However, the *Great Gatsby Curve* can also be explained because more inequality can cause more persistence across generations ( see Durlauf, Kourtellos y Tan 2022).

<sup>6</sup>These values are also similar to those found for the UK by Blanden, Eyles y Machin 2021, who estimate a coefficient between 0.135 and 0.231, depending on the year.

CUADRO 2 Inter-generational persistence in home ownership

Data set	Basic controls	Basic, education and labor controls
Emovi 2006	0.129*** (0.023)	0.130*** (0.025)
Emovi 2011	0.204*** (0.025)	0.201*** (0.025)
Emovi 2017	0.142*** (0.015)	0.139*** (0.015)
Ecaf 2012	0.158*** (0.025)	0.154*** (0.025)
Ecaf 2021	0.124*** (0.025)	0.123*** (0.025)

Notes: The table shows the OLS estimates for  $\beta$  in equation 1. Only individuals over 30 years of age were considered. The dependent variable is a binary indicator that takes one if the individual owns the house in which he/she currently lives and zero otherwise. In the first column, we add as basic controls gender, age group (under 40, between 40 and 50, and over 50), country/region fixed effect and marital status. In the second column, we add education and labor controls. As educational controls, we include the highest education reached by the individual and their parents among 3 possibilities: primary, high school, and tertiary. For labor outcomes, we use labor status (employed/unemployed) and, for employees; either firm size (in the case of EMOVIs) or a dummy that identifies if the worker contributes to social security, for the case of ECAFs. In the case of firm size, we have 3 categories: firms with less than 5 workers, between 5 and 10 workers, and firms with more than 10 workers. Inside parenthesis are robust standard errors and \* denotes significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

### 3.2 | Inter-generational persistence in the ownership of other real assets

Now we turn attention toward the inter-generation persistence in other real assets: business, land, commercial store, and an additional house. As mentioned, for the case of ECAF we do not have information on the ownership of the latter 3 assets separately; however, there exists a variable ("other assets") reflecting the possession of any of these 3 assets: land, commercial store, or an additional house. For completeness, we create this variable also for EMOVIs. In all these cases,  $y_i$ ,  $y_i^p$  are binary variables reflecting, respectively, if, at the time of the interview, the person or his/her parents owns the asset (or group of assets) under consideration. As mentioned, we use the condition of being an employer to proxy business ownership.

As in the case of home ownership, for each asset, we provide specifications for two sets of controls: general controls—column (a)— and general controls plus education and labor outcome controls—column (b). The coefficients of persistence in these assets are shown in table 3. We find an important inter-generational persistence in the ownership of these assets; in fact, the persistence looks even larger than in the case of home ownership, at least in relative terms.



CUADRO 3 Coefficient of intergenerational persistence in other assets

	Business		Land		Shop		Other house		Other Assets	
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
Emovi 2006	0.284*** (0.03)	0.282*** (0.029)	-	-	-	-	-	-	-	-
Emovi 2011	.238*** (0.05)	.246*** (0.045)	.181*** (0.03)	.183*** (0.03)	.168*** (0.05)	.152*** (0.045)	.379** (0.19)	.368** (0.185)	.209*** (0.03)	.2*** (0.025)
Emovi 2017	.232*** (0.055)	.212*** (0.05)	.165*** (0.01)	.164*** (0.01)	.142*** (0.03)	.125*** (0.03)	.135*** (0.025)	.118*** (0.025)	.176*** (0.015)	.172*** (0.015)
Ecaf 2012	.052*** (0.015)	.043*** (0.015)								
Ecaf 2021	.117*** (0.025)	.104*** (0.025)							.199*** (0.025)	.174*** (0.025)
Basic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Education + labor controls	-	✓	-	✓	-	✓	-	✓	-	✓

Notes: The table shows the OLS estimates for  $\beta$  in equation 1. Only individuals over 30 years of age were considered. The dependent variable is a binary indicator that takes one if the individual owns the house in which he/she currently lives and zero otherwise. In the first column, we add as basic controls gender, age group (under 40, between 40 and 50, and over 50), country/region fixed effect and marital status. In the second column, we add education and labor controls. As educational controls, we include the highest education reached by the individual and their parents among 3 possibilities: primary, high school, and tertiary. For labor outcomes, we use labor status (employed/unemployed) and, for employees; either firm size (in the case of EMOVIs) or a dummy that identifies if the worker contributes to social security, for the case of ECAFs. In the case of firm size, we have 3 categories: firms with less than 5 workers, between 5 and 10 workers, and firms with more than 10 workers. Inside parenthesis are robust standard errors and \* denotes significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

All the coefficients are positive and statistically significant at 1 %. The lowest coefficient is for the case of business in ECAF 2012. It is around 0.05; which is certainly close to one third of the coefficient of inter-generational persistence in home ownership for the same data set; but considerably larger in relative terms; as the ownership of a business in this data set is around 5 %, less than one-tenth of the ownership of a house. The larger coefficients are found in the case of ownership of an additional house in EMOVI 2011 with values above 0.36.

Again, as in the case of home ownership, the coefficients of inter-generational persistence in assets ownership are very robust to the inclusion of controls for education and labor outcomes.

## 4 | DISCUSSION ON POTENTIAL MECHANISMS BEHIND THE INTER-GENERATIONAL PERSISTENCE IN REAL ASSETS OWNERSHIP

### 4.1 | The role of bequest

Transfers from parents to offspring, in particular inheritances, are the first suspect behind the persistence of wealth across generations. Indeed, inheritance is a common phenomenon. For example, according to ECAF 2021, 34.8 % of house owners declared their house was inherited and 20.3 % of business owners declare so. As seen in table 4, the existence of inheritance is important regardless of the education and gender of the recipient.

CUADRO 4 The importance of bequest in main cities of Latin America. % Inherited

Assets	General	Men	Women	Less than high school	High-school	More than high school
House	34.8	34.6	36.8	34.3	36.9	33.5
Bussines	20.3	21.6	13.3	23.2	29.4	15.1
Other Assets	36.8	36	35	38.2	36.2	37.2

Notes: Based on ECAF 2021, the table shows, the percentage of people that answer that they inherit the asset. Only individuals over 30 years of age are considered.

Inheritance affects wealth concentration; however, the direction of the effect is ambiguous, depending on how concentrated are the inheritances. Evidence for Denmark (Boserup, Kopczuk y Kreiner 2016) and Sweden (Elinder, Erixson y Waldenström 2018) indicates that the value of the bequest increases with the wealth of the recipient but less than proportionally. That is, in those countries, bequests are concentrated among the richer but less concentrated than the pre-inheritance wealth. As a consequence, inheritance decreases the measures of relative wealth inequality but increases the measures of absolute wealth inequality.<sup>7</sup>

Our interest is more related to how inheritance affects, not wealth concentration, but the inter-generational mobility in wealth. In this regard, the evidence is much more scarce. The seminal work in this area is probably Adermon, Lindahl y Waldenström 2018 who study this matter for Sweden. To that end, they estimate an equation similar to 1 but with two differences. First,  $y_i$  and  $y_p$  represent, respectively, the position of the parents and the position of the offspring in their corresponding wealth distribution. Second, they include the value of the inheritance received as an explanatory variable. They found that such inclusion reduces by 50 % the coefficient of inter-generational persistence<sup>8</sup>.

Following this approach, we add to equation 1 a dummy variable that equals one if the particular asset under consideration was inherited and zero otherwise. Table 5 summarizes the results of our exercise. For each asset and data set, we show in the first column, the standard  $\beta$  in equation 1; while in the second column, we show the value of  $\beta$  after controlling for the condition of having inherited the asset. In both specifications, we introduce the basic controls as well as the controls for education and labor outcomes.

<sup>7</sup>Specifically, Boserup, Kopczuk y Kreiner 2016 suggest that when taking into account inheritances in Denmark, the concentration of wealth in hands of the richest 1 % reduces by 6 percentage points. At the same time, they find that the variance of wealth increases by 33 %. Likewise Elinder, Erixson y Waldenström 2018 find that inheritances reduce the Gini coefficient of wealth in Sweden by about 6 % in the short run, and by about 4 % around 2 years after getting the bequest, once occur behavioral responses in consumption and labor force participation. A recent paper, however, finds that when considering a longer time horizon, inheritances may also increase relative measures of wealth inequality. Specifically, Nekoei y Seim 2022, also for Sweden, find that 10 years after receiving the bequest, the typical person had depleted it completely, but this is not the case for the richer. They find that this fact is associated with differences in the return on investments between rich and poor people.

<sup>8</sup>As an alternative approach, they compute contractual levels of wealth that isolate the amount of inheritance. Then, they use these counterfactual wealth levels to estimate the inter-generational correlation in the percentile of wealth distribution. In this case, their coefficient of inter-generational persistence becomes statistically not different from zero.

CUADRO 5 Coefficients of inter-generational persistence in assets ownership and bequest

	House	Business	Land	Shop	Other house	Other assets
Emovi 2011	.201*** .188*** (0.02) (0.02)	.246*** .239*** (0.04) (0.04)	.183*** .073*** (0.03) (0.01)	.152*** .1** (0.04) (0.04)	.368** .055 (0.19) (0.05)	.2*** .109*** (0.02) (0.02)
Ecaf 2021	.123*** .082*** (0.02) (0.02)	.104*** .042 (0.02) (0.03)				.174*** .08*** (0.02) (0.02)

Notes: The table shows the OLS estimates for  $\beta$  in equation 1. Only individuals over 30 years of age were considered. The dependent variable is a binary indicator that takes one if the individual owns the house in which he/she currently lives and zero otherwise. In the first column, we add as basic controls gender, age group (under 40, between 40 and 50, and over 50), country/region fixed effect and marital status. In the second column, we add education and labor controls. As educational controls, we include the highest education reached by the individual and their parents among 3 possibilities: primary, high school, and tertiary. For labor outcomes, we use labor status (employed/unemployed) and, for employees; either firm size (in the case of EMOVIs) or a dummy that identifies if the worker contributes to social security, for the case of ECAFs. In the case of firm size, we have 3 categories: firms with less than 5 workers, between 5 and 10 workers, and firms with more than 10 workers. Inside parenthesis are robust standard errors and \* denotes significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

As in Adermon, Lindahl y Waldenström 2018, the inclusion of the inheritance variable reduces the inter-generational persistence in asset ownership in all cases. The drop is in general significant. When focusing on ECAF 2021, the smallest change is found in home ownership, yet the reduction is about 33 %. For the case of business and other assets, the reduction in ECAF 2021 is more than 50 %. For EMOVI 2011, the smallest reductions are found in business (around 3 %) and houses (about 6 %); while the largest changes are found in the case of land (above 60 %). Although we do not have land separately in ECAF 2021, it is also the case that the largest reduction is found in *other assets* which includes land, a commercial store, or, an additional house.

#### 4.2 | Assortative mating

Another phenomenon that can affect wealth concentration and inter-generational mobility in wealth is the fact that people tend to marry people with similar socioeconomic status. There exists strong evidence of this. For example, Charles, Hurst y Killewald 2013 find that conditional on age and race, the correlation in pre-marriage wealth between spouses is 0.4. Mechanically, this yields more wealth concentration. In fact, Lersch y Schunck 2017 estimate that in a counterfactual world in which pre-marriage wealth levels between spouses were orthogonal, the Gini coefficient would drop from 0.83 to 0.79 in Germany, and from 0.89 to 0.80 in the United States.

Likewise, Fagereng, Guiso y Pistaferri 2022 provide evidence of assortative mating in the pre-marriage returns to assets among spouses in Norway. The authors also find that the returns to assets during the marriage were determined by the returns of the best performer prior to the marriage. They conclude that assortative mating in the returns to assets, together with the intra-marriage specialization in the management of the family portfolio, plays a major role in explaining wealth concentration among households.

Assortative mating affects not only wealth concentration but also the inter-generational persistence in wealth. The most obvious reason is by affecting the amount of the inheritance. But it can also operate by shaping preferences, aptitudes, and financial practices that can also be transmitted across generations. We are not aware of a paper dealing with the role of assortative mating on intergenerational mobility.

Based on EMOVI 2006, we explore assortative mating in home ownership and its implications for the coefficient of inter-generational persistence. First, we identify a positive correlation between the home ownership of someone's parents and the ownership of that person's parents-in-law. That is, the offspring of owners of a house are more likely to marry each other relative to a random match. Specifically, conditional on age, education, and region, the correlation between the dummies reflecting parents and parents-in-law home ownership is 27.4 %

This result may have implications for the interpretation of the standard coefficient of inter-generational persistence in home ownership,  $\beta$  in equation 1<sup>9</sup>. Indeed, the probability that somebody owns a house may depend, not only on whether the parents of that person were owners of a house (the usual interpretation) but also, on whether the parents of the partner were the owners of a house. As we just mentioned, these two factors are not independent of each other.

To explore the role of this sort of assortative mating in explaining the inter-generational persistence in home ownership, we add to equation 1 a dummy variable controlling for the ownership status of the parents of the partners. Table 6 shows the results. In the first column, we show the standard coefficient, while in the second column, we show the coefficient when controlling for the ownership status of the parents of the partner.

CUADRO 6 Coefficient of inter-generational persistence in assets ownership and assortative mating

	Standard IPC	IPC controlling for parents in law ownership
Emovi 2006	0.123*** (0.03)	0.094*** (0.02)

Notes: The table shows the OLS estimates for  $\beta$  in equation 1. Only individuals over 30 years of age were considered. The dependent variable is a binary indicator that takes one if the individual owns the house in which he/she currently lives and zero otherwise. In the first column, we add as controls gender, age group (under 40, between 40 and 50, and over 50), country/region fixed effect, marital status; as well as education and labor controls. As educational controls, we include the highest education reached by the individual and their parents among 3 possibilities: primary, high school, and tertiary. For labor outcomes, we use labor status (employed/unemployed) and, for employees; either firm size (in the case of EMOVIs) or a dummy that identifies if the worker contributes to social security, for the case of ECAFs. In the case of firm size, we have 3 categories: firms with less than 5 workers, between 5 and 10 workers, and firms with more than 10 workers. In the second column, we add a binary variable for the home ownership status of the respondent partners parents. Inside parenthesis are robust standard errors and \* denotes significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

Controlling for the home ownership status of the parents of the partner reduces  $\beta$  from 0.123<sup>10</sup> to 0.094. We conclude that about 1/4 of the inter-generational persistence in home ownership in Mexico in 2006 relates to the referred phenomenon of assortative mating.

<sup>9</sup>The same line of arguments used here for the case of home ownership applies to any asset. Unfortunately, we do not have information to explore assortative mating in the ownership of other real assets.

<sup>10</sup>This coefficient is not exactly 0.13 as in table 2 because here, we restrict the sample to those having information of partner's parents home ownership.

### 4.3 | Health Shocks

Health shocks may yield inter-generational persistence in wealth levels as well as in the ownership of assets. On one hand, conditional on wealth, health status may be correlated across generations. This may be the case not only because of the genetic transmission of the propensity to suffer from certain diseases but also, because of the correlation in lifestyles and habits between the parents and their offspring. On the other hand, there could also be a correlation in the access to insurance against health shocks across generations. Moreover, health shocks and lack of insurance may have a socioeconomic gradient and may affect inheritances and inter vivos transfers.

Indeed, health shocks imply considerable costs. To start with, there is the out of the pocket expenses. Information from the World Health Organization indicates that in Latin America around 9 % (2 %) of households have out of pocket health expenditures larger than 10 % (25 %) of their annual income every year. As expected, the evidence indicates that the probability of having out-of-pocket health expenses above 10 % of household income is larger for rural and poor families, and for families with older adults and lacking health insurance (Knaul y col. 2011).

Moreover, the evidence suggests that the cost of bad health shocks goes far beyond the out-of-pocket expenditures; with an important cost associated with forgone income. For example, using data from the Health Retirement Study (HRS) for the US, Poterba, Venti y Wise 2017 find that, conditional on wealth level in 1994, people in the top third in a health index were, by 2010, 50 % wealthier than those in the bottom third.<sup>11</sup> They find that between 20 % and 40 % of the reduction in wealth due to poor health conditions is attributable to lower earned income and annuity income of those people in poor health conditions.

There is also evidence, more scarce though, on the inter-generational transmission of health shocks; specifically; on how parents' health conditions affect transfers between parents and offspring. For example, using HRS Schaller y Eck 2019 find that 2-4 years after a health shock, there exists a 64 % increase ( 2.9 percentage points) in the probability that the parents receive a monetary transfer from the offspring; and a 148 % (5.6 percentage points) increase in the probability that parents receive help in their usual activities.

Based on ECAF 2021, we provide evidence for the region. ECAF 2021 includes measures of health conditions for the interviewed person and for the parents of that person. These measures reflect if the interviewed person considers her/his health conditions, and her/his parents' health conditions, to be bad, regular, or good. We explore how the health conditions of parents relate to different outcomes for the offspring; in particular, offspring (self-reported) health conditions (column 1), the probability of inheriting an asset (column 2), and home ownership (column 3).

Table 7 shows the coefficient of the dummies that reflect if the person responds that the parents have either regular health conditions or good health conditions. These coefficients are then interpreted as the conditional differences in the outcome of interest relative to those people reporting parents with bad health conditions. In all cases, we control for age, gender, the health of the offspring, education of parents and offspring, number of siblings, country fixed effect, and a dummy reflecting whether the house in which the offspring was living when being 14 years old was owned by their parents.

<sup>11</sup>This represents a substantial amount of wealth. For example, for married couples those in the top third of health distribution accumulated, around 200.000 US\$ more than those in the bottom third.

CUADRO 7 Parents health status and offspring outcomes.

	Offspring good health	Inheritance	Home ownership
Parents regular health	0.056*** (0.02)	0.034* (0.02)	0.031 (0.02)5
Parents good health	0.246*** (0.02)	0.047** (0.02)	0.048** (0.025)

Notes: The table shows the OLS estimates of the effect of parents' health in different outcomes. The dependent variable is a binary indicator that takes the value one (zero) if (1) the respondent has good health, (2) the respondent received an inheritance, and (3) the respondent owns a house. We add as controls the gender, age group (under 40, between 40 and 50, and over 50), country, marital status, education controls (maximum educational level wealth by the parents and the son), and labor controls (the number of employees in the respondent work). In addition, only individuals over 30 years of age were considered. \* significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

First, notice the existence of inter-generational persistence in the measures of health conditions. Indeed, relative to people reporting parents with bad health conditions, those reporting parents with good health conditions have 0.25 percentage points larger probability of reporting good health conditions for themselves. Moreover, the conditional probability of receiving an inheritance is 4.7 percentage points larger for people reporting parents with good health conditions, relative to those reporting parents with bad health conditions. This represents an increase of more than 21 % of the mean of the dependent variable for those reporting parents with bad health (about 0.22). Similarly, the conditional probability of owning a house is 4.8 percentage points larger for persons reporting parents with good health conditions, relative to those reporting parents with bad health conditions. This represents an increase of about 10 % of the mean of the dependent variable for those reporting parents with bad health (0.47).

ECAF 2021 does not have information on transfers between offspring and parents. However, ECAF 2019 does, although it does not have information for estimating persistence in the ownership of assets. Using ECAF 2019, we find that that the probability offspring transfers money to their parents is 27 percentage points lower for those reporting parents with good health conditions relative to those reporting parents with bad health conditions. We also find that the probability of dedicating time to taking care is more than 19 percentage points lower for those reporting parents with good health conditions. In all these regressions, we control for age, gender, education of parents and offspring, number of siblings, and country-fixed effect. See Table 14 in the appendix.

Now we turn attention to how the inclusion of health status affects standard measures of inter-generational persistence in home ownership. We show the results in Table 8. In column (1) we report the coefficient of inter-generational mobility in house ownership. In this specification, we include basic controls plus educational and labor outcome (as in column 2 of table 2)<sup>12</sup>. Now in column 2, we include the health conditions of parents and offspring. Notice that coefficient  $\beta$  drops very little from column 1 to column 2. This does not mean that parents' health conditions do not have intergenerational implications. We already argued that parents' health conditions are associated with home ownership, inheritance, and inter-vivo transfers. In columns 3 and 4 we show, respectively, how parents' health conditions are associated with upward mobility and downward mobility in

<sup>12</sup>This coefficient is not exactly 0.123 as in table 2 because here, we restrict the sample to those households having information on health conditions, as well as controls included in all the columns of the table.

home ownership.<sup>13</sup> Having parents with good parents health conditions, increases upward mobility; that is, the probability of owning a house for the offspring of no owners. The effect on downward mobility is negative, but not significant. The coefficient  $\beta$  reflects both downward and upward mobility; hence, effects in opposite directions, or little effect in one of the directions of mobility, may explain why  $\beta$  does not drop more when including parents' health conditions in the regressions.

CUADRO 8 Health conditions and inter generational mobility in home onwership

	IPC ( $\beta$ )	IPC ( $\beta$ )	Upwards mobility: Prob( $y_i = 1 y_i^p = 0, X$ )	Downwards mobility: Prob( $y_i = 0 y_i^p = 1, X$ )
Parents homeownership	0.13*** (0.01)	0.128*** (0.01)		
Parents average health		0.031 (0.02)	0.044 (0.02)	-0.002 (0.04)
Parents good health		0.048** (0.02)	0.06** (0.03)	0.012 (0.04)

Notes: Based on ECAF 2021 and for the case of home ownership, the table shows the OLS estimates for  $\beta$  (first and second columns) and measures of upward mobility (third column) and downward mobility (fourth column). In all of the specifications, we control for gender, age group (under 40, between 40 and 50, and over 50), country and marital status, education controls (maximum educational level reached by the father and the son), and the labor controls (the amount of employers in the respondent work). . In addition, only individuals over 30 years of age were considered. \* significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

#### 4.4 | The role of the mortgage market

Now we explore the role of access to credit as a source of inter-generational persistence in home ownership. Indeed, the lack of access to credit may increase the dependence on family sources to finance the accumulation of human capital and other assets. Access to credit is especially important for buying a house given the high value of a house relative to household income. In absence of credit, offspring ownership of a house may strongly depend on inheritance, parents' loans, or parents' transfers. This, in turn, increases the correlation between family wealth, and in particular parents' ownership of a house, and offspring's ownership of a house.

To explore the association between the depth of the mortgage market and the persistence in home ownership we estimate equation 1 separately for regions with high (above median) house loans penetration (column 2) and regions with low (below median) house loans penetration (column 3). The penetration of house loans is defined as the fraction of households that finance their house purchases with a bank loan. This variable can be constructed only for EMOVI 2011 and ECAFs 2012 and 2021. For EMOVI 2017, we proxy the depth of the mortgage market by the fraction of households with a bank loan. We show the estimations in table 9. In all cases, the estimated coefficients of inter-generational persistence in homeownership are larger in regions with low penetration of house loans.

<sup>13</sup>In this case, upward mobility is the probability of owning a house ( $y_i = 1$ ) provided that your parents did not ( $y_i^p = 0$ ). Likewise, downward mobility is the probability of not owning a house provided that your parents did.

CUADRO 9 Depth of mortgage market and the intergenerational persistence in home ownership

	All regions	High credit penetration regions	Low credit penetration regions
Emovi 2011	.201*** (.025)	.179*** (.045)	.199*** (.035)
Emovi 2017	.139*** (.015)	.071** (.035)	.156*** (.02)
Ecaf 2012	0.154*** (.025)	0.151*** (.04)	0.153*** (.03)
Ecaf 2021	0.123*** (.025)	0.1** (.04)	0.142*** (.035)

*Notes: The table shows the OLS estimates for  $\beta$  in equation 1. Only individuals over 30 years of age were considered. The dependent variable is a binary indicator that takes one if the individual owns the house in which he/she currently lives and zero otherwise. In all cases we add as controls gender, age group (under 40, between 40 and 50, and over 50), country/region fixed effect, marital status; as well as education and labor controls. As educational controls, we include the highest education reached by the individual and their parents among 3 possibilities: primary, high school, and tertiary. For labor outcomes, we use labor status (employed/unemployed) and, for employees; either firm size (in the case of EMOVIs) or a dummy that identifies if the worker contributes to social security, for the case of ECAFs. In the case of firm size, we have 3 categories: firms with less than 5 workers, between 5 and 10 workers, and firms with more than 10 workers. In the first column, we include all regions. In the second column, we consider only the countries/states that are over the mean of credit access in the sample, and in the third column we only consider the countries that/states are under the mean. Inside parenthesis are robust standard errors and \* denotes significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.*

#### 4.5 | Personality traits

Like assets, preferences and other personality traits—like risk tolerance, perseverance, locus of control, and those related to the *Big Five*<sup>14</sup>— can be transmitted across generation. Independently of whether this transmission is due to genetic (nature) or environmental factors (nurture); in as much as these traits affect financial decisions, their transmissions between parents and offspring may be a driver of the inter-generational persistence in asset ownership.

Indeed, there is some evidence of the role of such traits in shaping financial decisions. For example, using data for the US, Letkiewicz y Fox 2014 find that an increase of one standard deviation in the measure of conscientiousness is associated with an increase of 40 % en net wealth. Similarly, for the case of the UK, Brown y Taylor 2014 find that Extroversion and Openness relate to the level of debt and assets of the household. For the case of Latin America, Sanguinetti y col. 2013, document an association between risk tolerance and entrepreneurship.

Based on EMOVI 2015, we provide evidence of the inter-generational persistence of such traits. This data set includes measures for the big five personality traits (extroversion, openness, conscientiousness, agreeableness, and emotional stability) as well as for (internal) locus of control, self-control, determination, and risk tolerance. These 9 measures were taken

<sup>14</sup>Extroversion, agreeableness, openness, conscientiousness, and neuroticism.



for both parents and their offspring in cohabitation and under 18 years old. Hence, we can estimate IPCs for such traits as in equation 1; but in this case,  $y_i$  is not asset ownership, but a measure of a particular trait for the offspring, while  $y_i^p$  is the measure for the same trait for the parent.<sup>15</sup>

Table 10 shows the estimation of the inter-generational persistence coefficient in personality traits in the nine traits measured in EMOVI 2015. In the first column, we use the level of the variable while in the second column, we use the percentile in the distribution of the specific trait (i.e we carry out a rank-rank estimation). For the case of extroversion, openness, emotional stability (only in levels), locus of control, self-control, and risk tolerance, we find  $\beta_s$  statistically different from zero.

CUADRO 10 Intergenerational persistence coefficient of personality traits

Trait	Labels		Rank	
	Basic Controls	Education and labor controls	Basic Controls	Education and labor controls
Extroversion	0.113*** (0.032)	0.104*** (0.030)	0.101*** (0.029)	0.102*** (0.029)
Openness	0.111*** (0.030)	0.108*** (0.032)	0.101*** (0.029)	0.096*** (0.031)
Conscientiousness	-0.032 (0.033)	-0.023 (0.033)	-0.029 (0.032)	-0.016 (0.031)
Agreeableness	0.044 (0.028)	0.022 (0.027)	0.044 (0.028)	0.022 (0.029)
Emotional Stability	0.049** (0.025)	0.038 (0.025)	0.044 (0.028)	0.032 (0.028)
Locus of internal control	0.117*** (0.030)	0.117*** (0.031)	0.121*** (0.031)	0.119*** (0.031)
Self-control	0.086*** (0.029)	0.072*** (0.032)	0.095*** (0.031)	0.092*** (0.032)
Determination	0.037 (0.025)	0.04 (0.028)	0.112*** (0.028)	0.107*** (0.028)
Risk predisposition	0.121*** (0.033)	0.121*** (0.035)	0.103*** (0.032)	0.104*** (0.033)

Notes: The table presents the coefficients of the OLS and rank-rank regressions of the son's personality traits on the father's personality traits. In the first column of each personality trait, we add the general controls which are gender, age group (under 40, between 40 and 50, and over 50), country, and marital status. In the second column, we add education controls (maximum educational level reached by the father and the son) and labor controls (number of employers where the respondent works). For more details on the construction of personality indices, see Campos Vázquez (2016). The estimates correspond to Mexico in 2015 and only families with children between 12 and 18 years old are considered. \* significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

Finally, we turn attention to how the inclusion of such traits in a regression like 1 affects the intergenerational persistence coefficient in asset ownership. As we mentioned, EMOVI 2015 does not allow estimating IPC for assets ownership; except for business ownership,

<sup>15</sup>It could be either the father or mother, depending of who response the survey.

which we approximate by the condition of being an employer. Fortunately, ECAF 2012 also includes information on some traits, although only for the surveyed person. Tables 11 and 12 show, respectively, results for EMOVI 2011 (business ownership) and results for ECAF 2012 (home ownership and business ownership).

In all the cases, the coefficient of intergenerational persistence in asset ownership drop when including the personality traits. However, the drop is rather mild. The reduction is more significant in the case of business for the ECAF 2012; case in which the inclusion of the traits reduces the coefficient by around 14 % (from 0.043 to 0.037)

CUADRO 11 Personality traits and persistence of business ownership  
EMOVI 2015

	(1)	(2)
	Empleador	Empleador
Father Business	0.070*** (0.026)	0.069*** (0.026)
Extroversion		0.009 (0.006)
Openness		0.003 (0.004)
Conscientiousness		0.003 (0.004)
Agreeableness		0.007 (0.005)
Emotional Stability		0.008 (0.006)
Locus of internal control		-0.002 (0.002)
Self-control		-0.001 (0.002)
Determination		-0.005* (0.003)
Risk predisposition		0.000 (0.001)
R-squared	0.049	0.055
Observations	2289	2289

Notes: The table shows the OLS estimates for  $\beta$ . The dependent variable is a binary indicator that takes the value one (zero) if the individual says that owns each asset. In the first column of each asset, we add the general controls that are gender, age group (under 40, between 40 and 50, and over 50), country and marital status, education controls (maximum educational level reached by the father and the son) and the labor controls (number of employers where the respondent works). In the second column, we add a binary variable for the home ownership status of the respondent partners' parents. In addition, only individuals over 30 years of age were considered. \* significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

CUADRO 12 Personality traits and persistence of home and business ownership  
ECAF 2012

	Business		Home Ownership	
	(1)	(2)	(3)	(4)
Parents ownership	0.043*** (0.015)	0.037** (0.015)	0.156*** (0.027)	0.154*** (0.026)
Goal orientation		0.041*** (0.012)		-0.013 (0.031)
Autonomy		0.006 (0.009)		-0.016 (0.020)
Self-efficacy		-0.011 (0.007)		0.030 (0.021)
Creativity		0.003 (0.005)		-0.021 (0.014)
Locus of internal control		0.002 (0.007)		-0.027 (0.019)
Multitasking		0.022*** (0.009)		-0.026 (0.018)
Risk tolerance		0.013*** (0.004)		-0.000 (0.009)
R-squared	0.052	0.067	0.101	0.106
Observations	5031	5031	4928	4928

Notes: The table shows the OLS estimates for  $\beta$ . The dependent variable is a binary indicator that takes the value one (zero) if the individual says that owns each asset (business or house). In the first column of each asset, we add the general controls that are gender, age group (under 40, between 40 and 50, and over 50), country and marital status, education controls (maximum educational level reached by the father and the son) and the labor controls (the number of employers in the respondent work). In the second column, we add the score of the individual in each type of psychological trait. In addition, only individuals over 30 years of age were considered. \* significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

## 5 | FINAL REMARKS: SOME POLICY IMPLICATIONS

Understanding inequality requires an inter-generational perspective. Unfortunately, data availability is limited, particularly regarding wealth and in developing countries where inequality is more prevalent. In fact, to the best of our knowledge, we are the first to estimate for Latin America the degree of inter-generational persistence in the ownership of real assets and to explore the main mechanisms behind it. Our analysis suggests that the high inter-generational persistence in the ownership of real assets found in Latin America is not fully explained by the persistence in educational and labor outcomes and points out mechanisms like inheritance, assortative mating, health shocks, and lack of access to credit.

Although the analysis of policies to improve inter-generational mobility in assets goes beyond the scope of this paper, our finding points out specific areas of intervention. The first one is taxing inheritance. Inheritance taxes do not exist in some Latin American countries, and in those where it does, their fiscal relevance is much lower than in developed economies. This suggests that there is room to introduce and/or improve this instrument. Of course, the design and implementation

of these taxes are full of challenges. Being progressive, including dismissal for small bequests, is a standard feature of this sort of tax. Ideally, inheritance and inter-vivos transfers should be taxed together, but this is only sometimes the case. The lack of alignment between taxes for inheritance and taxes for inter-vivos transfers favors richer people, who are less financially constrained and can advance transfers to their offspring. Richer can also carry out tax planning using some figures to avoid paying the tax. This, *the facto*, reduces the progressiveness of the tax scheme.

Social protection, particularly insurance against health shocks, is another realm for improvement. In Latin-American, around 40% of the population relies exclusively on public (universal) hospitals to face health issues, but for the poorest quintile, the figure is above 70%. Unfortunately, the quality problem of the universal health system in countries of the region is well known. This implies a lack of protection, including financial protection. The fraction of households facing catastrophic health shocks—shocks suggesting out-of-pocket expenditure higher than 10% of household income—is much higher in Latin America than in developed economies.

One of the underlying issues in the problem is the inefficiencies in health expenditure. Addressing moral hazard issues in the provision of medical services and incorporating TICs in the management of health services are common good practices to tackle inefficiencies. Encouraging healthy lifestyles is another cost-effective policy. Health shocks have inter-generational consequences, one of which is that descendants must dedicate time to provide care services, potentially affecting their labor participation. Therefore, in addition to improving access to high-quality health services, it is necessary to enhance the supply of long-term care services, particularly for older adults. Given the rapid aging process that Latin America is experiencing in the coming decades, the importance of these types of services will only continue to increase.

Finally, enhancing access to financial instruments, particularly mortgages, is imperative. In developed nations, such as the United States and Canada, the mortgage credit as a percentage of GDP is approximately 70%. However, in Latin American countries, this percentage ranges from 20% in Chile to nearly zero in Argentina. Deepening the mortgage market requires macroeconomic stability, secure property rights, proper regulation of credit markets, and a high-quality credit information system. The demand for financial instruments is also contingent upon financial literacy, and research indicates that financial knowledge correlates with wealth and can be passed down from parents to their offspring. Poor parents possess less financial knowledge to teach their children, so well-designed financial literacy programs may also help mitigate asset-holding persistence.

## 6 | APPENDIX

CUADRO 13 Parents education and offspring ownership

	No parents ownership		With parents ownership		P.O
	Father Educ.	Mother Educ.	Father Educ.	Mother Educ.	
Emovi 2006	-0.0091	.014 (.025)	-0.0091 (.025)	.014 (.025)	.130*** (.02)
Emovi 2011	-.0904* (.045)	.1015** (.045)	-.0893* (.045)	.1015 (.045)	.201*** (.025)
Emovi 2017	-.0418* (.045)	-.0097 (.015)	-.0418 (.025)	-.0097 (.015)	.139*** (.015)
Ecaf 2012	.0046 (.045)	-.0046 (.035)	.0046 (.035)	-.0046 (.035)	.14*** (.025)
Ecaf 2021	-.0025 (.045)	-.0107 (.025)	-.0025 (.02)	-.0107 (.025)	.14*** (.025)

Notes: The table shows the OLS estimates for the coefficient of each parent education (an indicator variable that takes value 1 if each parents finished high school). The dependent variable is a binary indicator that takes the value one (zero) if the individual says she owns each asset. \* significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

CUADRO 14 Health conditions and inter generational mobility

	Inverse transferences	Taking care of parents	Hours taking care of parents
Parents regular health	-.095** (.04)	-.151*** (.02)	-3.68** (1.52)
Parents good health	-.267*** (.09)	-.191*** (.045)	-.229 (.23)

Notes: Based on ECAF 2019. In all specifications, we control for gender, age group (under 40, between 40 and 50, and over 50), country and marital status, education controls (maximum educational level reached by the father and the son), and labor controls (the amount of employers in the respondent work). In addition, only individuals over 30 years of age were considered. \* significant at 10 %, \*\* significant at 5 %, \*\*\* significant at 1 %.

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