Wealth in Latin America.

Gandelman, Néstor
Universidad ORT Uruguay

Lluberas, Rodrigo
Universidad ORT Uruguay
[1]

Mayo 2022

Abstract

This paper presents harmonized indicators for household wealth, its components, and its determinants (including intergenerational mobility) in four Latin American countries (Chile, Colombia, Mexico and Uruguay), using Spain as a comparison benchmark. It is based on recently available microdata from financial surveys. The paper analyzes the relationship between wealth indicators and sociodemographic characteristics of household heads (age, education, gender, marital status).

Keywords: wealth, income, distribution, Latin America

JEL classification: D31, G51

Documento de Investigación, Nro.133, mayo 2022. Universidad ORT Uruguay.
Facultad de Administración y Ciencias Sociales. ISSN 1688-6275.

[1] gandelman@ort.edu.uy
lluberas@ort.edu.uy

The authors gratefully acknowledge financial support from CAF Development Bank of Latin America and thank Fernando Alvarez, Dolores de la Mata and Lucila Berniell for helpful suggestions and Ezequiel Yudka for his research assistance.

1. Motivation

Latin America is one of the most unequal regions of the world. While extensive literature documents its income disparities and analyzes causes, research on wealth distribution in the region is scarce. The level and distribution of household wealth in developed countries, in contrast, has been studied more thoroughly. The goal of this paper is to help fill the gap by generating and analyzing a set of harmonized indicators for household wealth, its components, and its determinants, including intergenerational mobility (inheritance, family businesses, parental education), in Latin America. The paper makes use of relatively recent microdata for Chile, Colombia, Mexico and Uruguay, taking Spain as a comparison benchmark.

Income and wealth distribution are connected, but one is a flow variable and the other a stock variable. As such, they have different short- and long-term effects on wellbeing. The COVID crisis has provided extreme evidence of the necessity of understanding the differences between these variables. Self-imposed economic recessions forced by lockdowns produced a rare combination of concurrent supply and demand shocks. The income flows of most households were negatively affected, and governments had to act to reduce the impact on current and future wellbeing. Although we still do not have a complete picture of the aggregated medium-term consequences of the pandemic, it is certain that not all families have been equally affected. Past savings provide a financial cushion to buffer economic bad news, whether in terms of expenditure or income. Wealth acts as a natural insurance mechanism against negative income shocks. In conjunction with national social security systems, wealth can smooth fluctuations in consumption and wellbeing. Within Latin America, the prevalence of labor markets with significant informality excludes many from unemployment subsidies, among the more traditional government-backed insurance mechanisms.

The study of wealth inequality in developed countries has a long history that goes back to the 1970s and 80s. Key works include Atkinson and Harrison (1978) and Atkinson et al. (1989) for the United Kingdom, and Wolff (1983, 1987) for the United States. After two decades of relative quiet, research in this area was reinvigorated because new data sources and methods became available to assess questions with long-run perspectives. The proliferation of household wealth surveys in the United States, Eurozone, United Kingdom and other developed and developing countries, together with the increasing availability of administrative records, particularly in Denmark and Norway, resulted in a new wave of studies on household wealth. Notable examples are Kopczuk and Saez (2004), Wolff (2014, 2021), and Saez and Zucman (2016) for the United States, Davies and Di Matteo (2021) for Canada, Piketty et al. (2006) for France, Roine and Waldenström (2009, 2015) for Sweden, and Vermeulen (2018) for the Eurozone. Davies et al. (2008, 2011) provided the first estimates of global distribution of household wealth for the year 2000; other authors have attempted to estimate global wealth holdings subsequently (Davies et al., 2017).

Unfortunately, evidence about the level, composition, and distribution of household wealth in Latin America is scarce. Research in this area has focused on asset holdings and income from assets. A pioneer study is Torche and Spilerman (2006), who examine the distribution of housing, land, and capital asset holdings in 16 Latin American countries. The emphasis is on asset holdings, as information on asset values is not available. The authors find that homeownership is widespread in the region but that

housing values, obtained indirectly from rents, are highly concentrated and correlated with income. The authors also find that land ownership is highly concentrated in the top percentiles of income distribution and that financial assets are the component of wealth most unequally distributed in the region.

Two alternative sources of information on wealth distribution are the Credit Suisse Global Wealth Report (see Davies et al., 2021), published annually since 2010, and the World Inequality Report, published in 2018 and 2021. Both reports highlight the high concentration of household wealth in the region, estimating that the top 10% of households hold more than 75% of total wealth, much higher than in Europe or the United States, or even in Africa or Asia.

As in the developed world, the availability of wealth surveys and administrative data for Latin American nations awakened new research impulses, mostly concerning specific countries (Chile and Uruguay). Based on household surveys, Bivas (2016) studied the distribution of income and wealth in Chile, reporting that wealth is more unequally distributed than income, and that wealth inequality in Chile is lower than in the United States. Sanroman and Santos (2021) study the joint distribution of income and wealth in Uruguay and compare the results with those for Chile, the United States and Spain. As expected, they find that wealth distribution is more concentrated than income distribution. They also find that wealth distribution in Uruguay is similar to that in Chile and less concentrated than in the United States. Of the four countries they study, wealth is most equally distributed in Spain. In turn, using administrative data, De Rosa (2019) studies the distribution of household wealth in Uruguay and finds that households in the top 10% own between 60% and 65% of total wealth.

Since wealth is the result of net-of-tax accumulated past savings, wealth research and savings research are connected. The last strand of literature has made clear that the relationship between saving rates and life-time income is less clear-cut than one might think. First, proper measures of permanent income should not be subject to life-cycle effects that are correlated with current savings. Second, incentives for precautionary savings are stronger among the poor than the rich, but the poor may not have the financial capacity to save. The formal study of the relationship between saving rates and income has followed the seminal work of Dynan et al. (2004) for the United States and includes applications to Australia (Chakrabarty et al., 2008), Canada (Alan et al., 2015) and Latin America (Gandelman, 2017). Gandelman (2017) reported that the savings rate of the rich is higher than that of the poor in Brazil, Chile, Costa Rica, Ecuador, Honduras, Mexico, Panama, Paraguay and Peru. The author found no differences between income groups in Uruguay; his results for Argentina and Colombia were not robust.

Gandelman (2016) analyzed micro data on expenditure and income for 16 Latin American and Caribbean countries and reported stylized facts of saving behavior by age, education, income and place of residence. Using the United States and Korea as benchmark economies, Gandelman (2016) found that differences in national saving rates between Latin American and Caribbean countries and benchmark economies can mainly be attributed to differences in saving behavior across demographic groups, and to a lesser extent to differences in population distribution by educational levels. Other demographic or income distribution differences are not quantitatively important as explanations of saving rates.

This paper contributes to the literature by combining the most recent available Latin American household level financial and wealth surveys and presenting a detailed descriptive analysis of the components of wealth, and of its relationship with household characteristics. Microdata homogenization and the application of a common methodology to several countries are rare in regional wealth literature. We go beyond individual case studies and set out stylized facts for the widest-

available range of countries, exploring how wealth components vary between and within countries, against net worth and income distribution. Second, since there is not a natural theoretical benchmark for normatively evaluating wealth distribution and its correlation with household characteristics, we use an out-of-the-region country for comparison. For that purpose Spain has several advantages. Many Latin American surveys were modeled using a Spanish questionnaire, and thus the available data is similar in nature, including the language in which questions are formulated. Moreover, for historical reasons, Spain and Latin America share cultural traits. This said, Spain has a substantially more developed financial sector, and at least as proxied by GPD per capita, is a richer country.

The paper proceeds as follows. Section 2 presents the data and main definitions. Section 3 reports wealth composition indicators over net worth and income distribution. Section 4 focus on concentration of income, wealth, and its components. Section 5 relates wealth composition and debt to household demographic characteristics. Section 6 addresses intergenerational issues, and Section 7 concludes.[2]

2. Data

2.1 Financial surveys

Household-level financial surveys are common in developed countries but scarce in Latin America. The most salient surveys are the Survey of Consumer Finances in the United States, the Wealth and Assets Study in the UK, the Survey of Household Income and Wealth in Italy, the Encuesta Financiera de las Familias in Spain, and the more recent Household Finance and Consumption Survey in the Eurozone area.

In this paper we use microdata from the following surveys:

- Chile: Encuesta Financiera de Hogares (EFH) 2017.
- Colombia: Encuesta de Carga Financiera y Educación Financiera de los Hogares (IEFIC) 2018.
- Mexico: Encuesta Nacional sobre las Finanzas de los Hogares (ENFIH) 2019.
- Uruguay: Encuesta Financiera de los Hogares Uruguayos (EFHU) 2013/2014.
- Spain: Encuesta Financiera de las Familias (EFF) 2017.

These surveys have common features that allow comparison, but they also have some differences that we should be take into account in interpreting results.

The recollection mechanism of all the surveys is based on interviews with one household representative who has enough knowledge to speak for all household members about economic and financial issues. All information gathered is self-declared, and no controls are in place to determine the truthfulness or correctness of answers.

Stock variables (assets, liabilities, wealth) correspond to the time the interviews were conducted. Income corresponds to the previous month in Chile, Colombia and Uruguay and to an average month in Spain. In Mexico respondents were permitted to report their income in different time periods: weekly, bi-weekly, monthly or yearly. In our statistics we annualized all income measures.

[2] We tried to present most of our results in graphical format. In the appendix we report corresponding Tables.

Given the nature of the surveys there is a concern about missing observations. Thus, it is common in this type of survey to use *multiple imputation mechanisms*. The agencies in charge of obtaining and processing information offer databases that include imputed data. This tactic avoids sampling selection due to missing answers (e.g., rich households being more likely not to answer some questions) while aiming to capture the uncertainty around imputed values. The procedure is followed for Chile, Uruguay, and Spain but not for Colombia or Mexico.

2.1.1 Chile

Chile was a pioneer in Latin America in terms of household financial surveys. The Encuesta Financiera de Hogares (EFH) started in 2007 and has also been carried out in 2008, 2009, 2010, 2011, 2014 and 2017. For the purpose of this study we use the 2017 wave, which is representative of urban households in Chile. The sample size is 4,549 households interviewed between June and December of 2017. As previously discussed, multiple imputations of the main variables are provided by the Central Bank of Chile, the agency in charge of the survey.

2.1.2 Colombia

The Encuesta de Carga Financiera y Educación Financiera de los Hogares (IEFIC) of Colombia started in 2010 and is available yearly until 2018. The survey makes inquiries about the level and composition of household wealth and also about financial education. The Central Bank of Colombia and the National Statistical Institute (DANE) are jointly in charge of the survey. The sample is representative of urban households in Bogotá and contains a total of 7,363 households. There is no multiple imputation available for the Colombian database.

2.1.3 Mexico

The data used for Mexico is from the 2019 Encuesta Nacional sobre las Finanzas de los Hogares (ENFIH), carried out by the Instituto Nacional de Estadística y Geografía (INEGI). The sample contains information on 17,386 households and is nationally representative. No imputation for missing values is carried out.

2.1.4 Spain

The Bank of Spain has a long tradition of conducting the Encuesta Financiera de las Familias (EFF). The first wave of the survey was in 2002; surveys were also implemented in 2005, 2008, 2011, 2014, and 2017. For this paper we use the last wave, containing a sample of 6,413 households that is nationally representative. Missing data in the survey has been imputed following the standard procedure for multiple imputation.

2.1.5 Uruguay

The Uruguayan Encuesta Financiera de los Hogares Uruguayos (EFHU) has three waves. The first and third were included as a special module of the Encuesta Continua de Hogares (ECH), a long-lasting survey aimed at gathering information about the labor market, poverty and income. We use the second wave of the survey in this study, as it is the only one containing detailed information about household assets and liabilities. The survey was commissioned by the Central Bank of Uruguay, the Oficina de Planeamiento y Presupuesto, the Ministry of Economics and Finance and the Corporación para la Protección del Ahorro Bancario, associated with the Economics Department of the School of Social Sciences of the Universidad de la República. Field work was carried out between October 2013 and July

2014. The survey is representative of households in cities of more than 20,000 habitants. The sample size is 3,845 households, and the official database contains multiple imputations for information missing on the most relevant variables.

2.2 Main definitions

The main variables considered in this study are at the household level and follow these definitions:

- Net worth: financial assets + real assets – debts.
- Financial assets: cash, deposits, stocks, bonds, individual pensions, other financial assets.
- Real assets: business, main property, other properties, art, jewelry, other real assets.
- Debts: consumption-related debt, mortgages, education-related debt, other debts.

3. Wealth composition

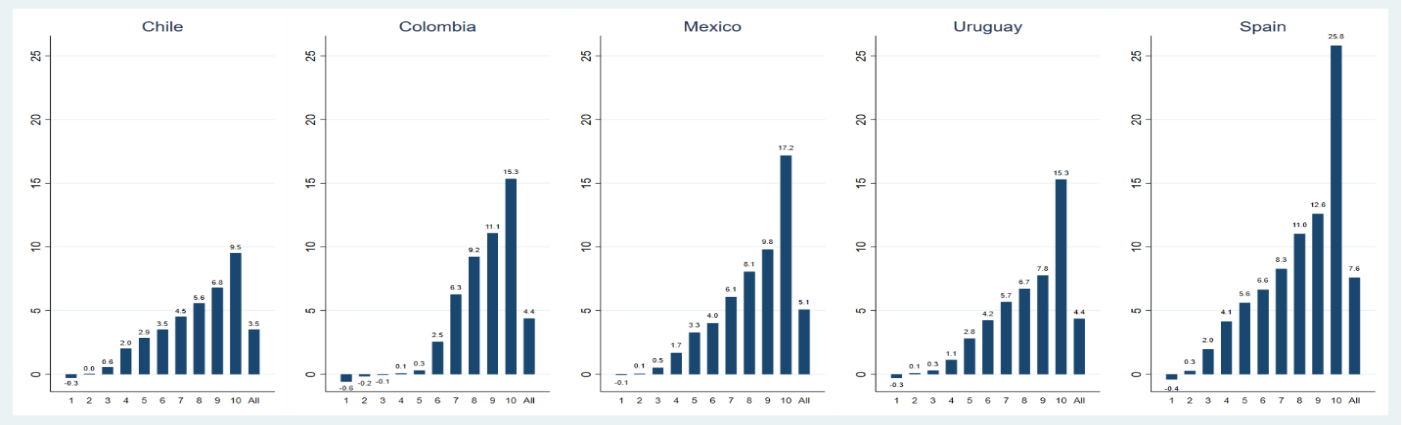
Previous literature on the composition of wealth in advanced economies showed that the proportion of financial assets increases with the level of gross assets. In this section we show how the composition of wealth varies across wealth distribution, both in terms of financial and real assets but also within each wealth component. We also look at the proportion of debt relative to income and net worth across wealth deciles and show alternative indicators of the relationship between wealth and income.

Figure 1 reports the ratio between a household's net worth and its current annual income. On average, Spain presents the largest ratio, indicating that net worth is equal to 7.5 times a household's annual income. In contrast, the ratio of net worth to income is substantially lower in the Latin American countries, ranging from 5.1 in Mexico, to 4.4 in Uruguay and Colombia, and 3.5 in Chile.

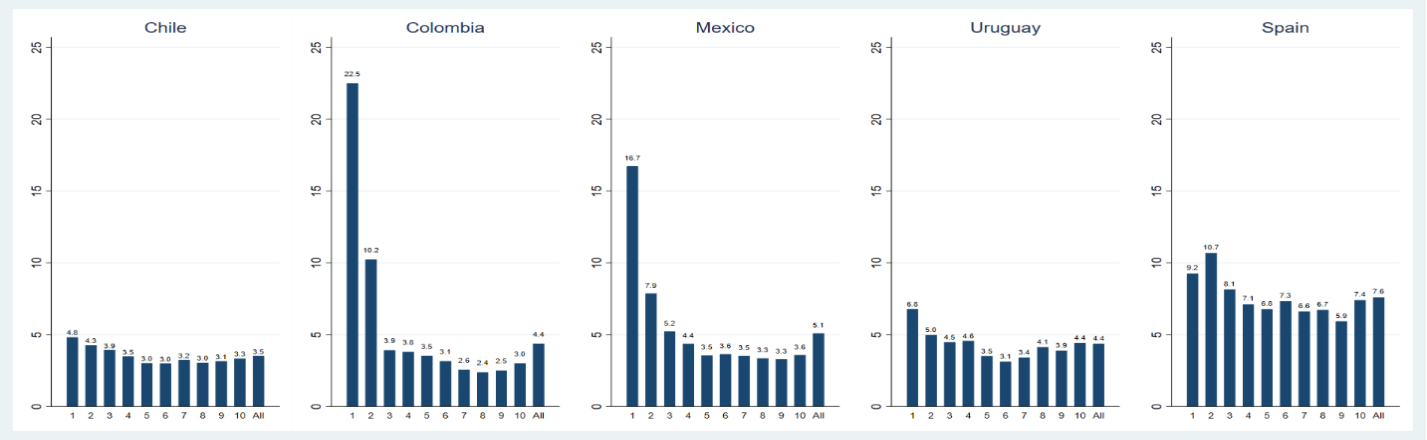
Richer people have more wealth and higher income, but in principle, the path of the net worth to income ratio along the income distribution line is not obvious. If current income is an unbiased proxy of permanent income and saving rates are constant, we should expect a constant net worth to income ratio. The evidence presented in Panel A of Figure 1 shows that this is not so, and this is consistent with richer households (in terms of income) having larger saving rates that translate into more than proportional wealth accumulation (as in Gandelman, 2017)). Panel B shows that the wealth-to-income ratio by income deciles is relatively stable except in the lowest income deciles, where the smaller denominator mechanically inflates this indicator.

Figure 1: Net worth-to-income ratio

Panel A: By net worth decile



Panel B: By income decile



At the country level, the debt-to-GDP ratio is the most used indicator to approximate a country's ability to comply with its financial obligations. The household-level equivalent is the debt to income reported in Figure 2. By comparing what a household owes with the income it generates, the debt-to-income ratio indicates a household's ability to pay back its debts. This ratio can also be interpreted as the number of years needed to complete repayment if the entire household income were dedicated to that end.

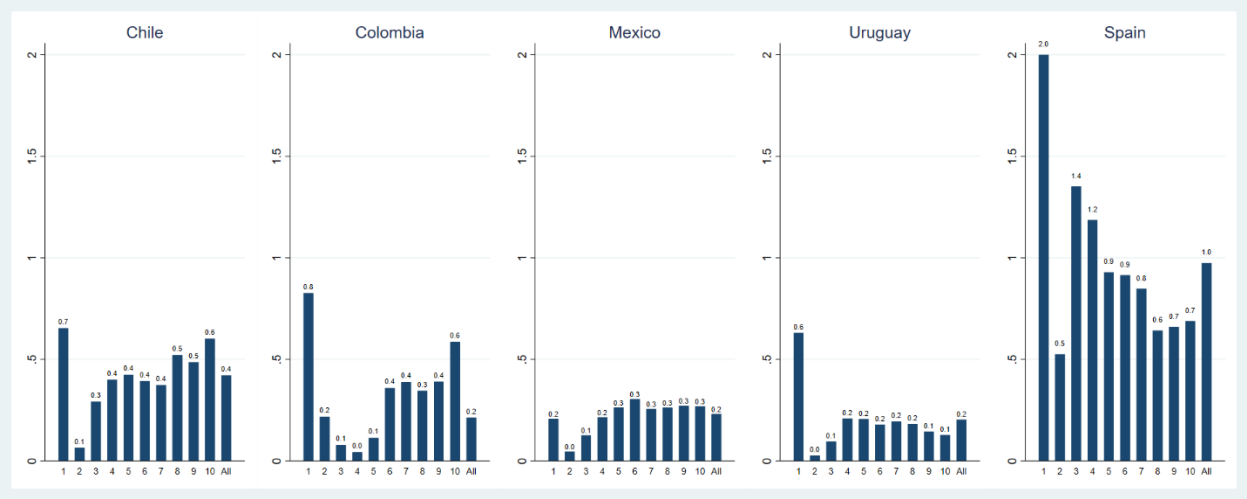
On average, our results show that households in Spain are more indebted than in Latin America. The average Spanish household would have to use its whole annual income to pay its current debt, while less than half the current annual income would suffice in Chile and Colombia, and an even lower percentage would be needed in Uruguay and Mexico.

In all countries, households in the poorest net wealth decile are relatively more indebted, but this feature is exacerbated in Spain, where the debt-to-income ratio is almost four times the equivalent of those in Latin American households. This is likely due to the relative development of credit markets and better access to credit of the Spanish poor than the Latin American poor.

Surprisingly, for the remainder of the wealth distribution, the debt-to-income ratio is notably stable (with Latin America at lower values than Spain). The distribution over income deciles (Panel B) is also relatively stable in all the cases but Chile, which shows a clear increasing pattern.

Figure 2: Debt-to-annual-income ratio

Panel A: By decile of net worth



Panel B: By income decile

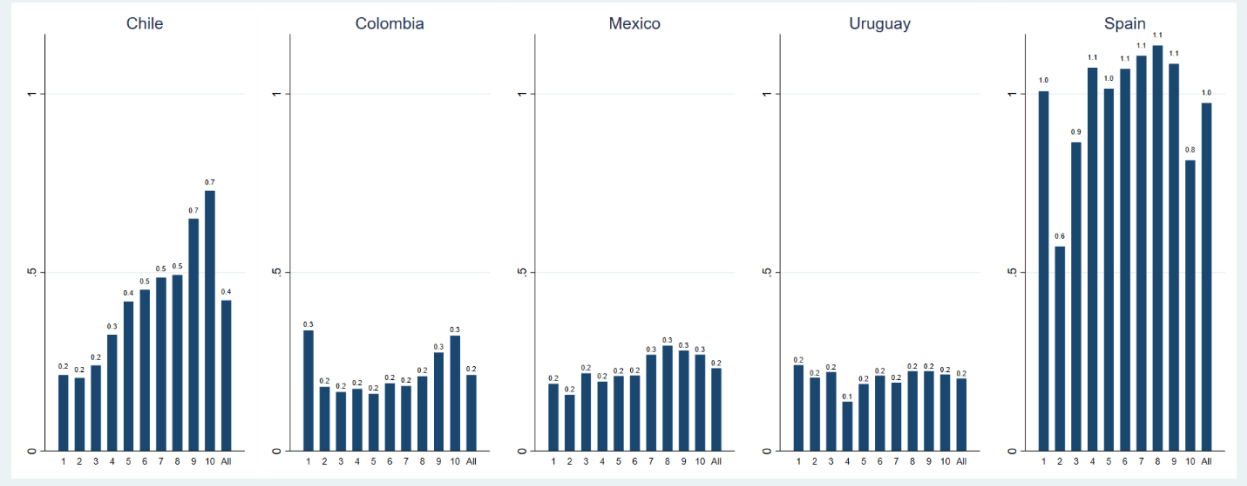


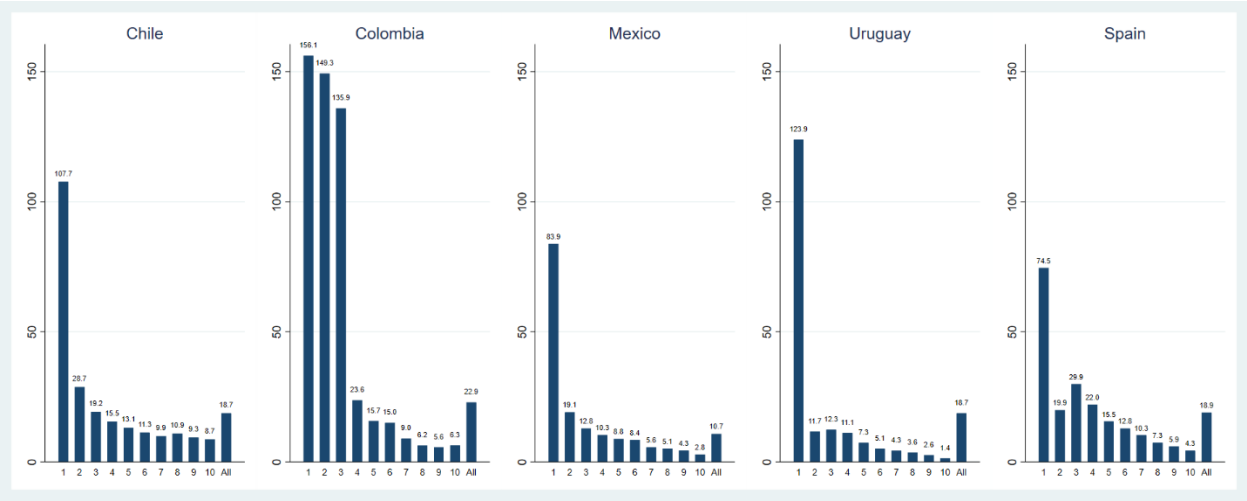
Figure 3 also focuses on the weight of debt, but now considers gross assets and the percentage of gross wealth a household must give up to cancel its debts. The average proportion of debt relative to gross assets is surprisingly similar in Chile, Uruguay and Spain. Colombia stands out, with debts representing about one quarter of gross assets.

In all countries but Uruguay there is a decreasing pattern with respect to wealth (Panel A) but an increasing pattern with respect to income (Panel B). Panel A shows that for richer households (in terms

of wealth), debt represent a lower share of gross wealth. Interestingly, for most wealth distribution, debt is lower than gross wealth. In Chile and Uruguay, debts surpass gross assets in the lowest wealth decile, while in Colombia, the lowest three deciles hold more debts than assets. In Mexico, on the contrary, households in the lowest wealth decile must give up 84% of their gross assets to pay debts. The striking decreasing and increasing patterns of Panels A and B suggest that access to debt is more related to current flows of income than to stocks of gross assets. This may reflect difficulties in accessing available legal remedies, in case a creditor has to execute collateral, e.g. a mortgaged property. If this is indeed so, current income is a more likely determinant of credit access than an eventual illiquid real asset.

Figure 3: Debts (as % of gross wealth)

Panel A: By decile of net worth



Panel B: By income decile

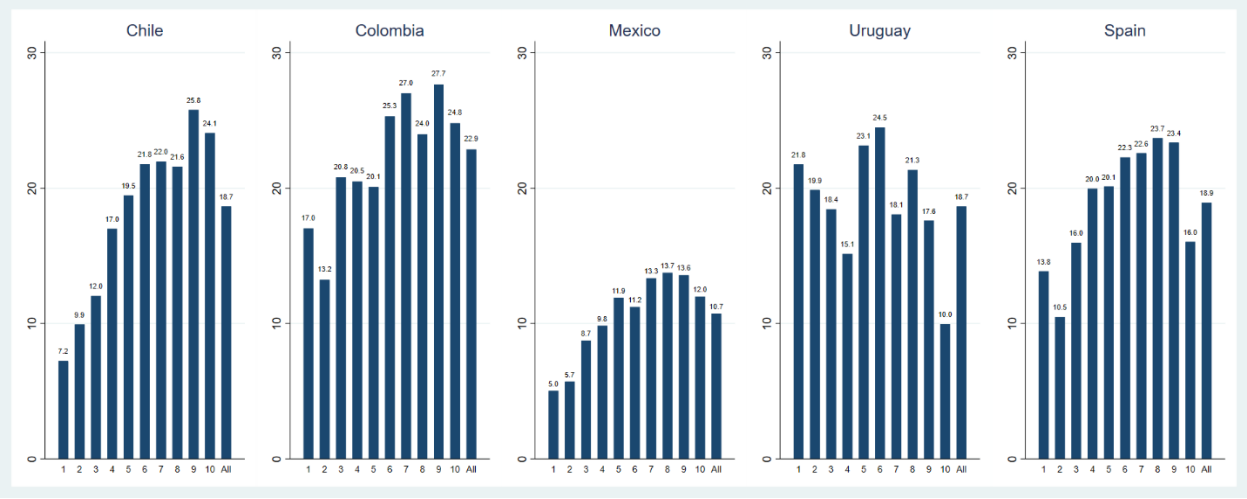


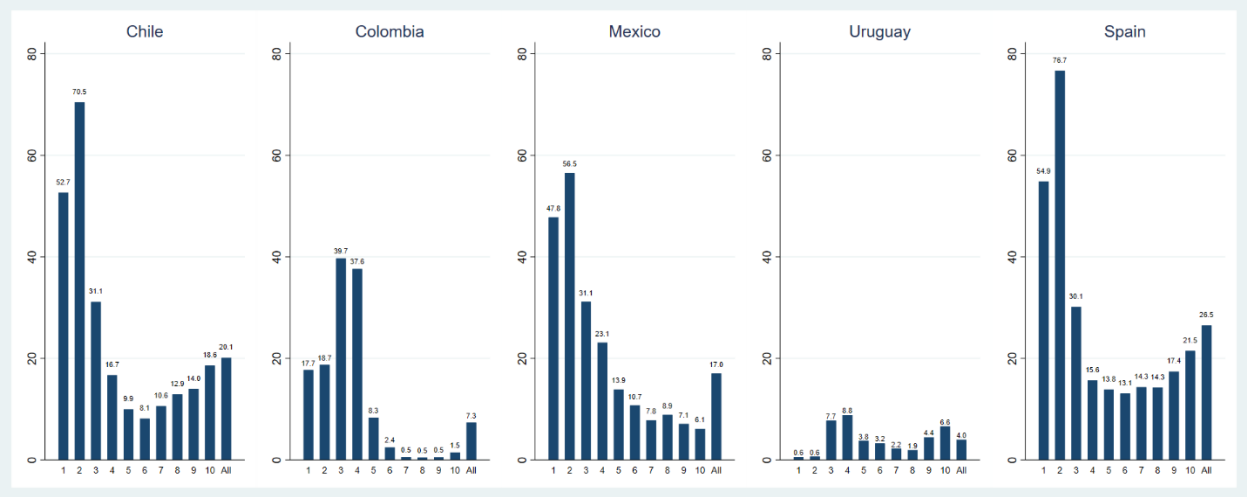
Figure 4 is also computed relative to wealth, but in this case, it reports the ratio between financial assets and gross wealth, i.e., it reflects the percentage of a household's gross wealth held in financial form. Financial assets could take the form of liquid assets, such as deposits and cash, or financial instruments, such as bonds or stocks. Depending on the country and its pension system, a large proportion of financial assets could also be held in pension rights. That is the case in Chile, a country with a mature and well-developed defined contribution pension system where pension assets reach, on average, 41% of financial assets. Not considering pension assets, the ratio of financial assets to gross wealth in Chile is 9% instead of the 20% shown in Figure 4. Despite their relatively higher incomes compared to households in other countries, Uruguayan households hold the lowest proportion of wealth in financial assets. This is probably a reflection of limitations in the development of the country's financial system and capital markets.

The proportion of wealth held in financial assets is U-shaped across the wealth distribution for Chile, Uruguay, and Spain (Panel A). Households in the lowest deciles hold most of their wealth in financial assets, while the proportion of financial assets decreases until the 6^{th} to 7^{th} deciles, then increasing at the top right of the distribution. In terms of income deciles (Panel B), Uruguay shows a clear increasing shape where financial assets represent a larger proportion of gross wealth. This is in contrast with Colombia and Spain, where the higher the income the lower the participation of financial assets in gross wealth. It is worth mentioning the case of Chile, where pension assets represent a large proportion of financial wealth, acting as an equalizer across income distribution.

As seen in the following graphs, financial assets are different for the poor (who hold mostly liquid and safer assets, such as cash) and the rich (who hold riskier and more longer-term assets).

Figure 4: Financial assets (as % of gross wealth)

Panel A: By decile of net worth



Panel B: By income decile

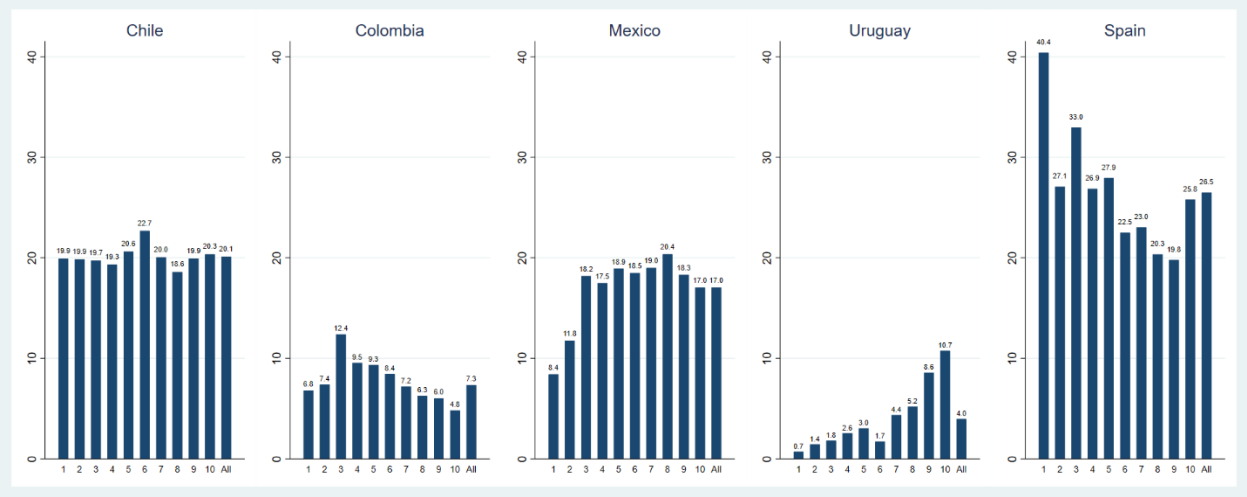
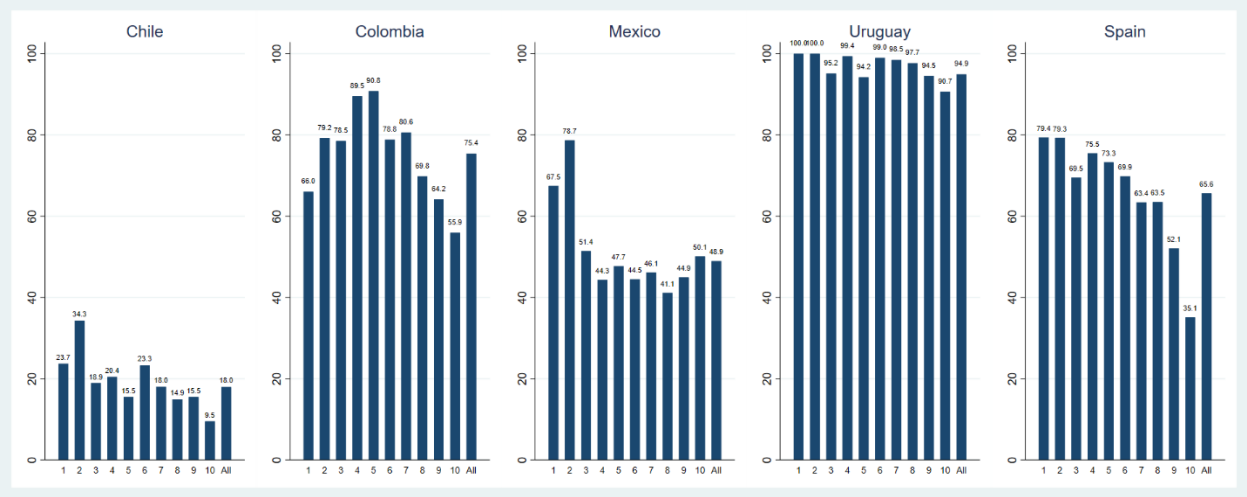


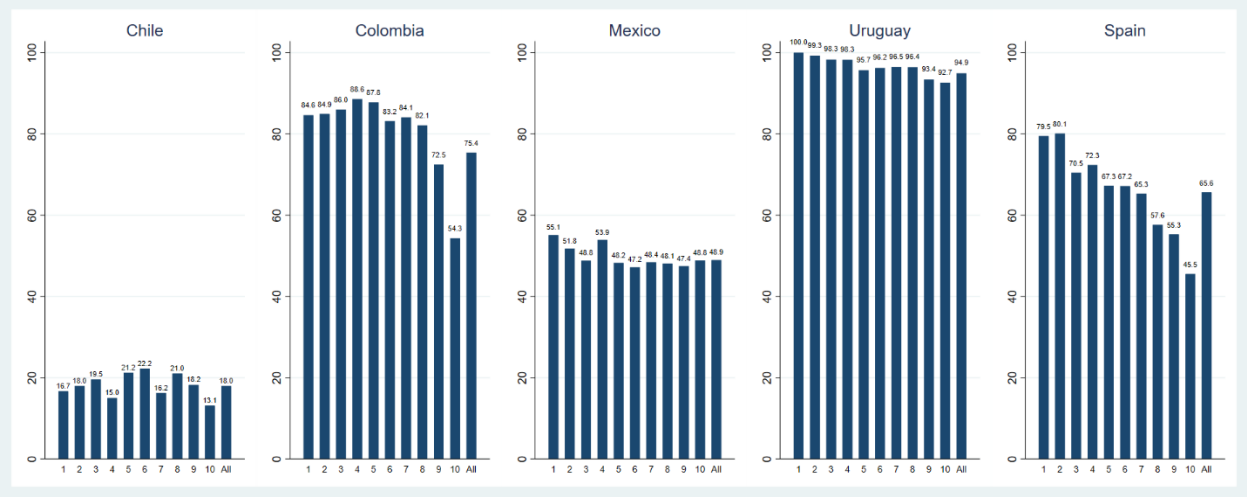
Figure 5 shows the proportion of financial assets held in cash and deposits, which can be considered as the most liquid assets. As already discussed, most financial assets in Chile are held in the form of pension rights. In contrast, in Spain, Uruguay and Colombia, most financial assets are held in liquid form. The proportion of liquid assets relative to financial assets is, on average, 66% in Spain, 75% in Colombia, and 95% in Uruguay. Surprisingly, Mexico stands out as the country with the lowest proportion of financial assets held in cash and deposits, even when compared to Spain. Households at the top wealth decile in Colombia, Mexico and Spain and particularly in Chile hold a smaller fraction of their financial assets in liquid form, reaching 56% in Colombia, 50% in Mexico, 35% in Spain and just 9% in Chile. That is not the case in Uruguay, where even richer households hold most of their financial assets in cash and deposits.

Figure 5: Liquid assets (as % of financial assets)

Panel A: By decile of net worth



Panel B: By income decile



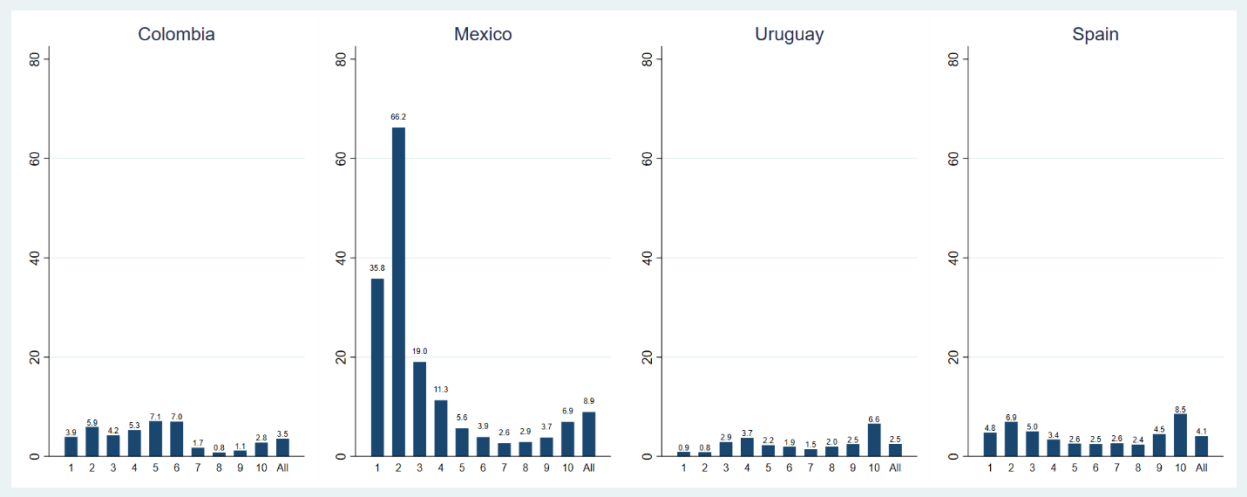
Most gross assets are held in real assets. The last two figures of this section show information about holdings of real assets: businesses and dwellings.

Little is known about wealth held in private businesses in Latin America. In Figure 6 we show that in Mexico, business assets account for 9% of households' real assets. This is between two and three times what business assets represent for Colombia, Uruguay and Spain. We also report the proportion of real assets held in private businesses across wealth distribution (Panel A) and income distribution (Panel B). While most business-related wealth in Uruguay and Spain is concentrated in the top wealth decile, it is more equally distributed in Colombia (even decreasing by income deciles). The case of Mexico is completely different, as business-related assets account for 35% and 66% of real assets in the first and second wealth deciles, respectively. At the top of the wealth spectrum, the share of business assets

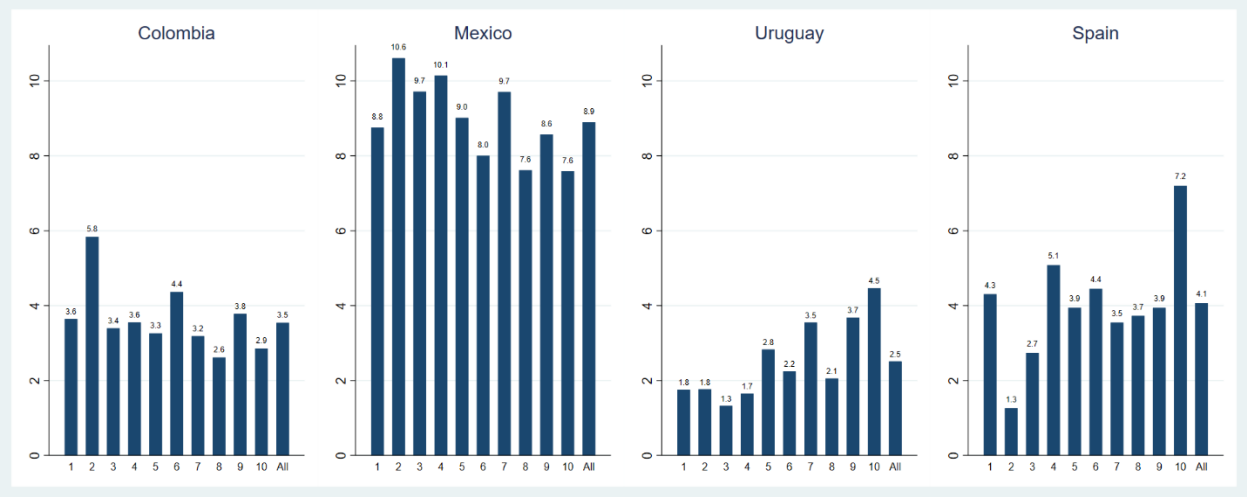
resembles that in other Latin American countries. Unfortunately, we do not have separate information on business assets in Chile.

Figure 6: Business assets (as % of real assets)

Panel A: By decile of net worth



Panel B: By income decile

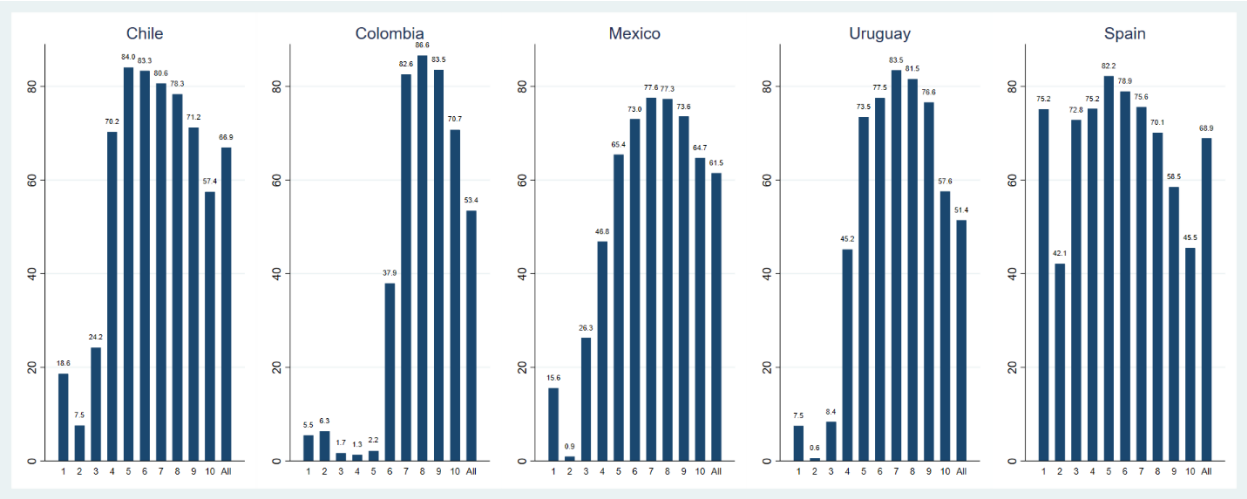


The second component of real assets that we study is dwellings. For the most part this component is simply the value of a household's primary residence, but in some cases it may also include the value of other real estate. Figure 7 shows the proportion of real assets held in real estate, both on average and across net worth and income distribution (Panels A and B, respectively). In all five countries, real assets are mostly held in dwellings. The proportion of real assets held in dwellings is, on average, 69% in Spain, 67% in Chile, 61% in Mexico, 53% in Colombia and 51% in Uruguay. In all the countries, the proportion of real assets in dwellings increases until the 5th to 7th wealth deciles and declines at the top of the wealth distribution. In contrast, it tends to decline along income deciles (Chile, Mexico and Spain). A striking difference between Spain and the four Latin American countries is that households in the lowest wealth decile in Spain still hold a relatively high proportion of real assets in dwellings, while that is not the case in Colombia, Chile, Mexico or Uruguay. In the lowest wealth decile, only 19% of real assets is held in

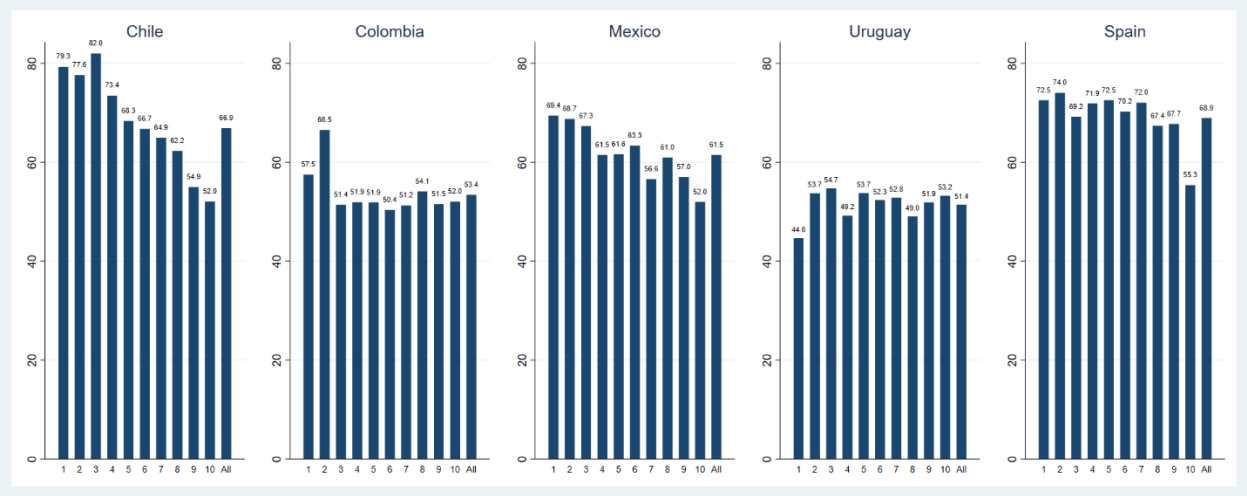
dwellings in Chile, 16% in Mexico, 7% in Uruguay and just 5% in Colombia, while the figure is 75% in Spain. This might be the reflection of differences in housing finance alternatives, as well as the fact that the home mortgage market is inaccessible for the poorest Latin American households.

Figure 7: Dwellings (as % of real assets)

Panel A: By decile of net worth



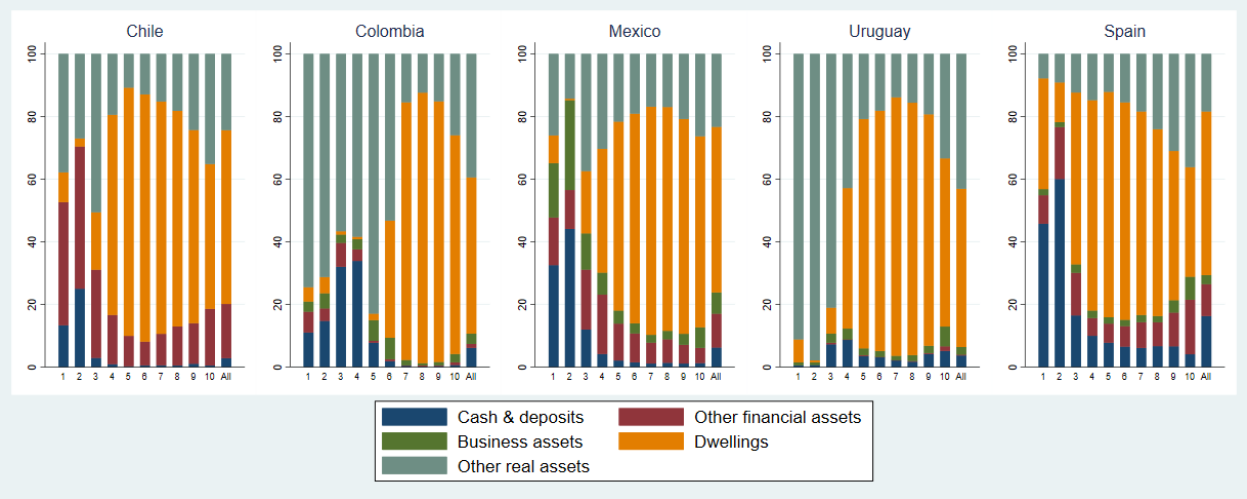
Panel B: By income decile



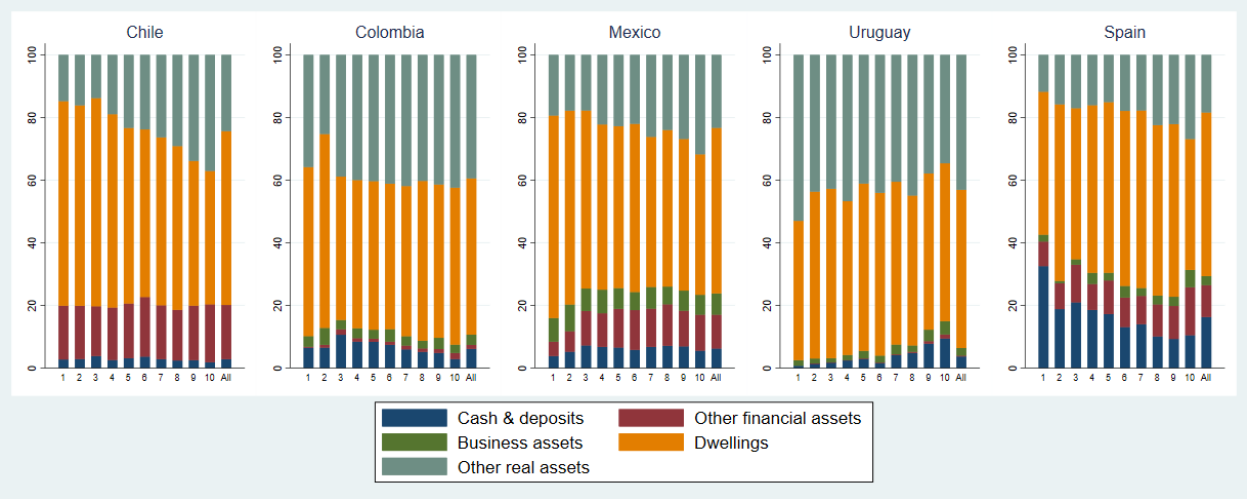
Panel A and Panel B of Figure 8 show, as a summary, the composition of gross assets in terms of main components: cash and deposits, other financial assets, business assets, dwellings, and other real assets across the distribution of wealth and income, respectively.

Figure 8: Composition of gross assets (% of gross assets)

Panel A: By decile of net worth



Panel B: By decile of income

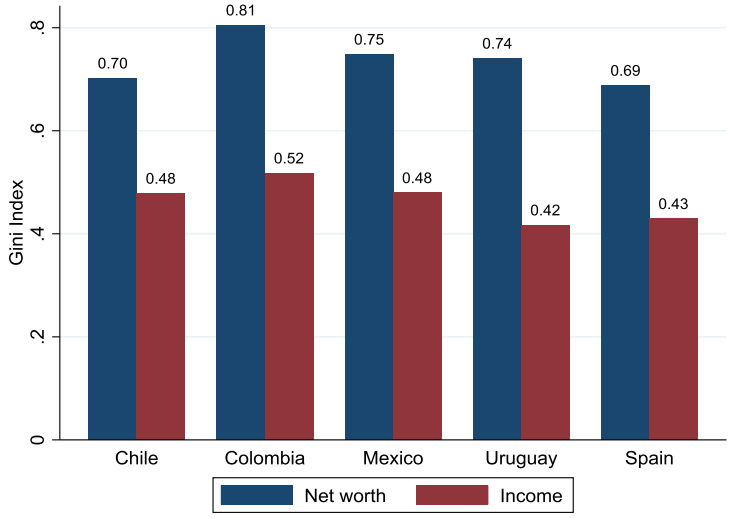


4. Wealth and income distribution

In this section we show alternative indicators of the distribution of income and wealth. Figure 9 shows the Gini Index for both net worth and income in the four Latin American countries considered. A word of caution is in order. Since wealth is a stock variable and income is a flow with persistence over time, it is expected that the Gini for wealth will be larger than the Gini for income. The empirically relevant question is how much larger, and what this difference tells us about redistributive policies. The ratio of the wealth Gini to the income Gini is in the range of 1.56-1.60 for Colombia, Mexico and Spain. Chile has the lowest ratio (1.46) and Uruguay the largest (1.76). This means that given respective income disparities, Chile is the country that best distributes its wealth, and Uruguay is the worst. This result is in contrast with the traditional images of both countries.

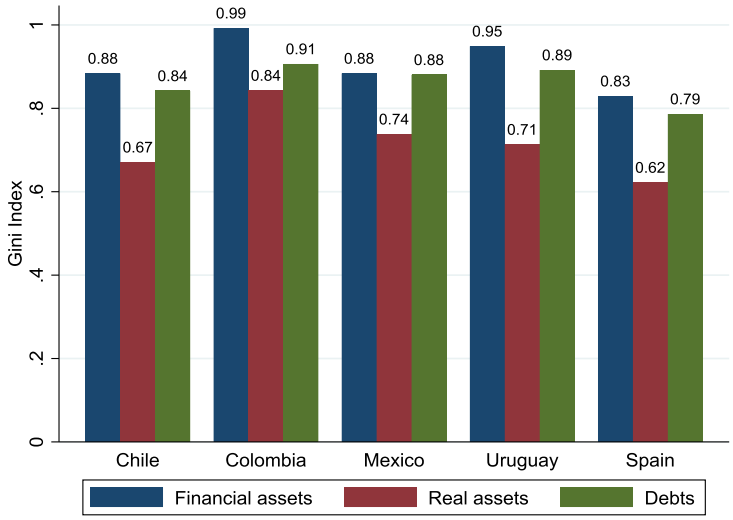
Both income and net worth are more equally distributed in Spain than in Latin America. Of the five countries, Colombia has the worst distribution of both wealth and income. Surprisingly, while income distribution in Uruguay is close to that in Spain, wealth is distributed less equally than in Spain or Chile.

Figure 9: Gini index: net worth and income



As shown in Figure 10, the distribution could also be analyzed in terms of wealth components: financial assets, real assets, and debts. Financial assets make up the component of wealth that is least equally distributed in the five countries, but particularly in Uruguay and Colombia. In contrast, real assets comprise the most equally distributed component, followed by debts.

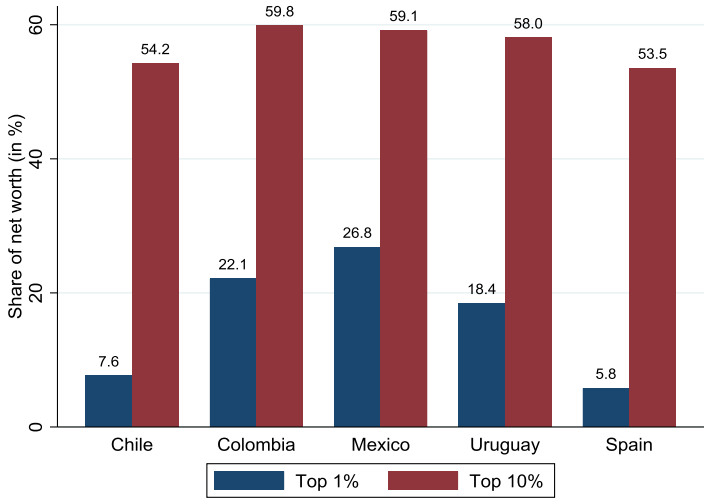
Figure 10: Gini index: financial assets, real assets, and debts



The distribution of wealth can also be studied by looking at the shares of the top 1% and top 10% of households. This should be taken with special care since household surveys are known to fail to capture information on the richest members of society, and we have no administrative data to adjust our estimates. Figure 11 shows the proportion of total net worth held by the top 10% and top 1% of households. More than half of total net worth is held by the top 10% of households in all the countries, but the proportion is higher in Latin American countries, in particular Colombia, Mexico and Uruguay.

The top 1% of households hold almost 6% of total wealth in Spain, and, in line with more inequality, this proportion increases in the Latin American countries, reaching almost 8% in Chile, just above 18% in Uruguay, 22% in Colombia, and almost 27% in Mexico.

Figure 11: Wealth share of the top 1% and top 10% (as % of total net worth)



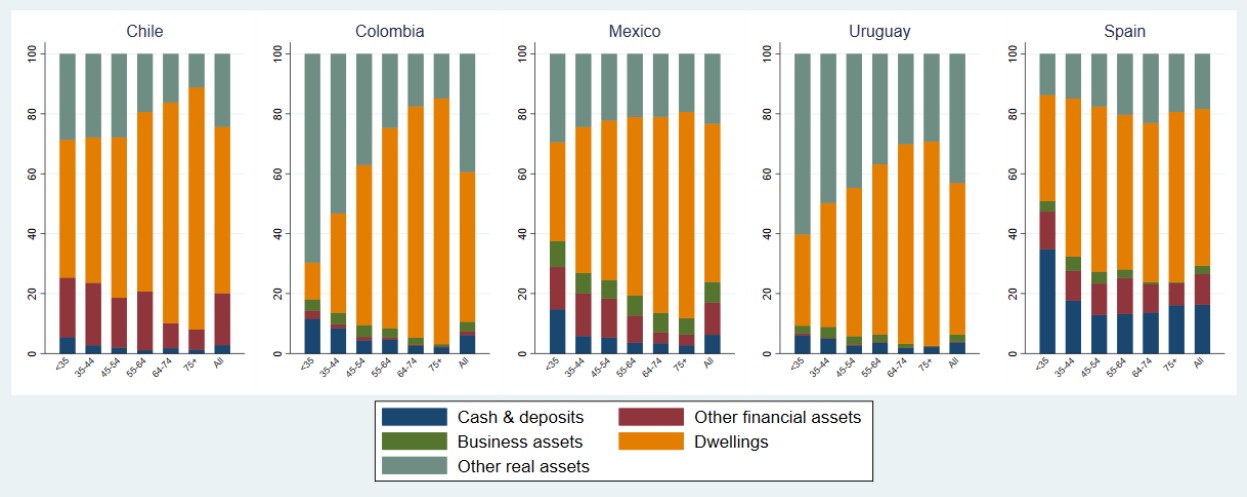
5. Household characteristics and wealth

In this section we show how observable household characteristics are correlated with the level and composition of household wealth. We consider education, age, gender, income and marital status of household heads.

5.1 Asset composition and household characteristics

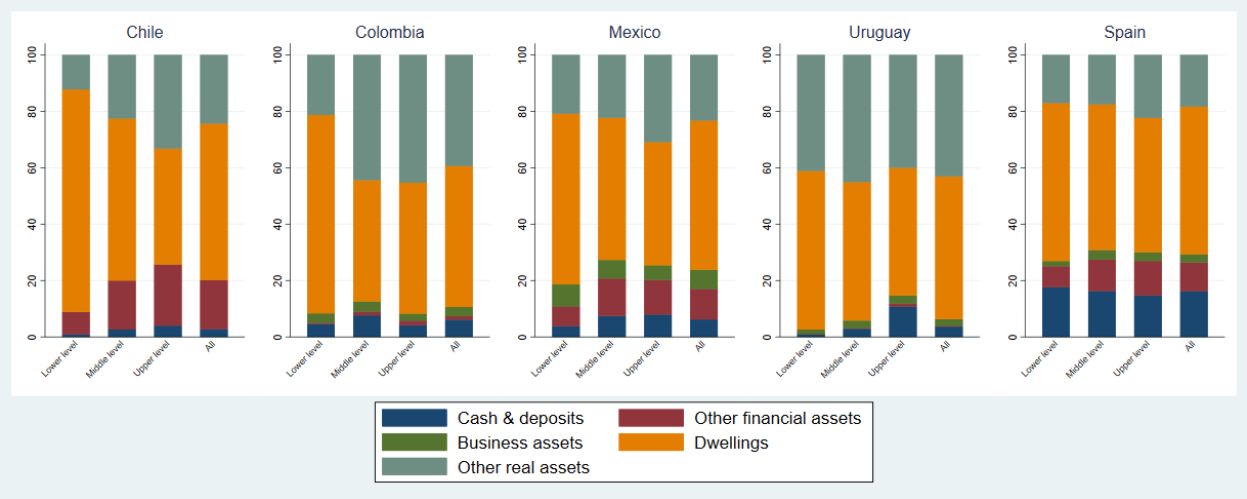
Figure 12 shows the composition of gross assets across age groups. The proportion of assets held in the form of dwellings increases with age for the four Latin American countries. That is not the case in Spain, where the share of assets held in dwellings is relatively constant for the various cohorts above age 35. There is also a decline in liquid assets (cash and deposits) with age. The sharp decline in other financial assets at age 64 and over in Chile is likely due to the drawdown of pension assets. Dwellings are the most important asset for the elderly in all five countries.

Figure 12: Composition of gross assets (% of gross assets, by age of household head)



We classify households according to the education level of household heads in three categories: lower (no education, only primary education or incomplete secondary education), middle (secondary or technical training) and upper (at least some university education). Financial asset holdings increase with the level of education of the household head (Figure 13). For instance, in Uruguay, households with university education hold 11% of gross assets in cash and deposits, contrasting with only 3% of gross assets held by those with secondary or technical education. The proportion of gross wealth in business assets is the highest for those in the lowest education bracket in Mexico. In Chile, the share of gross assets in other financial assets, of which the majority are pension assets, increases with education. While such assets represent 8% among those at the lower educational level, they reach 22% for more educated households.

Figure 13: Composition of gross assets (% of gross assets, by educational level of household head)



Note: lower educational level refers to no education, only primary education or incomplete secondary education), middle educational level refers to secondary education or technical training and upper educational level corresponds to at least some university education.

There are no large differences in the composition of gross assets across gender of household heads in the five countries analyzed (Figure 14), with dwellings representing a somewhat larger share of gross assets of households with female heads in Chile, Colombia and Mexico.

Figure 14: Composition of gross assets (% of gross assets, by gender of household head)

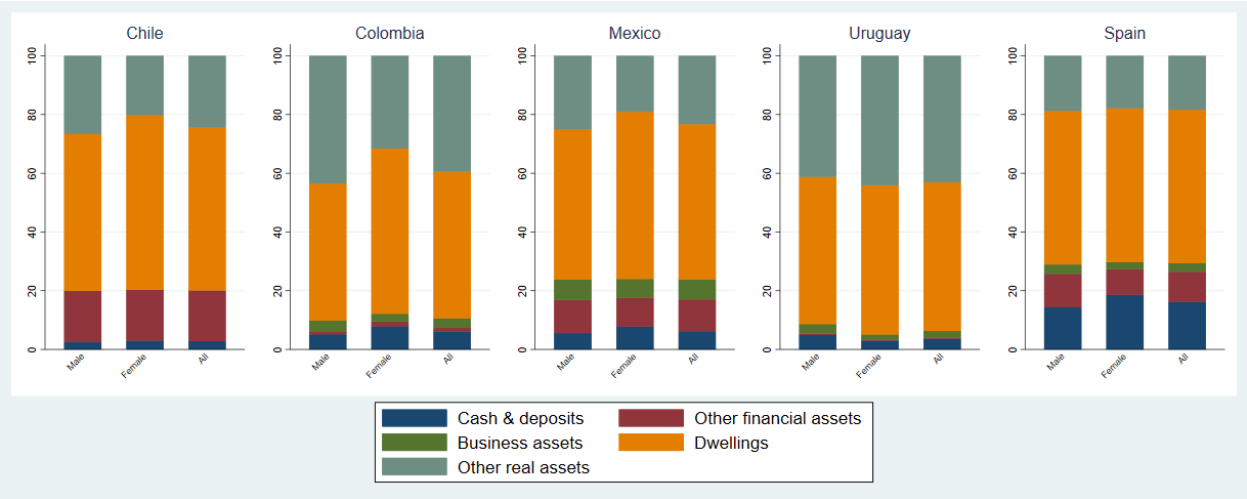
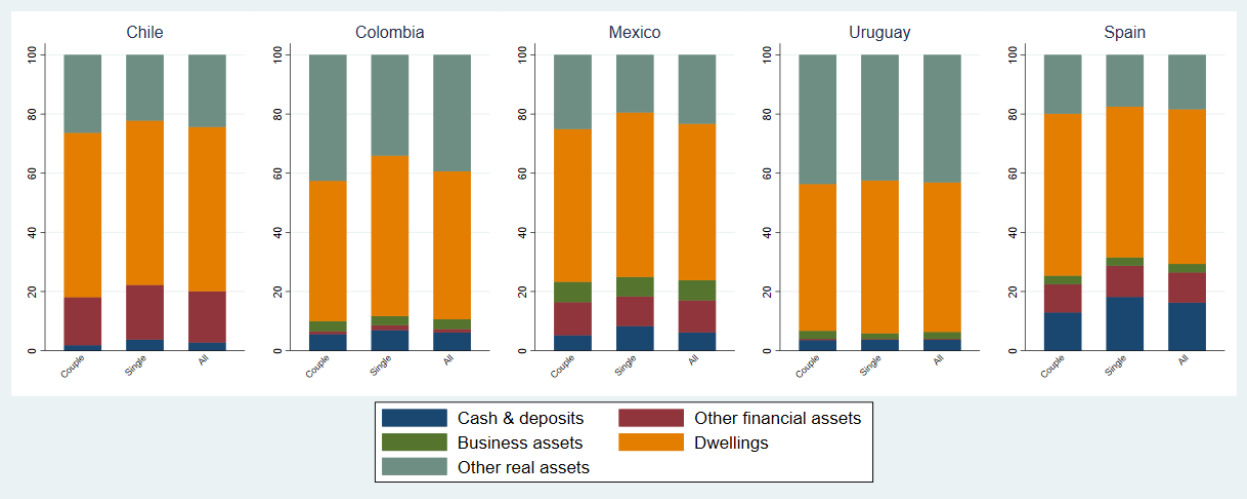


Figure 15 shows the composition of gross assets by marital status of household heads. Again, we do not find important differences in the composition of assets due to marital status.

Figure 15: Composition of gross assets (% of gross assets, by marital status of household head)



5.2 Debts and household characteristics

The ratio of debts to annual income decreases with age (Figure 16). This may happen as a result of dynamics in both the numerator and denominator. Some forms of debt may decrease with age, as mortgages are partially or completely paid off. Income tends to increase with age as result of human capital accumulation, both in terms of formal education and experience. The declining pattern of debt-to-income with age is most notable in Chile and particularly in Spain, where mortgage markets are more developed. From a life-cycle perspective, if credit markets are well developed, it is expected that households will finance consumption (of nondurables and durables) by incurring debts at younger ages, to be repaid as earners age, but this is not seen in our graphs between the first and second age brackets.

Figure 16: Debt-to-annual-income ratio (by age of household head)

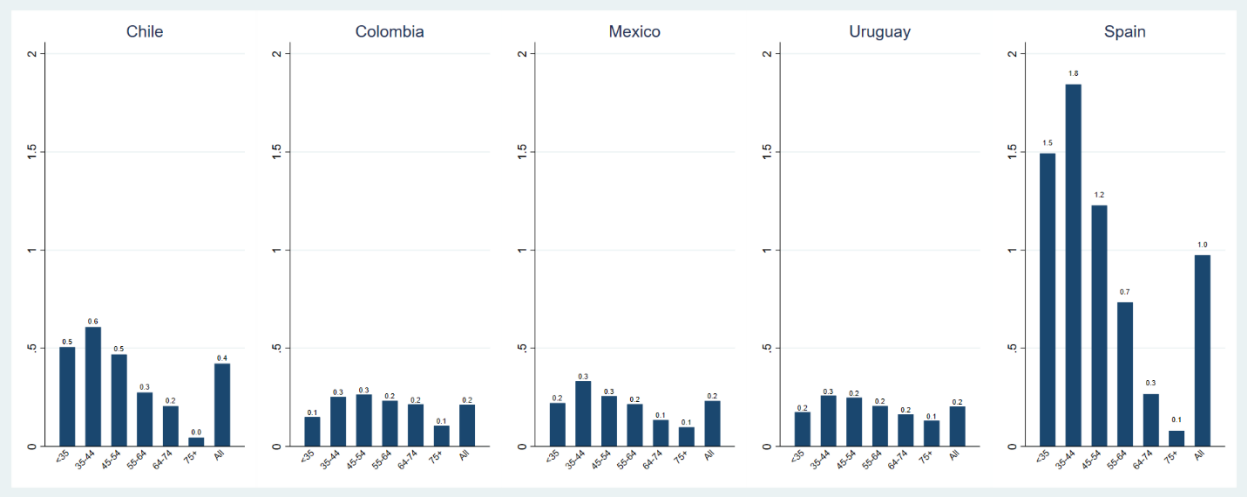
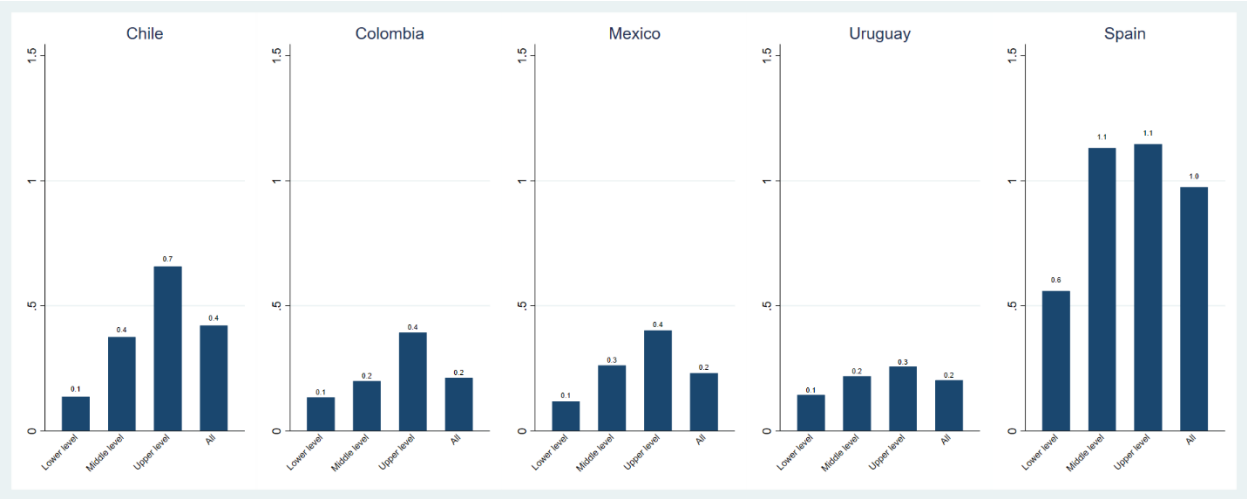


Figure 17 shows how the ratio of debt to annual income changes with level of education. We have already shown that debt increases with income, which is also the case with level of education. This suggests that richer and more educated households have greater access to credit. While there are important differences in the debt-to-income ratio across education levels in the Latin American countries studied, the ratio is relatively stable for household heads with secondary or above education in Spain, which suggests better access to credit markets.

Figure 17: Debt-to-annual-income ratio (by educational level of household head)



Note: lower educational level refers to no education, only primary education or incomplete secondary education), middle educational level refers to secondary education or technical training and upper educational level corresponds to at least some university education.

As in the case of the composition of gross assets, we do not find substantial differences in debt holdings across gender (Figure 18) or marital status (Figure 19) that can be reflected in simple, uncontrolled graph analysis.

Figure 18: Debt-to-annual-income ratio (by gender of household head)

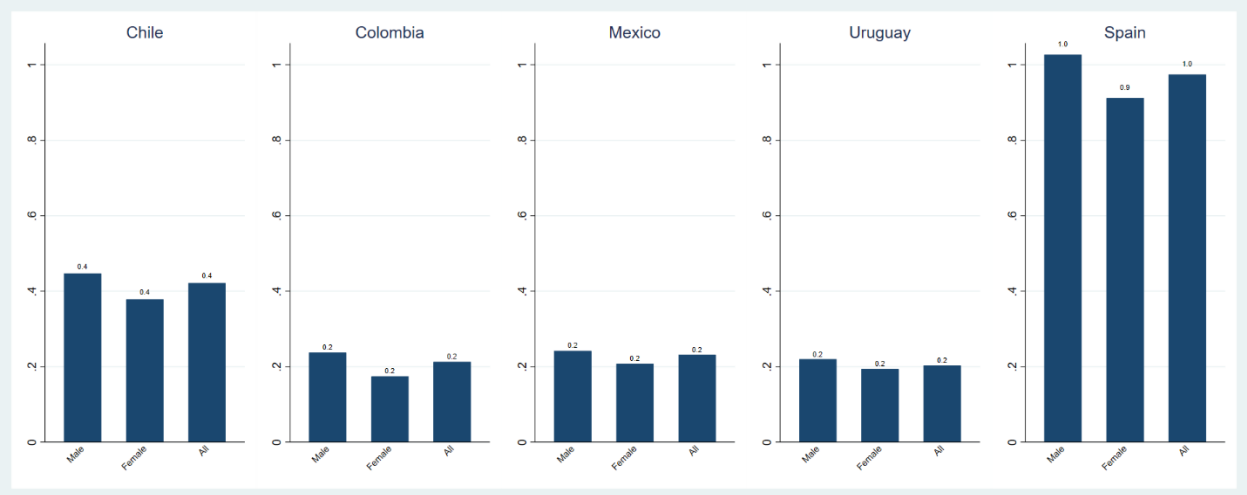
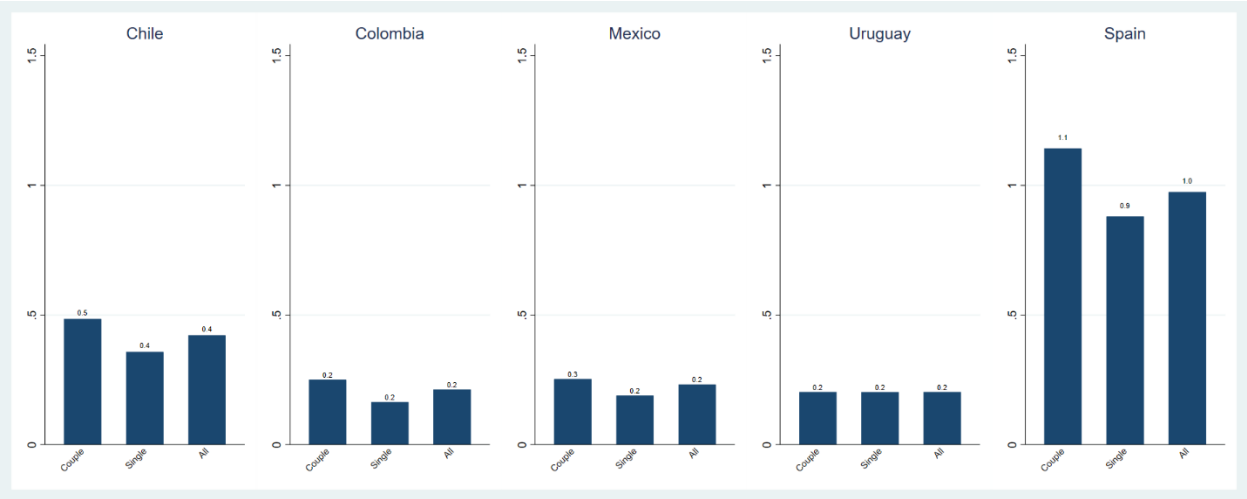


Figure 19: Debt-to-annual-income ratio (by marital status of household head)



5.3 Regression framework

Many of the characteristics of household heads depicted in Figures 12 to 19 are correlated, e.g. richer individuals also tend to be more educated. In what follows we present a regression analysis using the previous household head characteristics as explanatory variables. Since we lack an identification strategy, and variations cannot be assumed to be exogenous, the reported coefficients should not be interpreted in causal terms, but rather as correlations.

Table 1 starts with the ratio of net worth to annual income. We control for age and age squared to capture eventual non-linear effects. For the other demographic characteristics, we use dummy variables. The omitted category for education is the lowest level, so the reported coefficients should be interpreted as the difference between the lower and the other two levels. The bottom line presents the average value of the dependent variable, to simplify interpreting the relative size of marginal effects.

We find a statistically significant increasing relationship between net worth and annual income with age. In Chile and Colombia both the linear and squared terms are positive. In Mexico, Uruguay and Spain the squared term is negative, which implies marginal returns to age. According to our estimates, the maximum net worth-income-ratio is attained above 100 years of age.[3] Thus, from an empirical point of view, the net worth-to-income ratio increases with age in the relevant age range for all the countries considered.

We also find a statistically significant and increasing relationship between net worth and income with education (significant coefficients and of larger magnitudes for older and more educated people) in all

[3] In a model of the form:

$$y = \beta_1 Age + \beta_2 Age^2 + \gamma X + u$$

the first order condition to maximize the dependent variable is:

$$Age = \frac{-\beta_1}{2\beta_2}$$

countries. The size of the effect is large. The increase in net worth-to-income ratios between those having the lower level of education and those who attained secondary schooling ranges between 0.9 and 3. This represents between 25% and 39% of the average value of the net worth-to-income indicator. The difference between those with university education and those at the lower level of education is even larger: double for Chile, Uruguay and Spain, three times for Mexico, and five times for Colombia.

We also find in Chile, Uruguay and Spain that female-headed households tend to have a lower net worth-to-income ratios (representing between -4% and -10% of the average net worth-to-income indicator), while the results are not statistically significant for Colombia or Mexico. Single household heads also exhibit, in all countries, a negative and statistically significant coefficient, suggesting a lower net worth-to-income ratio when compared to households with couples.

The difference in the net worth-to-income ratio between single household heads and couples (ranging between -0.137 and -2.010) represents an equivalent decrease in the average net worth-to-income ratio of -4% for Chile, -30% for Colombia, -24% for Mexico, -10% for Uruguay and -26% for Spain.

Table 1 Net worth-to-income ratio and observable household characteristics

	Chile	Colombia	Mexico	Uruguay	Spain
Age/10	0.252***	1.126***	2.555***	1.389***	5.063***
	(0.055)	(0.352)	(0.358)	(0.130)	(0.445)
$(Age/10)^2$	0.082***	0.123***	-0.074**	-0.036***	-0.228***
	(0.006)	(0.036)	(0.036)	(0.013)	(0.040)
Middle educational level	0.883***	1.286***	1.476***	1.455***	2.989***
	(0.044)	(0.255)	(0.231)	(0.118)	(0.276)
Upper educational level	1.724***	6.624***	4.415***	2.865***	5.352***
	(0.054)	(0.391)	(0.347)	(0.145)	(0.326)
Female household head	-0.128***	0.274	-0.019	-0.276***	-0.826***
	(0.031)	(0.230)	(0.238)	(0.082)	(0.175)
Single household head	-0.137***	-1.304***	-1.220***	-0.453***	-2.010***
	(0.031)	(0.244)	(0.238)	(0.083)	(0.191)
Log of household income	-0.487***	-4.583***	-3.535***	-1.358***	-2.400***
	(0.021)	(0.214)	(0.195)	(0.080)	(0.217)
Constant	7.337***	72.098***	34.398***	14.368***	10.542***
	(0.334)	(3.495)	(2.094)	(0.979)	(1.954)
Observations	139,151	11,201	16,959	35,765	31,340
R-squared	0.148	0.304	0.172	0.066	0.096
Average Net worth to income ratio	3.517	4.376	5.077	4.362	7.589

Note: Income refers to the logarithm of household income; all other variables are defined for household heads. Middle education level is a dummy that takes the value of one if the household head has completed secondary or technical education. Upper educational level is a dummy that takes the value of one if the household head has completed at least some tertiary education. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Similarly, Table 2 reports the regression of the debt-to-income ratio on observable household characteristics. In Latin American countries we find a positive linear age term and a negative squared term. This implies an inverse U-shaped relation. Greater age is associated with a larger debt-to-income ratio up to a certain point, when the ratio starts decreasing. This maximum is attained in Chile at age 37, in Colombia at age 58 and in Mexico and Uruguay at age 50. This is in line with the permanent income hypothesis. Individuals consume above their current income while young, and this is accomplished by taking on debt that is repaid later in life. In Spain the linear term for age is not statistically significant, which means that the debt-to-income ratio always decreases with age.[4]

More educated households tend to have larger debt-to-income ratios as reported by coefficients that are statistically significant, positive and of increasing magnitude. This probably reflects difficulties faced by the less educated in accessing credit markets. Female heads of household have lower access to debt in Colombia, Uruguay and Spain; the opposite occurs in Chile, while Mexico shows no statistically significant results. Single-headed households in all countries but Uruguay exhibit lower statistically significant debt-to-income ratios, with a size effect of -23% in Chile, -42% in Colombia, -20% in Mexico and in Spain.

Table 2 Debt-to-income ratio and observable household characteristics

	Chile	Colombia	Mexico	Uruguay	Spain
Age/10	0.172***	0.187***	0.119***	0.141***	0.023
	(0.008)	(0.013)	(0.019)	(0.009)	(0.076)
$(Age/10)^2$	-0.023***	-0.016***	-0.012***	-0.014***	-0.034***
	(0.001)	(0.001)	(0.002)	(0.001)	(0.006)
Middle educational level	0.128***	0.094***	0.129***	0.082***	0.042
	(0.005)	(0.011)	(0.013)	(0.008)	(0.045)
Upper educational level	0.344***	0.318***	0.280***	0.147***	0.157***
	(0.008)	(0.022)	(0.021)	(0.013)	(0.056)
Female household head	0.030***	-0.022**	0.004	-0.028***	-0.072**
	(0.006)	(0.010)	(0.015)	(0.007)	(0.033)
Single household head	-0.098***	-0.088***	-0.046***	0.009	-0.206***
	(0.006)	(0.011)	(0.016)	(0.007)	(0.032)
Log of household income	0.079***	-0.048***	-0.012	-0.041***	-0.149***
	(0.004)	(0.008)	(0.007)	(0.005)	(0.031)
Constant	-1.251***	0.487***	0.007	0.342***	3.584***
	(0.059)	(0.134)	(0.089)	(0.066)	(0.359)
Observations	139,151	24,128	16,959	37,585	31,340
R-squared	0.084	0.041	0.030	0.015	0.115
Average Debt to income ratio	0.421	0.212	0.231	0.203	0.974

Note: Income refers to the logarithm of household income; all other variables are defined for household heads. Middle education level is a dummy that takes the value of one if the household head has

[4] Neglecting the non-significance of the negative linear term and taking at face value its point estimate would imply that the maximum debt-to-income ratio is attained for households heads that are 3 years old. That is, for the empirically relevant range the relationship between debt-to-income and age is negative in Spain.

completed secondary or technical education. Upper educational level is a dummy that takes the value of one if the household head has completed at least some tertiary education. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

6. Intergenerational effects

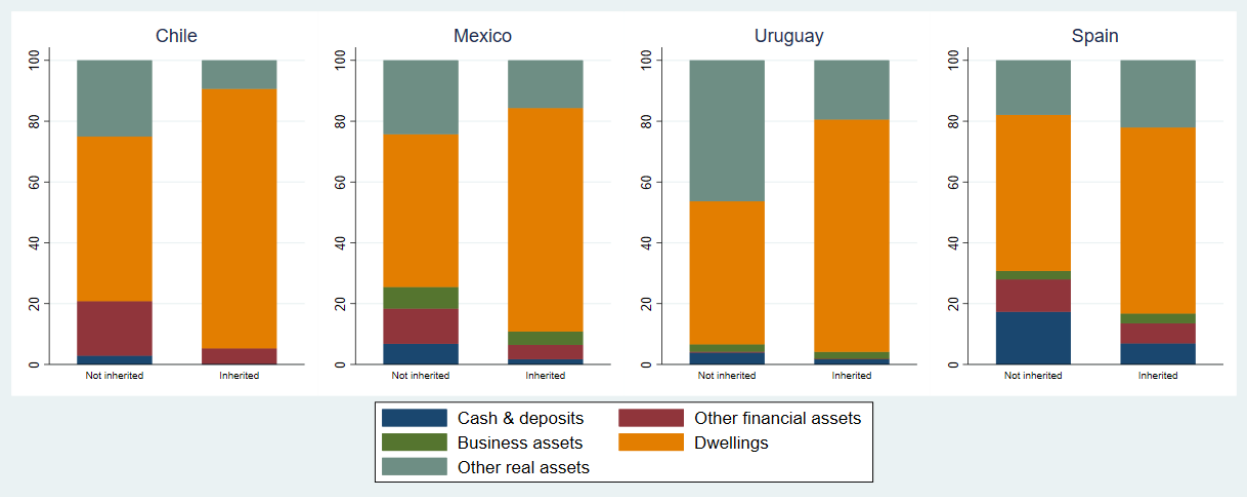
6.1 The role of inheritance

In this section we exploit a question asked in the surveys about how homeowners acquired their dwellings, inheritance being one of the options. This information is available for Chile, Mexico, Uruguay, and Spain.

The proportion of households that inherited their main property is 12% in Uruguay, 11% in Mexico, and just 4% in Chile. These percentages are similar to those observed in Spain, where 10% of households inherited their main property.

Figure 20 shows the composition of gross assets for households that have received an inheritance and for those that have not. As expected, in the four countries the share of gross assets held in dwellings increases with inheritance, while there is a decline in the proportion of assets held in cash and deposits.

Figure 20: Composition of gross assets (% of gross assets, by inheritance)



Inheritance is associated with less indebtedness. In the four countries for which we have information on inheritance, we find that the ratio of debts to gross wealth is higher among households that did not inherit their main properties. Indeed, while debt represents about 20% of gross assets in Chile, Spain and Uruguay, among those that did not receive an inheritance, it represents 4% in Uruguay, 5% in Chile, and 7% in Spain among those that did receive (Figure 21).

A similar picture emerges if we look at the debt-to-income ratio (Figure 22). In all four countries, the ratio is half among households that inherited their main properties. Thus, it is not a mere mechanical effect of having a larger denominator (household inheritance mechanically increases wealth) and is suggestive of less indebtedness among those who own their homes. This may be due to home mortgage financing or other forms of debt.

Figure 21: Debts (as % of gross wealth, by inheritance)

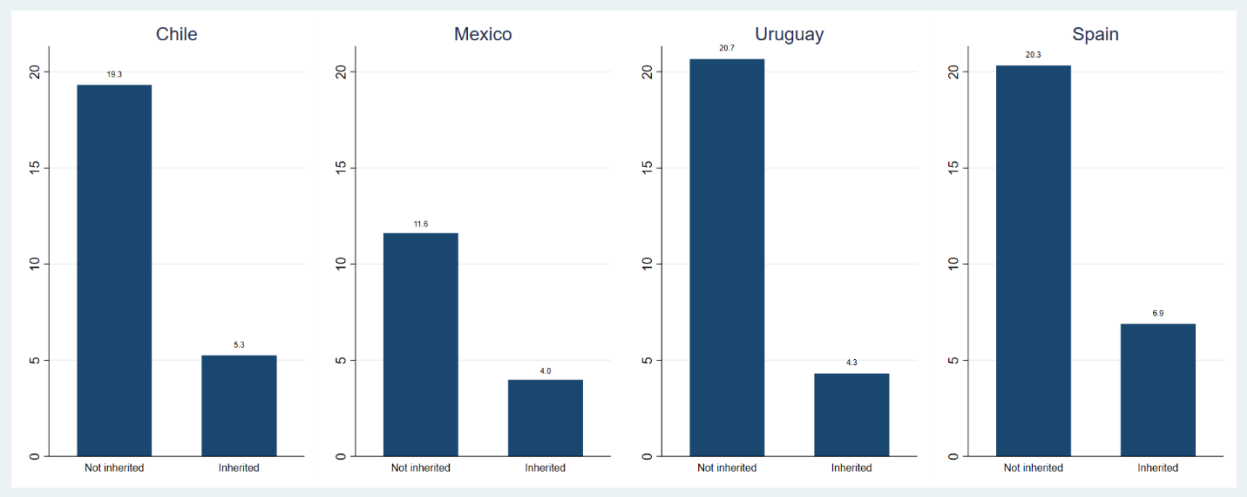
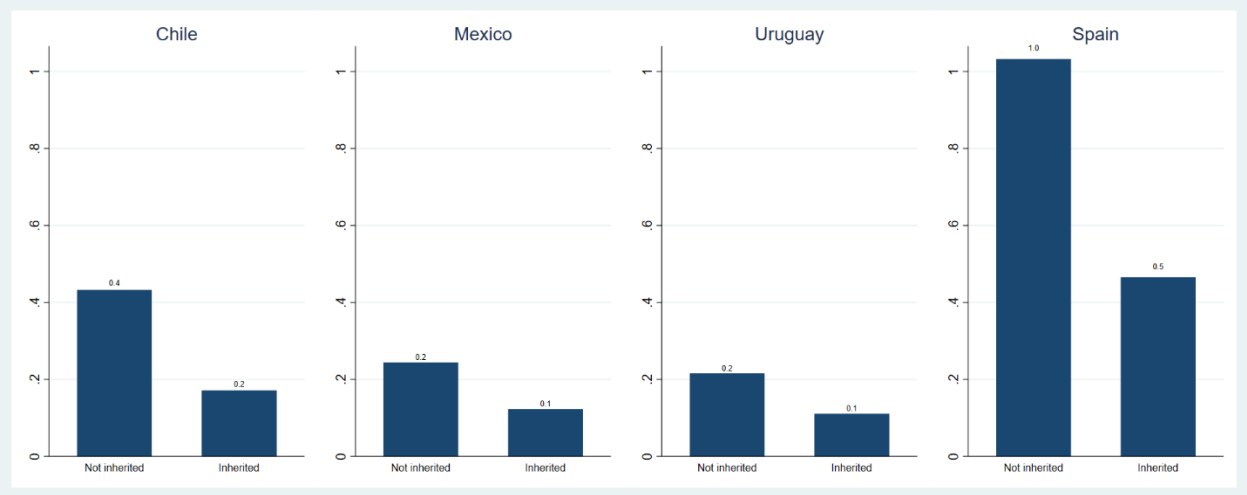


Figure 22: Debts-to-income ratio (by inheritance)



Inheritances are not only correlated with debts, but also with net worth. Figure 23 shows that in all four countries considered, the net worth-to-income ratio is substantially higher among those households that received inheritances. While net worth represents 7 years of annual income among households that inherited their main properties in Chile, Mexico and Uruguay, it only represents 3.4 years in Chile, 4 years in Uruguay, and 4.8 years in Mexico among households that did not inherit their main properties. A similar pattern is found for our benchmark country, Spain.

Figure 23: Net worth-to-income ratio (by inheritance)

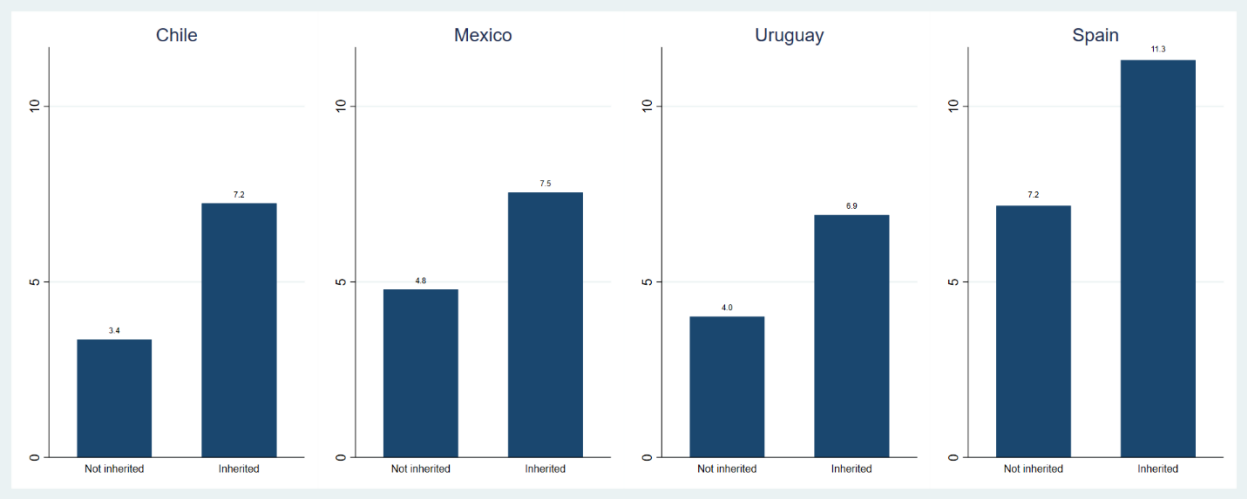


Table 3 shows the results of estimating probit models for whether receiving an inheritance or not controlling for household demographic characteristics. The likelihood of receiving an inheritance increases with age, up to a certain point. This maximum for Chile is 125 years, for Mexico 68, for Uruguay 61 and for Spain 74. That is to say, for most of the relevant empirical range, the probability of receiving an inheritance increases with age. Most other demographic variables show coefficients with no clear patterns. An interesting result is the negative and statistically significant coefficient of income in all countries. Given the probabilities of having inherited (Chile 4%, Mexico 11%, Uruguay 12% and Spain 10%) this implies an elasticity in the probability of inheritance with respect to income in the range of about one for Chile, Mexico and Spain and a much lower 0.2 for Uruguay. Unitary elasticity implies that a household's doubling its income is associated with doubling the probability of having received an inheritance.[5] We must stress that what we are depicting are not causal relationships. It could even be

[5] In a model of the form:

$$Pr(y = 1) = \beta_1 ln(income) + \gamma X + u$$

the first derivative with respect to income is:

$$\frac{\partial Pr(y = 1)}{\partial income} = \frac{\beta_1}{income}$$

Thus, the elasticity of the probability of inheriting with respect to income is:

$$\frac{\partial Pr(y = 1)}{\partial income} \frac{income}{Pr(y = 1)} = \frac{\beta_1}{Pr(y = 1)}$$

argued that these coefficients are the result of reverse causality: individuals who inherited their houses do not need to generate the same amount of labor income to cover their family budgets.

Table 3: Probit models for inheritance

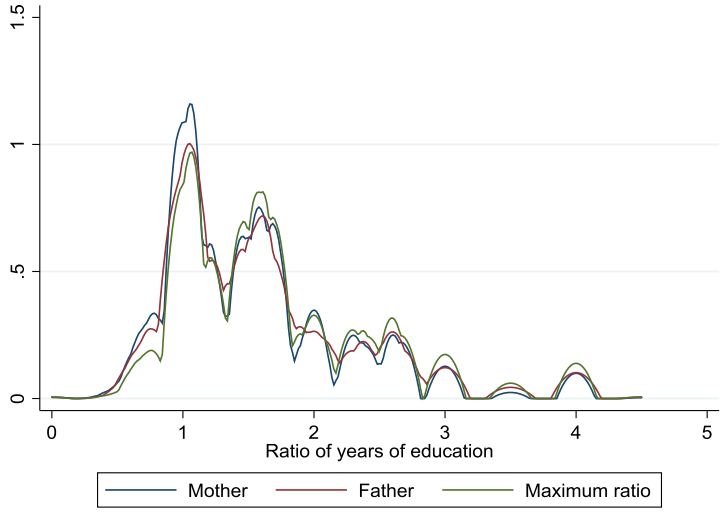
	Chile	Mexico	Uruguay	Spain
Age/10	0.250***	0.189***	0.232***	0.432***
	(0.031)	(0.063)	(0.036)	(0.074)
$(Age/10)^2$	-0.010***	-0.014**	-0.019***	-0.029***
	(0.003)	(0.006)	(0.003)	(0.006)
Middle educational level	0.087***	0.007	0.090***	-0.195***
	(0.024)	(0.042)	(0.025)	(0.035)
Upper educational level	0.009	-0.145**	0.052	-0.316***
	(0.034)	(0.061)	(0.036)	(0.048)
Female household head	-0.086***	0.158***	-0.007	-0.081**
	(0.019)	(0.046)	(0.020)	(0.033)
Single household head	0.240***	0.009	0.099***	0.070**
	(0.017)	(0.045)	(0.020)	(0.033)
Log of household income	-0.046***	-0.097***	-0.025*	-0.124***
	(0.012)	(0.020)	(0.014)	(0.019)
Constant	-2.103***	-0.740***	-1.569***	-1.330***
	(0.184)	(0.267)	(0.189)	(0.245)
Observations	139,151	16,959	38,125	31,340
Average probability of receiving an inheritance	0.042	0.106	0.123	0.102

Note: Income refers to the logarithm of household income; all other variables are defined for household heads. Middle education level is a dummy that takes the value of one if the household head has completed secondary or technical education. Upper educational level is a dummy that takes the value of one if the household head has completed at least some tertiary education. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

6.2 Intergenerational mobility proxied by education

One of the most used strategies to study intergenerational mobility is to measure the impact of parent education on children (Behrman et al. 1999). The Uruguayan survey has information on parents' education that allows us to construct a crude measure of intergenerational mobility as the ratio of the household head's years of education to the head's mother's or father's years of education. A ratio equal to 1 means that the household head attained the same level of education as her parents. Over the last decades there has been an overall increase in years of schooling. Someone with the same level of education as his parents has not benefited from general societal improvement in education. Thus, on average, we should expect the ratio to be larger than 1. Figure 24 shows the distribution of this intergenerational educational mobility, confirming the general increase in years of education. There are no substantial differences in the ratio with respect to the mother or father, or even the maximum between the two. From now on we analyze intergenerational mobility using the maximum, but our results are robust to the alternative measures.

Figure 24: Ratio of years of education of children to parents



Using this proxy, we can approximate how intergenerational educational mobility is related to wealth. We consider three groups of households: those for whom education did not improve compared to the average (ratio below 1.15, corresponding to the first quartile), those for whom years of schooling increased compared to that of their parents, but in line with the rest of the population (ratio between 1.15 and 2, corresponding to the second and third quartile), and those with an above-average increase in the number of years of schooling (ratio above 2).

Table 4 shows the main variables across intergenerational mobility. Without claims of causality, the results show that intergenerational educational advancement is associated with greater wealth, a larger net worth-to-income ratio, larger probabilities of inheriting, a larger proportion of financial assets and a lower proportion of real assets and debts.

Table 4: Intergenerational mobility –Uruguay- average statistics

Mobility	Net worth (in USD)	Net worth-to-income ratio	Debt-to-income ratio	% inherited property	% inherited business	% of gross assets: Financial assets	% of gross assets: Real assets	% of gross assets: Debts
No advance	62,287	4.5	0.17	12.1	1.4	2.9	97.1	19.9
Average advance	72,025	4.6	0.23	13.1	1.3	4.8	95.2	19.0
High advance	106,800	5.0	0.23	13.5	2.1	5.3	94.7	18.3

7. Final observations

The goal of this paper is to generate and analyze a set of harmonized indicators for household wealth, its components, and its determinants, including intergenerational mobility. We make use of microdata that has recently become available for Chile, Colombia, Mexico and Uruguay. Spain serves as a comparison benchmark.

We have tried to present homogenized wealth indicators in an orderly and systematic way. The analysis is essentially descriptive but reveals certain empirical regularities and anomalies of interest. First, Spanish households hold larger buffer stocks to smooth negative shocks than their Latin American counterparts. While the ratio of net worth to income is 7.8 in Spain, it ranges from 5.1 in Mexico, to 4.4 in Uruguay and Colombia and 3.5 in Chile.

Second, this result is not driven by indebtedness. In all countries, households in the poorest net wealth decile are relatively more indebted, but this feature is exacerbated in Spain with a debt-to-income ratio that is about four times the equivalent that in of Latin American households. This suggests that access to credit markets, both for consumers but also for mortgage loans, is an important determinant of household debt holdings. In theory, improving access to financial resources would enhance wellbeing by helping to smooth consumption over the business cycle and by alleviating restrictions on productive micro-investments. At the same time, improving credit access is likely to increase levels of indebtedness further. Thus, at least from this point of view, the problem in Latin America is not that the poor are indebted, but rather that they lack access to credit in formal markets and mortgages.

For all the countries studied, most household assets consist of real assets, dwellings being the most important components of gross assets. Little is known about wealth held in private businesses in Latin America. The case of Mexico stands out, as business related-assets account for 35% and 66% of real assets in the first and second wealth deciles, respectively. At the top of the wealth spectrum, the share of business assets in Mexico resembles that in other Latin American countries. Here we must recall a limitation of our study: household surveys are known to have difficulties in capturing the extreme right of the income and wealth distribution. Research based on administrative tax sources may provide clarity that could complement our results.

We also study the relationship between assets and debts, with regard household characteristics. We find an increasing relationship between the wealth-to-income ratio with age and education in all countries. The size of the effect is large. For instance, the increase in the net worth-to-income ratio between the lower level of education and the middle level ranges between 0.9 and 3. This represents between 25% and 39% of the average value of the net worth-to-income indicator. The difference between those with university education and those at the lower level is even larger.

In Latin American countries we find an inverse U-shaped relation between the debt-to-income ratio and age. Greater age is associated with a larger debt-to-income ratio up to a certain point, when the ratio starts decreasing. The maximum is attained in Chile at age 37, in Colombia at age 58 and in Mexico and Uruguay at age 50. We find that more educated households tend to have larger debt-to-income ratios, probably reflecting difficulties in accessing to credit markets among the less educated.

Finally, we look at the role of inheritance and intergenerational mobility in predicting wealth. The proportion of households that inherited their main property is 12% in Uruguay, 11% in Mexico, and just 4% in Chile, compared to 10% in Spain. As expected, in the four countries for which inheritance data is available, the share of gross assets held in dwellings increases with inheritance, while the proportion of assets held in cash and deposits declines, as does household indebtedness. We also find that, as in the case of Spain, the net worth-to-income ratio is substantially higher among households that received an inheritance in the three Latin American countries for which data is available. We are able to study the relationship between intergenerational mobility, measured by education, and wealth only in Uruguay. Without claims of causality, we show that intergenerational educational advancement in that nation is associated with greater wealth, larger net worth-to-income ratios, larger probabilities of inheriting, larger proportions of financial assets and lower proportions of real assets and debts.

Conflict of interest

The authors declare that they do not have any conflict of interest.

Data availability statement

The raw data used in the paper is publicly available from national institutes mentioned in the Data section of the paper. Upon request the authors can provide the codes that produce the figures and tables here reported.

References

ALAN, S.; ATALAY, K. & CROSSLEY, T. F. (2015). Do the rich save more? Evidence from – Canada, *Review of Income and Wealth*, 61(4), 739-757.

ATKINSON, A. B. & HARRISON, A. J. (1978). *Distribution of Personal Wealth in Britain*. Cambridge: University Press, Cambridge.

ATKINSON, A.B.; GORDON, J. P. F. & HARRISON, A. J. (1989). Trends in the shares of top wealth-holders in Britain, 1923-1981, *Oxford Bulletin of Economics and Statistics,* 51, 315-332.

BIVAS, A. (2016). *Income and wealth inequality in Chile.* [Master Thesis in Public Policies and Development]. Paris: Paris School of Economics.

BEHRMAN, J., BIRDSALL, N. & SZÉKELY, M. (1999). Intergenerational mobility in South America: deeper markets and better schools make a difference. In BRIDSALL, N. & GRAHAM, C., (Eds.). *New markets, new opportunities? Economic and social mobility in a changing world*. (pp. 1 - 39). Washington, D.C.: Brookings Institution and Carnegie Endowment for International Peace.

CHANCEL, L.; PIKETTY, T., SAEZ, E. & ZUCMAN, G. (2021). *World Inequality Report 2022*. Retrieved from https://wir2022.wid.world/www-site/uploads/2021/12/WorldInequalityReport2022_Full_Report.pdf

CHAKRABARTY, D.; KATAYAMA, H. & MASLEN, H. (2008). Why do the rich save more? A theory and Australian evidence. *Economic Record*, 84, 32–44.

DAVIES, J. & DI MATTEO, L. (2021). Long run Canadian wealth inequality in international context, *Review of Income and Wealth,* 67(1), 134-164.

DAVIES, J. B.; SANDSTRÖM, S.; SHORROCKS, A. & WOLFF, E. N. (2008). The world distribution of household wealth. In JAMES B. DAVIES, (Ed.). *Personal wealth from a global perspective*. (pp. 395-418). Oxford: Oxford University Press.

DAVIES, J. B.; SANDSTRÖM, S.; SHORROCKS, A. & WOLFF, E. N. (2011). The level and distribution of global household wealth. *The Economic Journal*, 121: 223–254.

DAVIES, J. B.; LLUBERAS, R. & SHORROCKS, A. (2017). Estimating the level and distribution of global wealth, 2000-2014. *Review of Income and Wealth*, 63(4), 731-759.

DAVIES, J. B.; LLUBERAS, R. & SHORROCKS, A. (2021). Global wealth report 2021. London: Credit Suisse Research Institute.

DEPARTAMENTO ADMINISTRATIVO NACIONAL DE ESTADÍSTICA DE COLOMBIA– DANE (2019). Boletín Técnico Encuesta Nacional de Calidad de Vida (ECV). Antioquía, Bogotá, D. C.: DANE.

DE ROSA, M. (2019). *Wealth accumulation and its distribution in Uruguay: first estimates of the untold half of the story.* Master Thesis in Public Policies and Development. Paris: Paris School of Economics.

DYNAN, K. E.; SKINNER, J. & ZELDES, S. P. (2004). Do the rich save more? *Journal of Political Economy*, 112(2), 397-444.

GANDELMAN, N. (2017). Do the rich save more in Latin America? *Journal of Economic Inequality*, 15(11), 75-92.

GANDELMAN, N. (2016). A comparison of saving rates: micro evidence from sixteen Latin American and Caribbean Countries. *Economia*, 16(2), 201-258.

GANDELMAN, N. (2017). Do the rich save more in Latin America? *Journal of Economic Inequality*, 15, 75-92.

KOPCZUK, W. & SAEZ, E. (2004). Top wealth shares in the United States, 1916-2000: evidence from estate tax returns, *National Tax Journal*, 57(2), 445-87.

PIKETTY, T.; POSTEL-VINAY, G. & ROSENTHAL, J. L. (2006). Wealth concentration in a developing economy: Paris and France, 1807-1994. *American Economic Review*, 96(1), 236-256.

ROINE, J. & WALDENSTRÖM, D. (2009). Wealth concentration over the path of development: Sweden, 1873–2006. *Scandinavian Journal of Economics*, 111(1), 151–187.

ROINE, J. & WALDENSTRÖM, D. (2015). Long-run trends in the distribution of income and wealth. In ATKINSON, A. B. & BOURGUIGNON, F. (Eds.), *Handbook of Income Distribution*, v. 2A, (pp. 469–592). Amsterdam: Elsevier.

SAEZ, E. & ZUCMAN, G. (2016). Wealth inequality in the United States since 1913: evidence from capitalized income tax data. *Quarterly Journal of Economics*, 131(2), 519-578.

SANROMAN, G. & SANTOS, G. (2021). The joint distribution of income and wealth in Uruguay. *Cuadernos de Economía*, 40 (83), 609-642.

TORCHE, F. & SPILERMAN, S. (2006). *Household wealth in Latin America.* (UNU Research Paper nº 114). Helsinki: UNU-WIDER.

VERMEULEN, P. (2018). How fat is the top tail of the wealth distribution*. Review of Income and Wealth*, 64 (2), 357-387.

WOLFF, E. (1983). The size distribution of household disposable wealth in the United States. *Review of Income and Wealth*, 29 (2), 125-146.

WOLFF, E. (1987). Estimates of household wealth inequality in the U.S., 1962-1983. *Review of Income and Wealth*, 33 (3), 231-256.

WOLFF, E. (2014). Household wealth trends in the United States, 1983-2010. *Oxford Review of Economic Policy*, 30 (1), 21-43.

WOLFF, E. (2021). *Household wealth trends in the United States, 1962 to 2019: median wealth rebounds…but not enough.* (NBER Working Paper nº 28383). Massachusetts: National Bureau Economic Research.

Online appendix

Table A1. Wealth components by wealth and income deciles

		Net worth-to-income ratio		Debt-to-income ratio		Debts as % of gross assets		Financial assets as % of gross assets		Liquid assets as % of financial assets		Business assets as % of real assets		Dwellings as % of real assets	
	Decile	Wealth decile	Income decile	Wealth decile	Income decile	Wealth decile	Income decile	Wealth decile	Income decile	Wealth decile	Income decile	Wealth decile	Income decile	Wealth decile	Income decile
Colombia	All	4.4	4.4	0.2	0.2	22.9	22.9	7.3	7.3	75.4	75.4	3.5	3.5	53.4	53.4
	1	-0.6	22.5	0.8	0.3	156.1	17.0	17.7	6.8	66.0	84.6	3.9	3.6	5.5	57.5
	2	-0.2	10.2	0.2	0.2	149.3	13.2	18.7	7.4	79.2	84.9	5.9	5.8	6.3	66.5
	3	-0.1	3.9	0.1	0.2	135.9	20.8	39.7	12.4	78.5	86.0	4.2	3.4	1.7	51.4
	4	0.1	3.8	0.0	0.2	23.6	20.5	37.6	9.5	89.5	88.6	5.3	3.6	1.3	51.9
	5	0.3	3.5	0.1	0.2	15.7	20.1	8.3	9.3	90.8	87.8	7.1	3.3	2.2	51.9
	6	2.5	3.1	0.4	0.2	15.0	25.3	2.4	8.4	78.8	83.2	7.0	4.4	37.9	50.4
	7	6.3	2.6	0.4	0.2	9.0	27.0	0.5	7.2	80.6	84.1	1.7	3.2	82.6	51.2
	8	9.2	2.4	0.3	0.2	6.2	24.0	0.5	6.3	69.8	82.1	0.8	2.6	86.6	54.1
	9	11.1	2.5	0.4	0.3	5.6	27.7	0.5	6.0	64.2	72.5	1.1	3.8	83.5	51.5
	10	15.3	3.0	0.6	0.3	6.3	24.8	1.5	4.8	55.9	54.3	2.8	2.9	70.7	52.0
Uruguay	All	4.4	4.4	0.2	0.2	18.7	18.7	4.0	4.0	94.9	94.9	2.5	2.5	51.4	51.4
	1	-0.3	6.8	0.6	0.2	123.9	21.8	0.6	0.7	100.0	100.0	0.9	1.8	7.5	44.6
	2	0.1	5.0	0.0	0.2	11.7	19.9	0.6	1.4	100.0	99.3	0.8	1.8	0.6	53.7
	3	0.3	4.5	0.1	0.2	12.3	18.4	7.7	1.8	95.2	98.3	2.9	1.3	8.4	54.7
	4	1.1	4.6	0.2	0.1	11.1	15.1	8.8	2.6	99.4	98.3	3.7	1.7	45.2	49.2
	5	2.8	3.5	0.2	0.2	7.3	23.1	3.8	3.0	94.2	95.7	2.2	2.8	73.5	53.7
	6	4.2	3.1	0.2	0.2	5.1	24.5	3.2	1.7	99.0	96.2	1.9	2.2	77.5	52.3
	7	5.7	3.4	0.2	0.2	4.3	18.1	2.2	4.4	98.5	96.5	1.5	3.5	83.5	52.8
	8	6.7	4.1	0.2	0.2	3.6	21.3	1.9	5.2	97.7	96.4	2.0	2.1	81.5	49.0
	9	7.8	3.9	0.1	0.2	2.6	17.6	4.4	8.6	94.5	93.4	2.5	3.7	76.6	51.9
	10	15.3	4.4	0.1	0.2	1.4	10.0	6.6	10.7	90.7	92.7	6.6	4.5	57.6	53.2
Spain	All	7.6	7.6	1.0	1.0	18.9	18.9	26.5	26.5	65.6	65.6	4.1	4.1	68.9	68.9
	1	-0.4	9.2	2.0	1.0	74.5	13.8	54.9	40.4	79.4	79.5	4.8	4.3	75.2	72.5
	2	0.3	10.7	0.5	0.6	19.9	10.5	76.7	27.1	79.3	80.1	6.9	1.3	42.1	74.0
	3	2.0	8.1	1.4	0.9	29.9	16.0	30.1	33.0	69.5	70.5	5.0	2.7	72.8	69.2
	4	4.1	7.1	1.2	1.1	22.0	20.0	15.6	26.9	75.5	72.3	3.4	5.1	75.2	71.9
	5	5.6	6.8	0.9	1.0	15.5	20.1	13.8	27.9	73.3	67.3	2.6	3.9	82.2	72.5
	6	6.6	7.3	0.9	1.1	12.8	22.3	13.1	22.5	69.9	67.2	2.5	4.4	78.9	70.2
	7	8.3	6.6	0.8	1.1	10.3	22.6	14.3	23.0	63.4	65.3	2.6	3.5	75.6	72.0
	8	11.0	6.7	0.6	1.1	7.3	23.7	14.3	20.3	63.5	57.6	2.4	3.7	70.1	67.4
	9	12.6	5.9	0.7	1.1	5.9	23.4	17.4	19.8	52.1	55.3	4.5	3.9	58.5	67.7
	10	25.8	7.4	0.7	0.8	4.3	16.0	21.5	25.8	35.1	45.5	8.5	7.2	45.5	55.3
Chile	All	3.5	3.5	0.4	0.4	18.7	18.7	20.1	20.1	18.0	18.0			66.9	66.9
	1	-0.3	4.8	0.7	0.2	107.7	7.2	52.7	19.9	23.7	16.7			18.6	79.3
	2	0.0	4.3	0.1	0.2	28.7	9.9	70.5	19.9	34.3	18.0			7.5	77.6
	3	0.6	3.9	0.3	0.2	19.2	12.0	31.1	19.7	18.9	19.5			24.2	82.0
	4	2.0	3.5	0.4	0.3	15.5	17.0	16.7	19.3	20.4	15.0			70.2	73.4

	5	2.9	3.0	0.4	0.4	13.1	19.5	9.9	20.6	15.5	21.2			84.0	68.3
	6	3.5	3.0	0.4	0.5	11.3	21.8	8.1	22.7	23.3	22.2			83.3	66.7
	7	4.5	3.2	0.4	0.5	9.9	22.0	10.6	20.0	18.0	16.2			80.6	64.9
	8	5.6	3.0	0.5	0.5	10.9	21.6	12.9	18.6	14.9	21.0			78.3	62.2
	9	6.8	3.1	0.5	0.7	9.3	25.8	14.0	19.9	15.5	18.2			71.2	54.9
	10	9.5	3.3	0.6	0.7	8.7	24.1	18.6	20.3	9.5	13.1			57.4	52.0
Mexico	All	5.1	5.1	0.2	0.2	10.7	10.7	17.0	17.0	48.9	48.9	8.9	8.9	61.5	61.5
	1	-0.1	16.7	0.2	0.2	83.9	5.0	47.8	8.4	67.5	55.1	35.8	8.8	15.6	69.4
	2	0.1	7.9	0.0	0.2	19.1	5.7	56.5	11.8	78.7	51.8	66.2	10.6	0.9	68.7
	3	0.5	5.2	0.1	0.2	12.8	8.7	31.1	18.2	51.4	48.8	19.0	9.7	26.3	67.3
	4	1.7	4.4	0.2	0.2	10.3	9.8	23.1	17.5	44.3	53.9	11.3	10.1	46.8	61.5
	5	3.3	3.5	0.3	0.2	8.8	11.9	13.9	18.9	47.7	48.2	5.6	9.0	65.4	61.6
	6	4.0	3.6	0.3	0.2	8.4	11.2	10.7	18.5	44.5	47.2	3.9	8.0	73.0	63.3
	7	6.1	3.5	0.3	0.3	5.6	13.3	7.8	19.0	46.1	48.4	2.6	9.7	77.6	56.6
	8	8.1	3.3	0.3	0.3	5.1	13.7	8.9	20.4	41.1	48.1	2.9	7.6	77.3	61.0
	9	9.8	3.3	0.3	0.3	4.3	13.6	7.1	18.3	44.9	47.4	3.7	8.6	73.6	57.0
	10	17.2	3.6	0.3	0.3	2.8	12.0	6.1	17.0	50.1	48.8	6.9	7.6	64.7	52.0

The information contained in Table A1 corresponds to Figures 1 to 7 in the main text.

Table A2. Composition of gross assets by wealth and income deciles

		Wealth decile					Income decile				
Country	Decile	Liquid assets	Other financial assets	Business assets	Dwellings	Other real assets	Liquid assets	Other financial assets	Business assets	Dwellings	Other real assets
Colombia	All	6.1	1.2	3.3	50.0	39.4	6.1	1.2	3.3	50.0	39.4
	1	11.0	6.7	3.2	4.6	74.5	6.5	0.3	3.4	54.0	35.8
	2	14.7	4.0	4.9	5.2	71.3	6.5	0.9	5.4	62.0	25.2
	3	32.0	7.7	2.6	1.0	56.6	10.6	1.8	3.0	45.8	38.9
	4	33.9	3.7	3.2	0.8	58.4	8.4	1.1	3.2	47.3	39.9
	5	7.8	0.6	6.7	2.1	82.9	8.3	1.0	2.9	47.5	40.3
	6	1.8	0.6	6.9	37.5	53.2	7.4	1.1	4.0	46.4	41.1
	7	0.4	0.1	1.7	82.3	15.4	5.9	1.3	3.0	48.0	41.9
	8	0.2	0.3	0.8	86.4	12.4	5.1	1.1	2.4	51.0	40.2
	9	0.3	0.2	1.1	83.3	15.1	4.8	1.2	3.6	49.0	41.3
	10	0.7	0.8	2.7	69.9	25.9	2.9	1.9	2.7	50.1	42.4
Uruguay	All	3.7	0.3	2.4	50.6	43.1	3.7	0.3	2.4	50.6	43.1
	1	0.6	0.0	0.9	7.4	91.2	0.7	0.0	1.8	44.5	53.0
	2	0.6	0.0	0.8	0.6	97.9	1.4	0.0	1.6	53.3	43.6
	3	7.2	0.5	2.9	8.4	81.0	1.8	0.0	1.3	54.1	42.7
	4	8.7	0.1	3.4	44.9	42.8	2.4	0.1	1.6	49.1	46.7
	5	3.5	0.3	2.2	73.3	20.8	2.9	0.1	2.4	53.5	41.0
	6	3.1	0.1	1.9	76.8	18.1	1.7	0.1	2.2	52.0	44.0
	7	2.1	0.1	1.4	82.6	13.8	4.1	0.3	3.2	52.0	40.5
	8	1.7	0.2	1.9	80.6	15.6	4.8	0.4	2.0	47.9	44.9
	9	4.2	0.3	2.4	73.9	19.3	7.8	0.8	3.7	49.9	37.9
	10	5.1	1.5	6.3	53.7	33.4	9.4	1.3	4.2	50.4	34.6
Spain	All	16.3	10.2	2.9	52.3	18.3	16.3	10.2	2.9	52.3	18.3
	1	45.8	9.1	2.0	35.4	7.8	32.5	7.9	2.2	45.7	11.7
	2	60.1	16.6	1.5	12.7	9.1	18.8	8.3	0.8	56.4	15.7
	3	16.5	13.6	2.7	54.9	12.3	21.0	12.0	1.8	48.3	17.0
	4	9.9	5.7	2.4	67.2	14.7	18.5	8.3	3.6	53.6	16.0
	5	7.8	6.1	2.0	72.0	12.1	17.2	10.8	2.5	54.5	15.0
	6	6.5	6.5	2.0	69.5	15.4	13.1	9.4	3.7	55.9	17.9
	7	6.1	8.2	2.3	65.0	18.3	14.0	9.0	2.5	56.7	17.7
	8	6.6	7.6	2.0	59.7	24.0	10.1	10.2	2.8	54.5	22.4
	9	6.6	10.8	4.0	47.6	31.0	9.3	10.5	3.0	55.2	22.1
	10	4.0	17.4	7.4	35.0	36.1	10.5	15.3	5.5	41.8	26.8
Chile	All	2.8	17.3		55.6	24.3	2.8	17.3		55.6	24.3
	1	13.3	39.4		9.5	37.8	2.7	17.2		65.4	14.7
	2	25.0	45.5		2.6	27.0	2.9	17.0		64.1	16.0
	3	2.9	28.2		18.3	50.5	3.8	15.9		66.5	13.7
	4	0.9	15.7		64.0	19.4	2.6	16.8		61.7	18.9
	5	0.3	9.7		79.3	10.7	3.1	17.5		56.1	23.3

	6	0.5	7.6		79.0	12.9	3.6	19.0		53.5	23.8
	7	0.6	10.0		74.2	15.2	2.8	17.3		53.7	26.3
	8	0.5	12.5		68.9	18.2	2.4	16.2		52.3	29.1
	9	1.0	13.0		61.8	24.3	2.5	17.4		46.2	33.8
	10	0.5	18.1		46.3	35.1	1.8	18.5		42.6	37.0
Mexico	All	6.2	10.8	6.8	52.9	23.3	6.2	10.8	6.8	52.9	23.3
	1	32.5	15.2	17.3	8.9	26.0	3.8	4.6	7.6	64.7	19.3
	2	44.1	12.4	28.7	0.4	14.3	5.2	6.6	8.5	61.9	17.7
	3	11.9	19.2	11.5	19.9	37.4	7.2	11.0	7.2	56.9	17.7
	4	4.1	19.0	7.1	39.5	30.3	6.8	10.7	7.5	52.8	22.2
	5	2.1	11.8	4.2	60.4	21.6	6.5	12.4	6.6	51.7	22.8
	6	1.5	9.3	3.2	67.0	19.0	5.8	12.7	5.8	53.7	22.0
	7	1.1	6.7	2.5	72.9	16.9	6.8	12.2	6.9	47.9	26.1
	8	1.3	7.5	2.7	71.5	16.9	7.1	13.2	5.6	50.1	23.9
	9	1.1	6.0	3.5	68.6	20.8	6.9	11.4	6.4	48.5	26.8
	10	1.3	4.9	6.6	61.0	26.3	5.5	11.5	6.3	44.9	31.7

The information contained in Table A2 corresponds to Figure 8 in the main text.

Table A3. Wealth and income distribution: Gini index and share of top 10% and top 1%

	Gini Index						
	Net worth	Income	Financial assets	Real Assets	Debts	Share top 10%	Share Top 1%
Chile	0.70	0.48	0.88	0.67	0.84	54.2	7.6
Colombia	0.81	0.52	0.99	0.84	0.91	59.8	22.1
Spain	0.69	0.43	0.83	0.62	0.79	53.5	5.8
Mexico	0.75	0.48	0.88	0.74	0.88	59.1	26.8
Uruguay	0.74	0.42	0.95	0.71	0.89	58.0	18.4

The information contained in Table A3 corresponds to Figures 9 to 11 in the main text.

Table A4. Wealth composition by demographic characteristics of household head

			as % of gross assets				
Country	Variable		Cash and deposits	Ofher financial assets	Dwellings	Business assets	Other real assets
Colombia	Age groups	All	6.1	1.2	50.0	3.3	39.4
		<35	11.6	2.7	12.3	3.8	69.6
		35-44	8.4	1.3	33.1	3.8	53.2
		45-54	4.4	1.1	53.4	4.0	37.1
		55-64	4.6	0.8	66.9	3.1	24.6
		64-74	2.5	0.4	77.2	2.4	17.5
		75+	2.1	0.3	82.0	0.7	14.9
Uruguay	Age groups	All	3.7	0.3	50.6	2.4	43.1
		<35	6.0	0.7	30.5	2.6	60.2
		35-44	5.0	0.2	41.3	3.7	49.8
		45-54	2.6	0.4	49.5	2.8	44.7
		55-64	3.5	0.3	56.8	2.6	36.8
		64-74	1.8	0.2	66.7	1.3	30.1
		75+	2.1	0.1	68.2	0.4	29.3
Spain	Age groups	All	16.3	10.2	52.3	2.9	18.3
		<35	34.9	12.5	35.5	3.5	13.7
		35-44	17.8	9.9	52.7	4.7	14.9
		45-54	12.9	10.4	55.1	4.0	17.6
		55-64	13.1	12.1	51.6	2.8	20.3
		64-74	13.7	9.4	53.2	0.8	23.0
		75+	16.1	7.4	56.8	0.3	19.4
Chile	Age groups	All	2.8	17.3	55.6	0.0	24.3
		<35	5.5	19.9	46.0	0.0	28.7
		35-44	2.7	20.9	48.5	0.0	27.9
		45-54	2.0	16.6	53.6	0.0	27.8
		55-64	1.1	19.6	59.9	0.0	19.4
		64-74	1.8	8.4	73.7	0.0	16.2
		75+	1.3	6.6	80.9	0.0	11.2
Mexico	Age groups	All	6.2	10.8	52.9	6.8	23.3
		<35	14.8	14.1	33.0	8.7	29.4
		35-44	5.8	14.3	48.8	6.8	24.3
		45-54	5.3	13.0	53.2	6.3	22.2
		55-64	3.6	9.0	59.6	6.6	21.1
		64-74	3.4	3.6	65.5	6.4	21.0
		75+	2.7	3.7	68.9	5.4	19.4

Country	Variable		as % of gross assets				
			Cash and deposits	Other financial assets	Dwellings	Business assets	Other real assets
Colombia	Marital status	All	6.1	1.2	50.0	3.3	39.4
		Couple	5.6	1.0	47.4	3.4	42.6
		Single	7.0	1.7	54.3	3.0	34.0
Uruguay	Marital status	All	3.7	0.3	50.6	2.4	43.1
		Couple	3.6	0.4	49.6	2.8	43.6
		Single	3.7	0.2	51.6	2.0	42.4
Spain	Marital status	All	16.3	10.2	52.3	2.9	18.3
		Couple	12.9	9.5	54.8	2.9	19.8
		Single	18.2	10.6	50.9	2.8	17.5
Chile	Marital status	All	2.8	17.3	55.6	0.0	24.3
		Couple	1.9	16.2	55.6	0.0	26.3
		Single	3.8	18.5	55.6	0.0	22.2
Mexico	Marital status	All	6.2	10.8	52.9	6.8	23.3
		Couple	5.2	11.2	51.7	6.9	25.0
		Single	8.4	10.0	55.6	6.6	19.4
Colombia	Educational level	All	6.1	1.2	50.0	3.3	39.4
		Lower educational level	4.6	0.4	70.3	3.4	21.3
		Middle educational level	7.7	1.4	43.0	3.6	44.4
		Upper educational level	4.1	1.7	46.4	2.5	45.3
Uruguay	Educational level	All	3.7	0.3	50.6	2.4	43.1
		Lower educational level	1.0	0.0	56.3	1.6	41.1
		Middle educational level	2.9	0.2	49.1	2.7	45.1
		Upper educational level	10.8	1.1	45.3	2.8	40.0
Spain	Educational level	All	16.3	10.2	52.3	2.9	18.3
		Lower educational level	17.7	7.4	56.0	1.8	17.0
		Middle educational level	16.3	11.1	51.6	3.4	17.5
		Upper educational level	14.7	12.2	47.6	3.1	22.4
Chile	Educational level	All	2.8	17.3	55.6	0.0	24.3
		Lower educational level	0.9	7.9	78.9	0.0	12.2
		Middle educational level	2.6	17.4	57.5	0.0	22.5
		Upper educational level	4.0	21.7	41.1	0.0	33.2
Mexico	Educational level	All	6.2	10.8	52.9	6.8	23.3
		Lower educational level	3.8	7.0	60.6	7.8	20.8
		Middle educational level	7.5	13.3	50.4	6.6	22.3
		Upper educational level	7.9	12.3	43.7	5.2	30.9

			as % of gross assets				
Country	Variable		Cash and deposits	Other financial assets	Dwellings	Business assets	Other real assets
Colombia	Gender	All	6.1	1.2	50.0	3.3	39.4
		Male	5.2	1.0	46.7	3.6	43.5
		Female	7.9	1.6	56.2	2.6	31.6
Uruguay	Gender	All	3.7	0.3	50.6	2.4	43.1
		Male	4.9	0.4	50.2	3.3	41.2
		Female	3.0	0.2	50.8	1.9	44.1
Spain	Gender	All	16.3	10.2	52.3	2.9	18.3
		Male	14.3	11.4	52.3	3.2	18.7
		Female	18.6	8.7	52.3	2.5	17.9
Chile	Gender	All	2.8	17.3	55.6	0.0	24.3
		Male	2.7	17.3	53.3	0.0	26.7
		Female	3.0	17.3	59.5	0.0	20.2
Mexico	Gender	All	6.2	10.8	52.9	6.8	23.3
		Male	5.6	11.3	51.3	6.9	25.0
		Female	7.8	9.7	56.9	6.5	19.1

The information contained in Table A4 corresponds to Figures 12 to 15 in the main text.

Table A5. Debt-to-income and net worth-to-income ratios by demographic characteristics of household head

Country	Variable		Debt-to-income ratio	Net worth-to-income ratio
Colombia	Age groups	All	0.2	4.4
		<35	0.1	0.8
		35-44	0.3	1.8
		45-54	0.3	4.1
		55-64	0.2	6.3
		64-74	0.2	9.7
		75+	0.1	11.9
Uruguay	Age groups	All	0.2	4.4
		<35	0.2	2.4
		35-44	0.3	3.0
		45-54	0.2	3.8
		55-64	0.2	5.1
		64-74	0.2	6.7
		75+	0.1	6.4
Spain	Age groups	All	1.0	7.6
		<35	1.5	2.0
		35-44	1.8	4.1
		45-54	1.2	6.4
		55-64	0.7	9.0
		64-74	0.3	10.8
		75+	0.1	12.5
Chile	Age groups	All	0.4	3.5
		<35	0.5	1.8
		35-44	0.6	2.4
		45-54	0.5	3.5
		55-64	0.3	4.5
		64-74	0.2	6.1
		75+	0.0	7.4
Mexico	Age groups	All	0.2	5.1
		<35	0.2	1.8
		35-44	0.3	3.5
		45-54	0.3	4.5
		55-64	0.2	6.3
		64-74	0.1	8.7
		75+	0.1	10.1
Colombia	Marital status	All	0.2	4.4
		Couple	0.2	3.7
		Single	0.2	5.5
Uruguay	Marital status	All	0.2	4.4
		Couple	0.2	4.2
		Single	0.2	4.6

Spain	Marital status	All	1.0	7.6
		Couple	1.1	8.3
		Single	0.9	7.2
Chile	Marital status	All	0.4	3.5
		Couple	0.5	3.6
		Single	0.4	3.4
Mexico	Marital status	All	0.2	5.1
		Couple	0.3	4.7
		Single	0.2	5.8
Colombia	Educational level	All	0.2	4.4
		Lower educational level	0.1	6.4
		Middle educational level	0.2	3.4
		Upper educational level	0.4	4.9
Uruguay	Educational level	All	0.2	4.4
		Lower educational level	0.1	4.5
		Middle educational level	0.2	4.3
		Upper educational level	0.3	4.4
Spain	Educational level	All	1.0	7.6
		Lower educational level	0.6	8.2
		Middle educational level	1.1	7.0
		Upper educational level	1.1	8.3
Chile	Educational level	All	0.4	3.5
		Lower educational level	0.1	4.0
		Middle educational level	0.4	3.4
		Upper educational level	0.7	3.5
Mexico	Educational level	All	0.2	5.1
		Lower educational level	0.1	6.2
		Middle educational level	0.3	4.1
		Upper educational level	0.4	5.2
Colombia	Gender	All	0.2	4.4
		Male	0.2	4.0
		Female	0.2	5.1
Uruguay	Gender	All	0.2	4.4
		Male	0.2	4.5
		Female	0.2	4.3
Spain	Gender	All	1.0	7.6
		Male	1.0	8.0
		Female	0.9	7.1
Chile	Gender	All	0.4	3.5
		Male	0.4	3.4
		Female	0.4	3.7
Mexico	Gender	All	0.2	5.1
		Male	0.2	4.9
		Female	0.2	5.5

The information contained in Table A5 corresponds to Figures 16 to 19 in the main text.

Table A6. By inheritance status

		% of gross assets							
		Liquid assets	Other financial assets	Business assets	Dwellings	Other real assets	Debts	Debt-to-income ratio	Net worth-to-income ratio
Uruguay	Not inherited	3.9	0.3	2.4	47.0	46.3	20.7	0.2	4.0
	Inherited	1.8	0.1	2.3	76.4	19.4	4.3	0.1	6.9
Spain	Not inherited	17.4	10.6	2.8	51.3	17.9	20.3	1.0	7.2
	Inherited	7.0	6.6	3.3	61.2	22.1	6.9	0.5	11.3
Chile	Not inherited	2.9	17.9	0.0	54.1	25.1	19.3	0.4	3.4
	Inherited	0.2	5.1	0.0	85.4	9.3	5.3	0.2	7.2
Mexico	Not inherited	6.8	11.6	7.1	50.2	24.2	11.6	0.2	4.8
	Inherited	1.7	4.7	4.4	73.5	15.7	4.0	0.1	7.5

The information contained in Table A6 corresponds to Figures 20 to 23 in the main text.