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Ladder or Safety Net? Financial Inclusion and Women's Social Mobility in Mexico

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Ladder or Safety Net? Financial Inclusion and Women's Social Mobility in Mexico

María Jose Roa[1] and Alejandra Villegas[2]

Abstract

This paper asks a policy-relevant question for Mexico: when financial inclusion expands, does it help women climb the socioeconomic ladder, protect them from falling, or both? Using the Survey on Social Mobility in Mexico 2023 (ESRU–EMOVI 2023) survey and a use-based measure of financial inclusion, we combine probit models with intergenerational origin–destination transition matrices to document how inclusion correlates with mobility—and how the pattern differs by gender. We find that financial inclusion is associated with a more favorable mobility profile overall, but the returns are distinctly gendered. Among those originating at the bottom, inclusion is more strongly linked to men's exits from the lowest quintile, while for women inclusion is especially associated with remaining in the top quintile and avoiding downward mobility. These asymmetries align with evidence that women face binding structural constraints and unequal financial socialization within households, which can weaken women's ability to convert financial access into upward movement. Taken together, the results imply that closing gender gaps requires policies that go beyond access—pairing inclusion with interventions that relax structural barriers and disrupt gendered transmission of financial skills so that inclusion can function as a genuine mobility ladder for women.

Keywords: financial inclusion; social mobility; gender equality; financing for development; intergenerational transmission; Mexico.

JEL Codes: D14, G21, I24, J16, O15

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1. Introduction

One of the population segments that has gained importance in the design and implementation of financial inclusion programs in recent years is women. Quality financial inclusion is understood as a key instrument to close the gender gaps that affect women in financial, social, and economic domains. The literature is extensive in documenting the micro- and macro-level benefits of quality financial inclusion for women (Di Giannatale & Roa 2019), ranging from improvements in individual and household well-being, income, and both objective and subjective empowerment—along with education and health outcomes for themselves and their families—to wider growth, poverty reduction, equality, and even environmental effects. More recent work also shows that quality financial inclusion is a key determinant of women's financial resilience, stress, and overall financial health (Roa et al. 2023; INEGI 2024).

Despite these advantages and many public and private initiatives, gender gaps in financial inclusion persist. Women—especially those living in rural areas and with lower incomes—continue to exhibit the lowest levels of financial inclusion and the highest levels of financial vulnerability in both developing and advanced economies. In Mexico, as in Latin America, there is a gender gap in the ownership of formal financial products that, unlike other developing and emerging economies, has even widened in recent years (Klapper et al. 2025). This gap hides many facets and realities that reveal the financial and socioeconomic vulnerability of women in the country (López 2021). Women participate less in household financial decisions and, when facing an emergency or unexpected expense, are more likely than men to turn to family, friends, or informal lenders instead of formal financial institutions.

Given the proven effects of quality financial inclusion and the persistence of the gender gap, understanding the determinants of that gap is a priority for policy design in Mexico. Numerous initiatives and studies have explored the main barriers to women's inclusion. A core finding is that structural barriers arising from unequal labor, wage, and educational opportunities—combined with gender social norms—are the primary factors behind women's lower (or null) participation in formal financial markets (Roa 2021; UN Women 2021; AFI 2024; Roa et al. 2023; World Bank 2024).

Yet a central policy puzzle remains unresolved, which is, when financial inclusion expands, does it translate into upward mobility for women, or does it primarily operate as a mechanism of economic stability and persistence among those already advantaged? In other words, is financial inclusion in Mexico functioning mainly as a ladder (enabling upward movement), a safety net (reducing downward mobility), or both—and does it do so differently for women and men? These questions matter because policy prescriptions differ sharply depending on the answer. If inclusion is mostly linked to persistence at the top, then expanding access alone may reproduce existing stratification unless complementary constraints are addressed; if it is linked to upward movement, scaling inclusion may be

more directly mobility-enhancing. Motivated by this, we focus on three policy-relevant questions: (i) how financial inclusion is associated with upward movement versus persistence across the socioeconomic distribution; (ii) whether these associations differ by gender in ways consistent with structural constraints and gender social norms; and (iii) which barriers—circumstances of origin, education/employment, and intergenerational transmission of financial attitudes—are most strongly associated with financial inclusion, helping to explain persistent gender gaps.

We frame financial inclusion as a social inclusion and gender equality issue, and as a household-level channel relevant to financing for development. The policy question is whether expanding formal financial use is associated primarily with upward mobility or with economic resilience and persistence—and whether these patterns differ for women and men.

The social-mobility literature—concerned with the change in socioeconomic position of children relative to their parents—has shown that people's lack of opportunities is partly explained by origin-based factors outside individual control. Parents' socioeconomic status (income, employment, education, location), sex, ethnicity, and skin tone, among others, perpetuate structural barriers across generations. In general, constrained mobility is even more pronounced among vulnerable women (Torche 2015, 2019). Therefore, limited social mobility is itself a determinant of the structural barriers that restrict women's financial inclusion.

In addition, this literature shows that the intergenerational transmission of beliefs and attitudes regarding money management within households creates behavioral barriers that limit the ownership and use of financial products. In the case of women, gender social norms shape beliefs about how they should participate in household financial decisions and formal markets. Examples include a lack of bargaining power and decision authority over income and expenditures—especially large expenses; assumptions that women have weaker entrepreneurial and financial skills; beliefs that women should not own real or financial assets in their name or inherit property; and expectations that women should not have privacy over their finances. These norms raise invisible barriers to women's participation in formal financial markets.

Against this background, our objective is to study the relationship between financial inclusion and social mobility in Mexico, with particular emphasis on gender differences. We also analyze factors inside and outside individuals' control that may operate as barriers to financial inclusion, with emphasis on the intergenerational transmission of financial attitudes and gender social norms. To our knowledge, few studies have investigated the link between social mobility and financial inclusion, and even fewer have focused on women. Specifically, we distinguish between financial inclusion as a correlate of upward mobility and as a correlate of persistence at the top of the socioeconomic distribution. We ask whether these patterns are systematically weaker for women, consistent with structural

constraints and gendered norms that may limit women's ability to translate inclusion into mobility gains.

We use data from the ESRU Survey on Social Mobility in Mexico 2023 (ESRU-EMOVI 2023). The richness of this survey allows us to construct indicators for the key variables in our study. Our empirical strategy combines regression analysis and transition matrices to assess how barriers and facilitators of financial inclusion shape social mobility in Mexico. The main findings indicate that financial inclusion is associated with higher probabilities of upward mobility, although this relation is greater for men than for women. We also find that perceived skin tone represents a barrier to financial access, and that social norms limit the link of family financial education with women's inclusion. These results underscore the need for comprehensive approaches that address both structural and personal/cultural factors in order to promote financial inclusion and reduce gender inequalities.

The article is organized as follows. Section 1 reviews the literatures on women's financial inclusion and on the links between financial inclusion and women's social mobility. Section 2 presents descriptive statistics. Section 3 sets out the empirical methodology and main results. Section 4 concludes with key findings and recommendations.

2. Literature Review

This study relates to two strands of literature: (i) the determinants and barriers to women's financial inclusion, and (ii) the more recent—and relatively smaller—literature on the relationship between financial inclusion and women's social mobility.

2.1 Women's financial inclusion

The design of financial inclusion and financial education programs has made clear the importance of segmented programs for different population groups, in line with international guidelines. National surveys of financial inclusion and education show that certain groups require tailored interventions because each has distinct characteristics in terms of time and risk preferences, cognitive and non-cognitive skills, life-cycle stage, and socioeconomic (income and income regularity, occupation, rural/urban location, informality, education, etc.) and demographic characteristics (gender, age, stage of life).

The groups with the lowest levels of financial inclusion and financial literacy in Latin America include women (especially the most vulnerable), ethnic minorities, migrants, the elderly, people with disabilities, and low-income and informal-sector workers. Serving these populations is a priority given the potential of financial education and inclusion to improve financial well-being and resilience.

In Mexico, there is a gender gap in the ownership of financial products, particularly among more vulnerable women (López 2021; INEGI 2022). Understanding and addressing these

gaps is essential given the potential benefits of quality financial inclusion. The predominant approach distinguishes between supply-side and demand-side barriers to inclusion (Di Giannatale & Roa 2019).

On the supply side, intermediation costs generate barriers related to physical and economic access, and to eligibility. For women, beyond travel and time costs to reach financial institutions, additional obstacles include street insecurity and mobility or social-interaction restrictions (even prohibitions) outside the home—especially with unrelated men. In Mexico, ENIF data show that women more often report not visiting branches because someone else handles procedures for them; they also report less frequent visits to branches, correspondents, and ATMs than men.

Regarding economic access, limited decision-making power over income and expenditures and fewer labor and wage opportunities—often characterized by informality or unpaid domestic work—prevent many women from acquiring financial products. Lack of income and income regularity are among the main reasons women report for not having financial products (Roa 2021; López 2021). On average, a woman earns 85 pesos for every 100 pesos earned by a man; women dedicate 50.4 hours per week to unpaid household work versus 19.6 hours for men (IMCO, 2022).

In terms of eligibility, studies show that women face greater difficulty obtaining official identification; experience direct or indirect discrimination in financial institutions; lack collateral or cannot use it even when they have it; and are asked for a husband's or family member's permission/signature, among other hurdles (Demirgüç-Kunt et al. 2013). ENIF data indicate a 25-percentage-point gender gap in asset ownership favoring men, which complicates collateral provision—one of the main reasons women report for not having credit.

On the demand side, women's financial exclusion is linked to social biases and norms, lower financial literacy, and lower trust in formal institutions (Lusardi & Mitchell 2008; Bustelo & Vezza 2019; Yakoboski et al. 2020; Roa et al., 2023; Banca de las Oportunidades & CAF 2024). Studies find that greater risk awareness, higher aversion to debt, "tunnel vision," authority biases, and lack of identification with formal finance—along with lower confidence in one's own financial skills—explain much of women's lower inclusion.

With respect to habits, attitudes, and biases, ENIF shows that women dislike indebtedness, are better payers, perceive themselves more often than men as excessively indebted, and—before buying—tend to consider whether they can afford a purchase. Women display stronger saving attitudes and give greater weight to future considerations.

Regarding financial literacy, ENIF shows that men have greater knowledge of financial concepts and better financial behaviors (budget control, financial resilience, informed

decision-making) than women—by 3.1 and 1.9 points, respectively. Numerical ability is an important determinant of financial health and resilience and tends to be higher among men. On financial vulnerability, ENIF shows that women have a lower capacity to cover expenses (8.4%); are less likely to believe they will obtain desired goods (4%); are less likely to seize opportunities (7%); and, if they lose their income source, could cover expenses for less than a week (6.9%). The recent ENSAFI survey shows that women keep closer expense records than men, rely mainly on family in emergencies, fail to meet goals due to a lack of savings, and experience lower financial well-being and greater financial stress—manifested as anxiety, sadness, frustration, and irritability.

Finally, social norms that underpin and prolong political, social, and economic inequalities shape (and perpetuate) the gender gap in financial inclusion (Holloway et al. 2017; Vossenberg et al. 2018). A review of this literature shows how norms about women's role in the economy and society undermine life skills and personality traits—such as self-confidence, autonomy, aspirations, and leadership—leading women to self-exclude from economic activity (Roa 2021). This is reinforced by norms that create unequal access to education. In this study, the main gender norms affecting women's financial lives include: lack of bargaining, privacy and decision power over income and expenditures; the expectation that women's primary role is caregiving; the belief that women should not own large businesses; assumptions that women have weaker entrepreneurial and financial skills than men; and restrictions or prohibitions on women's mobility and social interaction. Fieldwork measuring these norms in Mexico finds they are more severe for women in rural areas and for certain ethnic groups.

In sum, a multidimensional view of the barriers limiting women's financial inclusion in Mexico is required to design measures that reduce or eliminate them, and to deepen understanding of the factors behind these barriers. Social norms related to women's roles in household and market finance—together with structural barriers stemming from greater socioeconomic vulnerability—may be perpetuated by origin-based factors, as discussed next.

2.2 Women's financial inclusion and social mobility

The literature linking financial inclusion and social mobility is recent and still small. Its goal is to understand how the financial system's opportunities relate to people's chances of moving up the socioeconomic ladder. Social mobility can be defined as "the amount of change in living standards between parents and children, in broad terms" (CEEY 2018). A key mechanism for mobility is the independence between conditions of origin and destination (Vélez-Grajales & Vélez-Grajales 2014; Del Ángel 2018; Del Ángel et al., 2023).

Conceptually, two main channels link financial inclusion to social mobility. First, inclusion via greater access and use of savings and insurance products, and a payments system that

facilitates transactions, can promote investment in education and health, asset accumulation and financial resilience (Kofinti et al. 2024). Second, inclusion via access to financing and credit promotes entrepreneurship and productive investment—key elements for upward mobility. The literature also emphasizes bidirectionality and the need to study underlying mechanisms more deeply.

Most contributions are theoretical reviews and preliminary statistical analyses using national financial inclusion and social mobility surveys. For Mexico, these surveys suggest that low use of financial products is an obstacle to mobility and that intergenerational financial exclusion persists—particularly among rural women. For this country specifically, literature remains scarce. De la Torre-Díaz (2023) assesses how microcredit used to acquire household equipment assets relate to mobility (measured through household assets), particularly during negative income and expenditure shocks (e.g., the COVID-19 period). Using a microsimulation model, she concludes that microcredits for asset acquisition can generate upward mobility: around 32% of households would move to a higher socioeconomic level. She recommends a mixed public-private scheme to broaden impact, including better access to education and health and a more favorable economic environment.

Using ESRU-EMOVI 2017 and logit models, López (2021) finds that parents' access to formal financial services has a positive effect on children's mobility, whereas reliance on informal services has a negative effect. Mothers' inclusion (especially ownership of savings accounts) affects children's educational mobility more than fathers' inclusion; conversely, fathers' credit card ownership is linked to downward labor mobility. She finds strong links between inclusion and people's labor status, and the key role of parental education in children's mobility.

Del Ángel and Martínez (2024) using ENIF 2021 argue that the intergenerational transmission of financial habits—shaped by biases and beliefs—and the high correlation between circumstances of origin and use of financial products suggest that origin, in and of itself, may act as a barrier to financial inclusion. On one hand, structural barriers related to low schooling and unfavorable labor conditions emerge from origin-based circumstances among vulnerable groups. On the other, the intergenerational transmission of beliefs and attitudes about financial management within households generates behavioral biases that negatively affect the ownership and use of financial products.

Finally, the literature finds that they are more likely to remain at the bottom when born in the bottom strata, and are less likely than men to remain at the top even when born there (Torche 2015, 2019; Campos & Vélez 2015; Huerta & Espinosa 2015). Women's labor-market participation appears more conditioned by household-of-origin socioeconomic characteristics: the higher the father's education, the more likely a woman is to participate in the labor market. Structural barriers thus have a strong intergenerational persistence that limits women's inclusion. As discussed, gender norms constrain women's participation in

finance; thus, the intergenerational persistence of beliefs and norms may be more severe for women.

Hypothesis (descriptive). Building on the literature, we expect women's lower formal financial use in Mexico to be closely related to (i) circumstances of origin—such as socioeconomic status of the household at age 14 and parental education—and (ii) gender norms that shape who is expected to engage with money and financial decisions within the household. Empirically, we capture this second channel using retrospective items on whether parents taught the respondent how to manage money, gave them money, and talked with them about money, which we interpret as proxies for gender-norm-related household financial socialization rather than direct measures of social norms. We then assess whether the associations between these origin-based factors and financial inclusion differ by sex in ESRU–EMOVI 2023. Evidence for Mexico remains limited on how circumstances of origin and gendered household financial socialization relate to women's financial inclusion and mobility, particularly within a single framework linking barriers, inclusion, and intergenerational mobility.

3. Data and descriptive statistics

To analyze the relationship between financial inclusion and social mobility with a gender lens, we use the ESRU-EMOVI 2023, which is representative at national and regional levels. It surveys women and men aged 25–64 on sociodemographic, educational, and labor variables, along with information on the respondent's household of origin at age 14. It also includes a specific financial inclusion module to capture the use of financial services and various barriers to inclusion. The basic questionnaire sample is 17,843 households. The financial inclusion module we use contains 5,976 observations.

To measure social mobility, we use the respondent's socioeconomic quintile in the current household and in the household at age 14. To analyze financial inclusion, we construct a use indicator defined as a binary variable equal to 1 if the respondent used at least one formal savings instrument in the last 12 months and/or obtained at least one formal loan recently. It should be noted that our measure of financial inclusion captures observed use of formal savings and/or formal credit, as reported in the survey module. A use-based indicator is well suited to our objective because it reflects effective engagement with formal financial services (as opposed to mere availability). At the same time, financial inclusion is a multidimensional concept, and the survey does not allow us to measure complementary dimensions such as service quality, intensity/frequency of use, digital payments, affordability/fees, or product suitability. Accordingly, throughout the paper we interpret financial inclusion as formal use, and view broader dimensions as a natural extension for future work.

As a proxy for gender norms, we use retrospective items capturing whether parents (i) taught the respondent how to manage money, (ii) gave them money, and (iii) talked with

them about money. We interpret these variables as proxies for gendered household financial socialization—i.e., differential exposure to money-related skills and conversations that is consistent with gender norms around who is expected to handle finances—rather than as direct measures of social norms or normative beliefs.

Table 1 reports descriptive statistics for the key variables. Educational attainment is higher in the current generation relative to parents: a considerable share of parents have only primary schooling or less, whereas 20% of the current generation attained tertiary education. Employment is relatively high (69% report being employed). Ethnic self-identification indicates a predominance of people identifying as *mestizo*, alongside a notable share who do not identify with any specific ethnic category. Self-perceived skin tone shows a majority in the intermediate and light categories. Financial inclusion exhibits a sizable gap: only 24% of the current generation and 14% of parents are financially included.

Table 1. Descriptive statistics

Variable	Observations	Mean	Standard Deviation
Sex	5,976		
Male		0.47	0.50
Female		0.53	0.50
Education	5,874		
Elementary or less		0.26	0.44
Lower secondary		0.32	0.47
Upper secondary (ISCED 3)		0.22	0.41
Tertiary education		0.20	0.40
Employed	5,976	0.69	0.46
Ethnic self-identification	5,976		
Black/Indigenous		0.10	0.30
White		0.07	0.25
Mestizo		0.54	0.50
None		0.29	0.45
Self-perceived skin tone (grouped PERLA scale)	5,976		
Darkest		0.02	0.14
Intermediate		0.41	0.49
Lightest		0.57	0.50
Financial inclusion (use)	5,976		
Not included		0.76	0.42
Included		0.24	0.42
Father's or mother's financial inclusion (use)	5,976		
Not included		0.86	0.35
Included		0.14	0.35
Father's education	4,858		
Elementary or less		0.63	0.48

Lower secondary		0.20	0.40
Upper secondary (ISCED 3)		0.10	0.31
Tertiary education		0.07	0.25
Mother's education	5,360		
Elementary or less		0.68	0.47
Lower secondary		0.19	0.40
Upper secondary (ISCED 3)		0.10	0.29
Tertiary education		0.03	0.18

Source: Authors' calculations based on ESRU-EMOVI 2023.
Notes: Survey weights applied.

Table 2 shows mean differences that reveal gender inequalities across key dimensions (financial inclusion, education, employment, and intergenerational transmission of financial practices). Women are less likely to attain upper-secondary and tertiary education and are more concentrated in basic education. This disadvantage extends to the labor market, where women's employment rate is significantly lower than men's—consistent with structural and normative barriers that push women toward domestic/care roles and restrict economic and financial opportunities.

Table 2. Differences in means of key variables

Variable	Observations	Male	Female	Mean difference
Education	5,874			
Elementary or less		0.22	0.29	0.07***
Lower secondary		0.3	0.34	0.04**
Upper secondary (ISCED 3)		0.25	0.19	-0.05***
Tertiary education		0.23	0.17	-0.06***
Employed	5,976	0.87	0.54	-0.33***
Ethnic self-identification	5,976			
Black/Indigenous		0.11	0.09	-0.02
White		0.04	0.09	0.05***
Mestizo		0.61	0.49	-0.12***
None		0.24	0.33	0.09***
Self-perceived skin tone (grouped PERLA scale)	5,976			
Darkest		0.03	0.01	-0.02***
Intermediate		0.45	0.38	-0.06***
Lightest		0.52	0.6	0.08***
Financial inclusion (use)	5,976	0.27	0.21	-0.06***
Father's or mother's financial inclusion (use)	5,976	0.17	0.11	-0.06***
Father's education	4,858			
Elementary or less		0.6	0.66	0.06***
Lower secondary		0.2	0.2	0
Upper secondary (ISCED 3)		0.13	0.08	-0.05***

Tertiary education		0.08	0.06	-0.01
Mother's education	5,360			
Elementary or less		0.62	0.72	0.10***
Lower secondary		0.21	0.18	-0.03
Upper secondary (ISCED 3)		0.13	0.07	-0.06***
Tertiary education		0.04	0.03	-0.01
Self-control	5,976	0.71	0.74	0.03
Short-term preference	5,976	0.31	0.38	0.07***
Risk aversion	5,976	0.4	0.44	0.03
Long-term planning tendency	5,976	0.44	0.42	-0.02
Keeps financial records like his/her parents	5,976	0.35	0.3	-0.05**
Uses the same financial products as his/her parents	5,976	0.2	0.16	-0.04**
Saves money in the same way as his/her parents	5,976	0.35	0.31	-0.04*
Parents taught him/her how to manage money	5,976	0.43	0.38	-0.04*
Parents gave him/her money	5,976	0.56	0.51	-0.05**
Parents talked to him/her about money	5,976	0.35	0.27	-0.08***
Transmission of distrust (in the financial system)	5,976	0.61	0.59	-0.03
Transmission of budgeting practices	5,976	0.21	0.16	0.05***

Source: Authors' calculations based on ESRU-EMOVI 2023.
Notes: Survey weights applied. $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

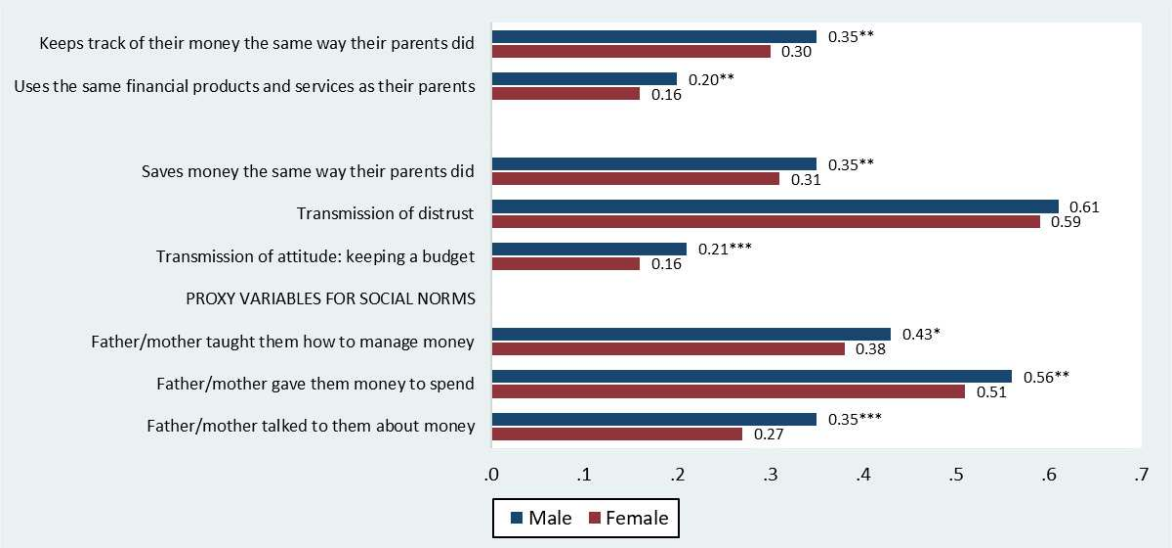
Ethnic self-identification and perceived skin tone show gender-differentiated patterns. Women more often self-identify with lighter skin tones (including a higher share identifying as white), whereas men concentrate more in intermediate or *mestizo* categories. Women's lower financial inclusion—and that of their parents—also suggests intergenerational transmission of constraints, where financial resources and economic opportunities are not equally transmitted to or achieved by women. Regarding the transmission of financial knowledge and attitudes within the household, men more often report having received instruction from parents on managing money, choosing financial products, and planning savings—factors that can facilitate inclusion in adulthood. Women are less likely to have received such instruction, which can limit their ability to make informed financial decisions and their economic autonomy. This unequal transmission may hinder women's social mobility by perpetuating lower familiarity with the financial system and reducing the likelihood of replicating these practices across generations.

Differences also appear in non-cognitive traits such as time preference and self-control. Women exhibit a slight advantage in self-control, whereas men show a greater tendency to plan for the long term and to replicate parental financial practices. Because long-term planning and disciplined financial decisions facilitate integration into formal finance, lower exposure to financial skills—combined with a shorter planning horizon among women—may limit inclusion and mobility. Overall, the data show how gender differences in structural factors, intergenerational transmission, and non-cognitive characteristics interact

to shape unequal access to financial and economic resources, creating a significant barrier to equitable social mobility.

Figure 1 shows differences between men and women in variables capturing intergenerational transmission of financial beliefs and attitudes, as well as proxies for gendered household financial socialization. Men tend to replicate parental financial behaviors more than women (accounts, product choice, saving methods, budgeting). Beyond this behavioral inertia among sons, the socialization proxies suggest that daughters were less exposed to money-management conversations and instruction within the household. We interpret this pattern as consistent with gendered expectations about who should engage with household finances, while noting that these items do not directly measure social norms.

Figure 1: Intergenerational transmission of beliefs and attitudes, and gender-norm-related socialization (proxy measures): mean differences by sex



Source: Authors' calculations based on ESRU-EMOVI 2023.
Notes: Survey weights applied. $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

4. Barriers to Financial inclusion

4.1 Empirical methodology: Probit models

As a first step in a gender-focused analysis of financial inclusion, we examine barriers and facilitators of formal use to identify which factors are associated with inclusion and whether these associations differ for women and men. The underlying purpose is to understand how these factors may shape women's ability to benefit from financial inclusion and, ultimately, to progress in social mobility. We group covariates into three blocks: (i) factors outside individual control (sex; socioeconomic status of the household of origin at age 14; parental education; perceived skin tone/ethnicity proxies); (ii) factors plausibly within individual control (own education and employment status); and (iii) financial habits

and attitudes, in line with the financial-education literature—specifically self-control, planning horizon, and time and risk preferences. We estimate pooled models with gender interactions and sex-specific models to document heterogeneity.

Formally, let FI_i equal 1 if individual i used at least one formal financial product in the reference period and 0 otherwise. We estimate a probit:

$$FI_i^* = X_i'\beta + u_i,\ FI_i = 1[FI_i^* > 0],\ u_i \sim \mathcal{N}(0,1)$$

and report average marginal effects (AMEs).

$$AME_k = \frac{1}{N}\sum_{i=1}^{N} \varphi\left(X_i'\hat{\beta}\right)\hat{\beta}_k$$

where φ $(\cdot)$ is the standard normal pdf. We estimate pooled models with gender interactions and sex-specific models to document heterogeneity.

4.2 Results

Figure 2 (Panel A) shows marginal effects on the probability of inclusion. Being a woman reduces the probability of financial inclusion by about 4.7 percentage points relative to men. For ethnicity and skin tone, coefficients for *mestizo* or white identification are positive but not statistically significant relative to the reference category (indigenous/Black). Skin tone seems relevant perceiving oneself with an intermediate skin tone reduces the probability of inclusion relative to lighter tones, consistent with possible biases/discrimination in access associated with skin color.

Socioeconomic status of the household at age 14 has a significant intergenerational link. Those from higher-quintile households are more likely to be financially included in adulthood relative to those from the bottom quintile. In particular, respondents from quintile 5 at age 14 have a 29.4-percentage-point higher probability of inclusion than those from quintile 1. This indicates strong intergenerational persistence in financial opportunities.

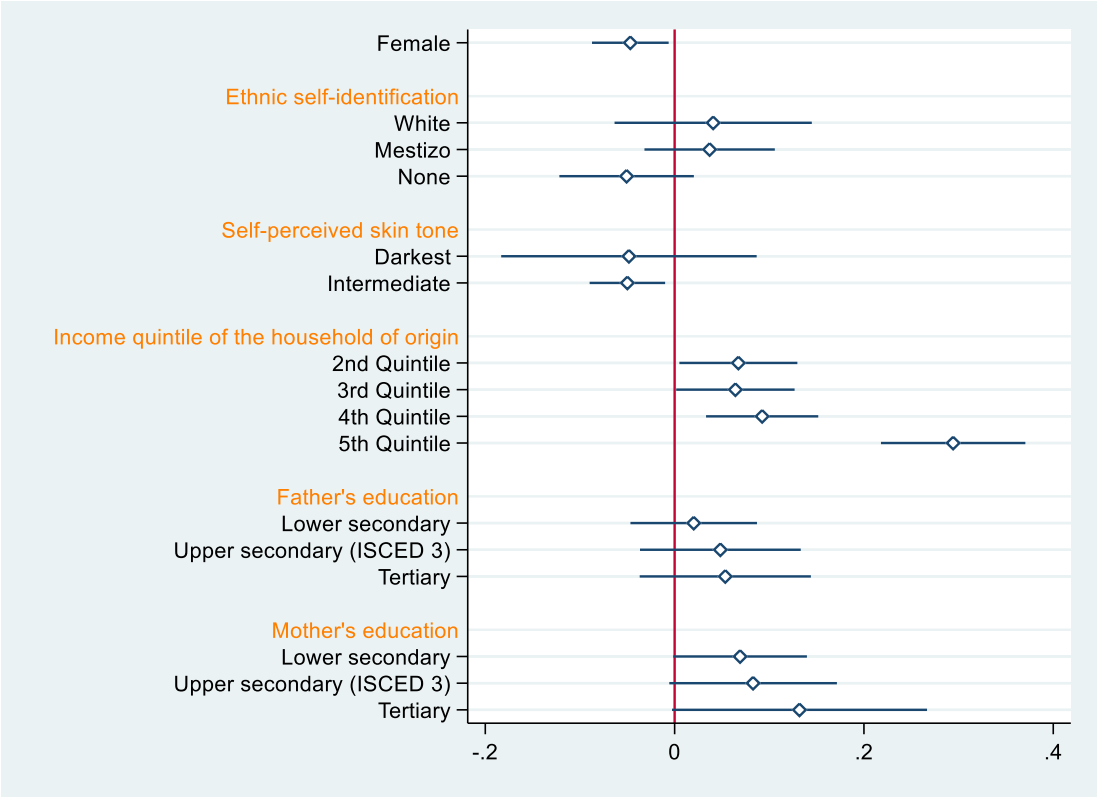
Parental schooling also matters, especially mothers' education. As maternal education rises, so does the probability of children's inclusion, with the largest association when the mother has tertiary education (+13.1 p.p.). This suggests a key role for maternal education in transmitting financial skills and attitudes across generations. Fathers' education is positive but not statistically significant.

After including individual-level control variables, such as employment status and educational attainment, in the analysis of financial inclusion, the coefficients for some variables in Panel B of Figure 2 change. One of the most significant changes is seen in the

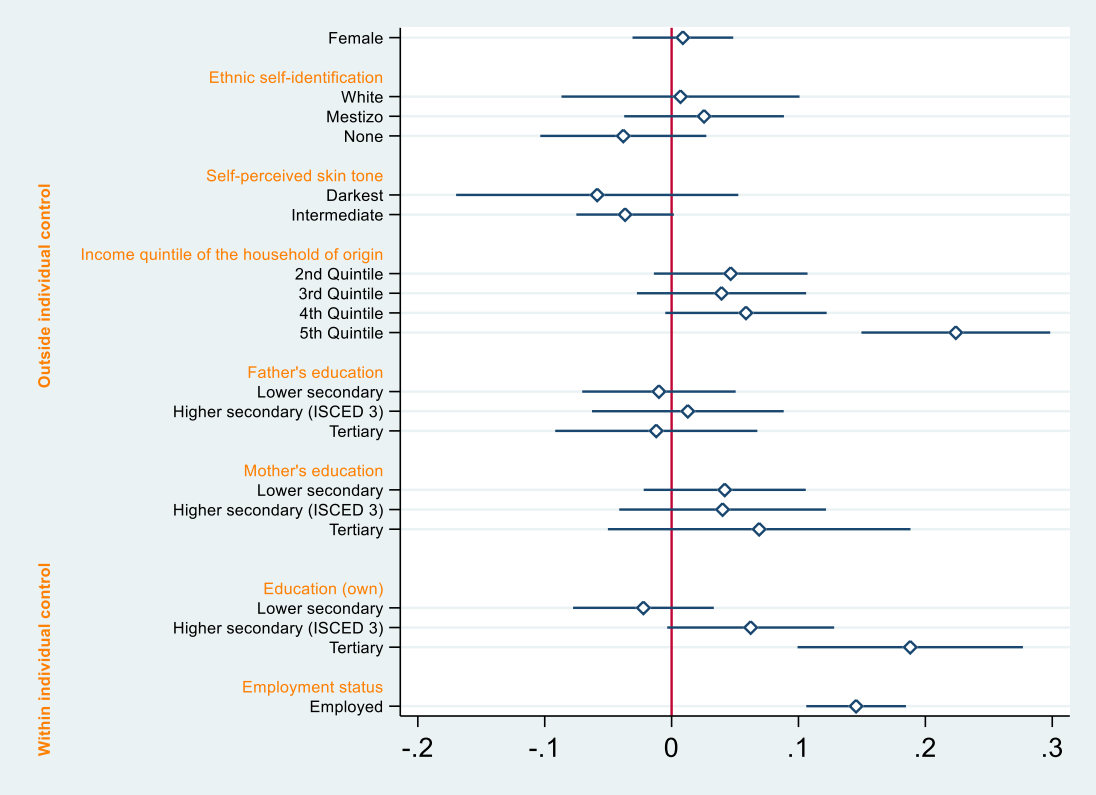
sex variable, whose coefficient becomes very close to zero. This suggests that a substantial portion of the disadvantage women face in financial access may be explained by differences in their access to employment and education, pointing to structural disadvantages that hinder women's financial inclusion.

Figure 2: Financial inclusion, factors within and outside individual control, and non-cognitive personal characteristics

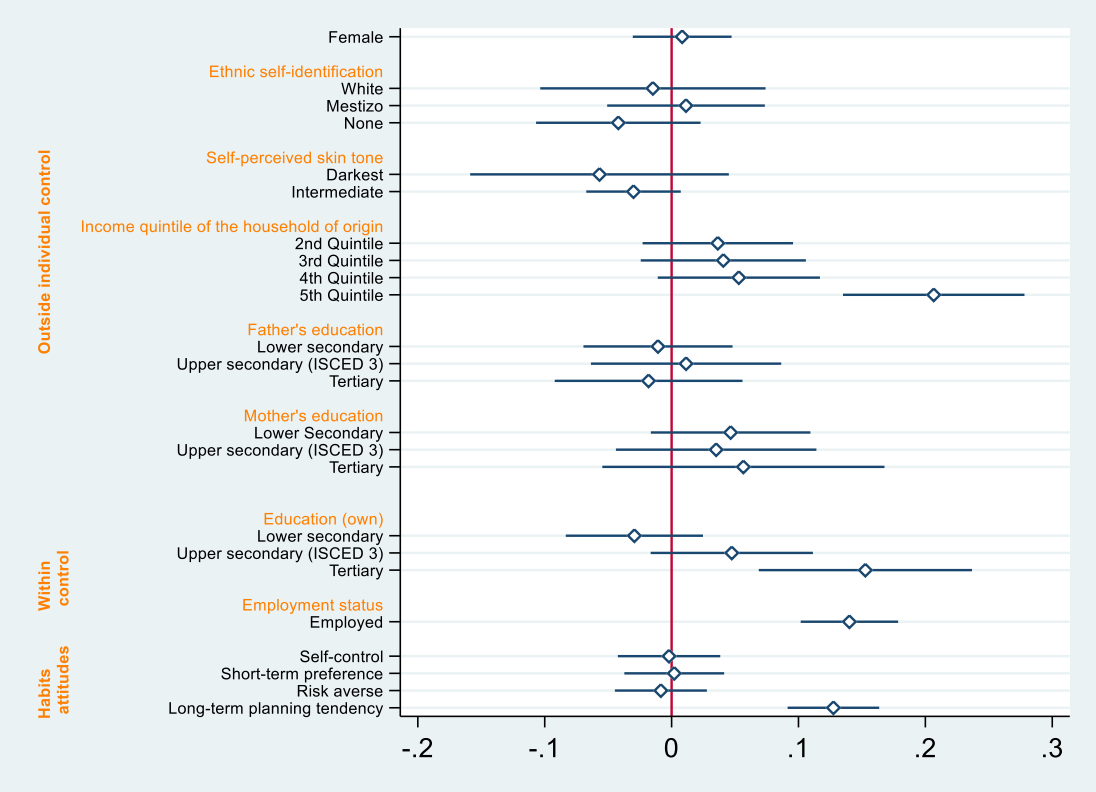
Panel A: Factors outside individual control



Panel B: Factors within individual control + factors outside individual control



Panel C: Factors within individual control + factors outside individual control + financial habits and attitudes



Source: Authors' calculations based on ESRU-EMOVI 2023.

Notes: Marginal effects from probit models with financial inclusion as the dependent variable. Survey weights applied. The models control for the respondent's current region and their region at age 14. Bars represent confidence intervals.

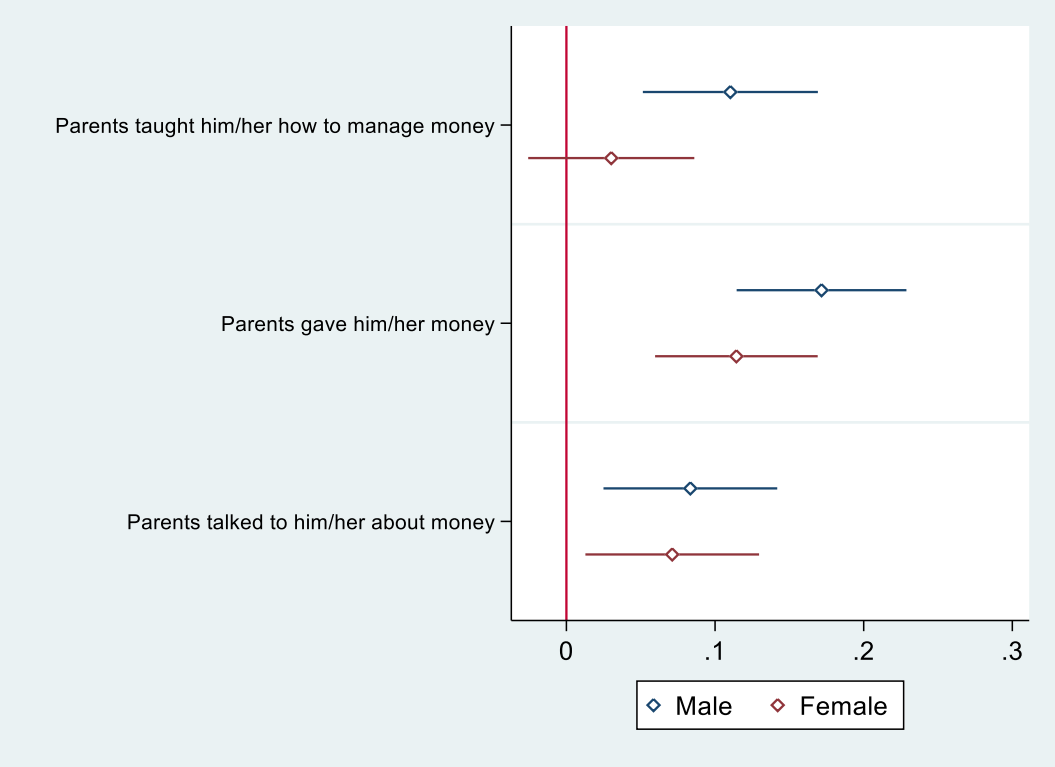
The income quintile of the household of origin also shows a reduction in its contribution to explaining financial inclusion, although it remains statistically significant for the upper quintiles. The decline in magnitude indicates that part of the relation of the origin quintile with financial inclusion is explained through education and employment—factors more accessible to individuals from households with higher socioeconomic status. However, the persistence of a significant association in the upper quintiles suggests that the socioeconomic context of origin continues to play a role in the intergenerational transmission of opportunities for financial inclusion, even after accounting for individual control variables.

For ethnicity and skin tone, the coefficients suggest that part of the disadvantage associated with ethnic identity and skin color in terms of financial inclusion could be explained by inequalities in access to formal employment and educational opportunities. Nevertheless, some links associated with skin tone persist, indicating that there may be exclusion barriers not fully captured by education level and employment status, possibly related to biases or discrimination in access to financial services.

Finally, when including financial habits and attitudes (Panel C), we observe that the only factor with a significant contribution to the probability of being financially included is the tendency to plan. This characteristic constitutes a key factor in financial inclusion, as individuals who plan for the long term tend to manage their resources better and to adopt financial services that allow them to achieve future economic goals.

Moreover, estimating the contribution of the norms proxies to inclusion reveals gender-differentiated patterns—especially the relation of being taught by parents with managing money. For men, this teaching is positive and significant, suggesting that early acquisition of specific financial skills has a lasting association that facilitates integration into formal finance. For women, the relation is notably smaller. Even when such teaching occurs for daughters, it may not translate into higher inclusion due to norms restricting women's financial roles or limited opportunities for employment and autonomy. Receiving money from parents and having conversations about money are positive for both sexes, but the relation again is larger for men.

Figure 3: Financial inclusion and gender norms (proxied by household financial socialization)



Source: Authors' calculations based on ESRU-EMOVI 2023.
Notes: Marginal effects from a probit model with financial inclusion as the dependent variable. Survey weights applied. The model controls for the respondent's current region. Bars represent confidence intervals.

The gender-differentiated associations of these socialization proxies with adult financial inclusion should be interpreted as mechanism-consistent evidence, not as direct evidence on norms. The same parental practice (e.g., being taught to manage money) may translate into different adult outcomes for women if subsequent constraints—such as restricted labor-market attachment, limited bargaining power, or lower autonomy over financial decisions—attenuate the returns to early financial socialization. Because these are retrospective self-reports, they may also reflect recall and social desirability biases, and they cannot capture unobserved household dynamics (e.g., who controlled resources, intra-household conflict, or differential encouragement conditional on perceived ability).

5. Financial inclusion and social mobility

5.1 Empirical methodology: Intergenerational transition matrices (origin–destination)

To analyze the relationship between financial inclusion and social mobility, we begin by analyzing the transition matrices (Bavaro & Tullio, 2023) for an individual's socioeconomic quintile at age 14 and their current socioeconomic quintile, disaggregated by sex and financial inclusion status. Let $s_{i,t_0} \in \{1, \dots, K\}$ denote the socioeconomic class (e.g.,

quintile) of individual i's household of origin at age 14, and s_{i,t_0} the current class. The weighted transition matrix *P* has elements:

$$\hat{p}_{jk} = \frac{\sum_i w_i \, I\left[s_{i,t_0} = j,\ s_{i,t_1} = k\right]}{\sum_i w_i \, I\left[s_{i,t_0} = j\right]}, \qquad \sum_{k=1}^{K} p_{jk} = 1,$$

$I[\cdot]$ equals 1 if the condition is true and 0 otherwise.

We compute *P* (i) overall, (ii) by sex, (iii) by FI status, and (iv) by sex × FI status. For interpretation, we also present upward and downward movement shares:

$$\text{Upward}=\sum_{j<k} \hat{p}_{jk}, \quad \text{Downward}=\sum_{j>k} \hat{p}_{jk}$$

These matrices summarize intergenerational movement patterns and how they differ by sex and status of financial inclusion. To quantify sampling uncertainty, we compute 95% confidence intervals using a nonparametric bootstrap with 500 replications, resampling individuals with replacement and recomputing $\hat{p}_{jk}$ in each replication. We report percentile confidence intervals.

5.2 Results

Results suggest that financial inclusion is associated with greater upward mobility and stronger persistence at the top of the socioeconomic distribution. Figure 4 shows substantial persistence at the extremes.[3] In the full sample (Panel A), individuals from the bottom quintile are likely to remain at the bottom, while those from the top quintile also show high persistence. Mobility from the bottom is largely local, it means that when upward movement occurs, it tends to take the form of incremental steps to adjacent quintiles rather than large jumps across the distribution. Likewise, downward mobility from the top is concentrated in movements to the fourth quintile rather than abrupt falls to the bottom. Overall, these patterns indicate that intergenerational mobility is typically gradual and that socioeconomic origin continues to be strongly predictive of adult position, particularly at the extremes.

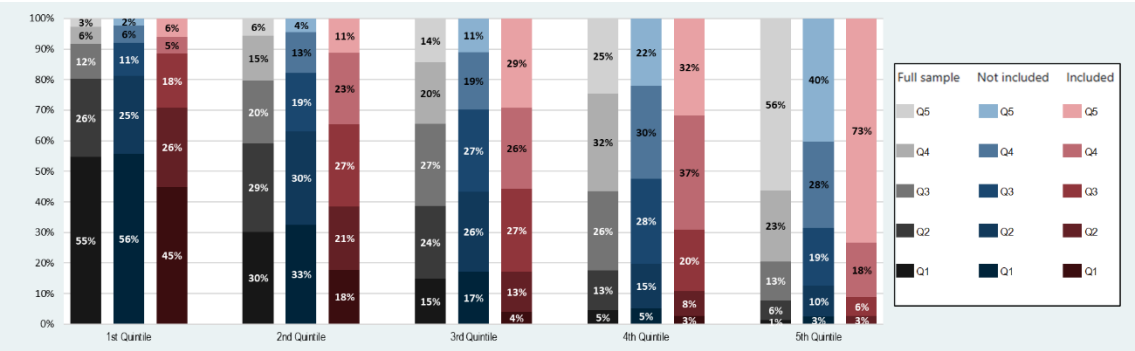
Disaggregating by financial inclusion status suggests that exclusion is systematically associated with limited mobility from the bottom for both men and women. Among those who are not financially included, persistence in the first quintile is high, and transitions are concentrated in small moves to the second quintile. This implies that, in the absence of financial inclusion, there is relatively little distance traveled in the distribution, even when mobility occurs. By contrast, among the financially included, the transition patterns show a

[3] The complete set of transition matrices is reported in the Appendix.

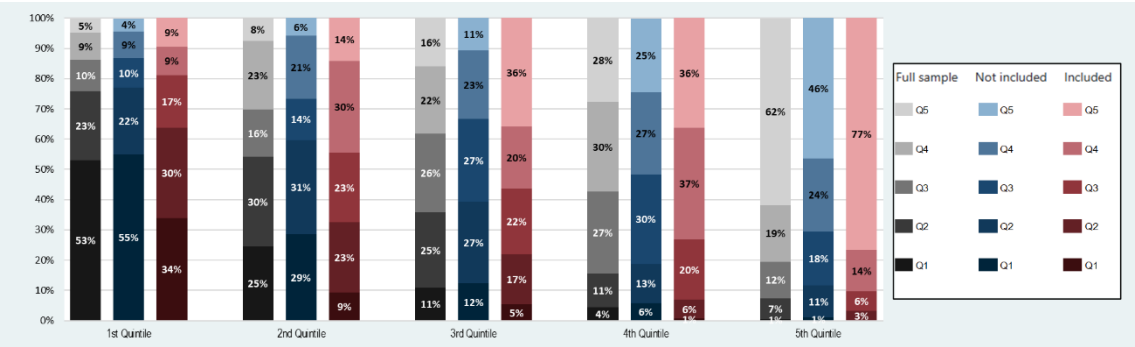
clearer shift toward higher quintiles, indicating that inclusion is correlated with a more favorable mobility profile.

Figure 4: Transition matrices, socioeconomic quintile mobility by sex and financial inclusion status

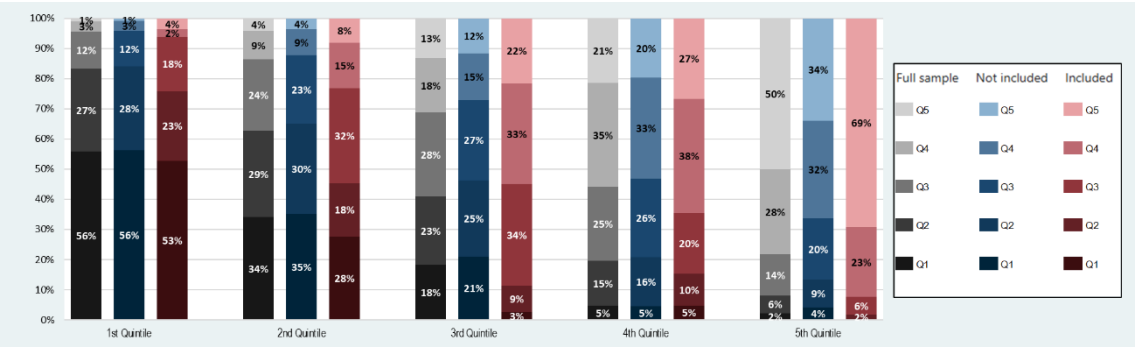
Panel A: Full sample



Panel B: Male



Panel C: Female



Source: Authors' calculations based on ESRU-EMOVI 2023.

However, these patterns are not gender-neutral. Among financially included individuals, men exhibit a stronger shift out of the bottom quintile and a higher concentration of transitions toward the second and third quintiles (Panel B). Women who are financially

included also show movement toward the middle of the distribution, but with higher persistence in the bottom quintile compared to men (Panel C). This suggests that financial inclusion is associated with upward mobility for both genders, yet the association is more pronounced for men at the lower end of the distribution.

At the top of the distribution, persistence is high for the population as a whole, but financial inclusion is closely associated with reinforcing stability in the fifth quintile. This association is particularly pronounced for women: included women are much more likely to remain at the top, whereas non-included women show a notably higher tendency to descend to lower quintiles. For men, inclusion is also associated with greater stability at the top, although the contrast between included and non-included men is less sharp than for women. In other words, inclusion appears to be linked both to upward mobility from the bottom and to protection against downward mobility from the top, but these two correlates operate with different intensity by gender.

To complement the visual evidence from Figure 4, we formally test whether two key persistence contrasts differ across groups using weighted linear probability models estimated within origin quintiles and robust standard errors (Table 3). First, among individuals originating in the bottom quintile, financially included men exhibit significantly lower persistence in Quintile 1 than non-included men, consistent with a stronger association between inclusion and upward movement out of the lowest socioeconomic level for men. Second, among individuals originating in the top quintile, financially included women are significantly more likely to remain in Quintile 5 than non-included women, indicating that inclusion is strongly associated with protecting women against downward mobility from the top. These tests reinforce the gendered asymmetry suggested by the transition matrices since inclusion is more clearly linked to exiting the bottom for men, and to remaining at the top for women.

Table 3: Differences in bottom and top persistence by gender and financial inclusion

Outcome (within origin quintile)	Men, not included	Men, included	Women, not included	Women, included	Difference test
Bottom persistence: (P($Q^{destination}$}=1 | Q^{origin}=1))	0.550	0.340	0.562	0.528	Women included − Men included = 0.188 (n.s.)
Top persistence: (P($Q^{destination}$}=5 | Q^{origin}=5))	0.464	0.767	0.338	0.692	Women included − Women not included = 0.353 (***)

Note: Significance: n.s. = not statistically significant at conventional levels; *** p<0.01p<0.01p<0.01.

Importantly, the confidence intervals around the transition probabilities support the qualitative contrasts highlighted by the figure—high persistence at the extremes and the stronger inclusion gradient at the top for women—suggesting these patterns are not driven by sampling noise. At the same time, the transition matrices remain descriptive: they

summarize intergenerational movements across quintiles by origin, gender, and inclusion status and should be interpreted as associations rather than causal effects.

Overall, financial inclusion is associated with greater upward mobility for individuals in the lower and middle quintiles and with stronger persistence in the upper socioeconomic levels, but the patterns are clearly gendered. For men, inclusion is more strongly associated with upward movement out of the lower and middle quintiles. For women, inclusion appears less strongly associated with escaping the bottom, but more strongly associated with remaining in the top quintile and avoiding downward mobility. This asymmetric pattern is consistent with the idea that gendered constraints and norms may shape how economic and financial resources translate into mobility opportunities, and aligns with evidence suggesting that gender roles and stereotypes may be less restrictive for women at higher socioeconomic levels (Roa, 2021).

6 Educational Mobility by Sex and Inclusion Status

6.1 Empirical Methodology: Educational mobility regressions

To examine intergenerational educational mobility, we analyze it in relation to financial inclusion. Specifically, we compare the intergenerational association in schooling between fathers and sons and between mothers and daughters, separately by status of financial inclusion. This design follows evidence that intergenerational transmission is often gendered—i.e., norms and role specialization can make same-sex parent–child links stronger—so pairing fathers with sons and mothers with daughters better captures the distribution of values, knowledge, and resources across generations (Chetty et al., 2014; Erola et al., 2016; Demirtaş et al., 2024). We estimate OLS regressions with survey weights and interpret coefficients as associations, not causal effects; the comparison by financial inclusion status provides a descriptive view of gender-specific barriers and facilitators shaping men's and women's educational mobility. Formally, let $m \in \{0,1\}$ index financial inclusion status (0= excluded, 1=included). We run, for each sex g and *FI* group m:

$$Edu_i^{child} = \alpha_{gm} Edu_i^{parent} + X_i' \gamma_{gm} + \varepsilon_i, \text{ for } i \in \{FI_i = m, sex_i = g\}$$

So *FI* enters via the group index *m* (different coefficients α_{gm}, γ_{gm}).

6.2 Results

Finally, we examine intergenerational educational mobility, comparing fathers–sons and mothers–daughters, by inclusion status. This design follows evidence that same-sex parent–

child pairs often reflect gendered transmission of values, knowledge, and resources (Chetty et al., 2014; Erola, Jalonen & Lehti, 2016).

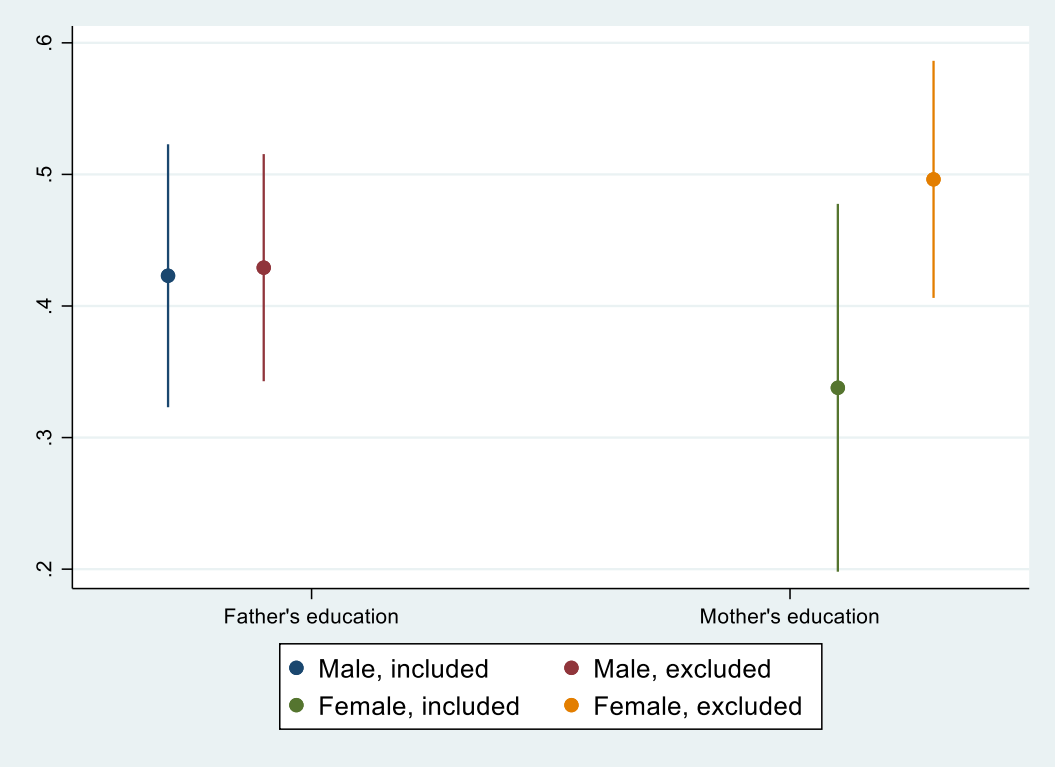
Figure 5 shows that inclusion is associated with positive intergenerational educational mobility for both sexes, with different patterns. For men, fathers' education has a similar relation with sons' attainment among included and excluded groups, with a slight advantage for the included. For women, mothers' education has a notably larger relation with daughters' attainment among the excluded; among included women, the coefficient is smaller—suggesting that inclusion may reduce the dependence of daughters' attainment on maternal education, perhaps reflecting greater autonomy and opportunities.

It should be noted that educational attainment is inherently discretized in survey data, and intergenerational associations can be sensitive to how attainment is operationalized. Our baseline uses the four-category ISCED-style grouping to keep cells comparable across sex × FI groups. The interpretation of a one-step increase in education changes with the granularity of the scale, and the apparent differential for women is not robust across different operationalizations, for example, using a six-category grouping. This sensitivity is informative since it suggests that the result is driven by where the category thresholds are placed (e.g., collapsing/splitting secondary and tertiary levels), rather than by a uniform linear gradient across schooling.

Next, we analyze educational mobility in relation to financial inclusion. To do this, we compare the intergenerational relationship in educational attainment between fathers and sons, and between mothers and daughters, differentiating by financial inclusion status. Comparing the education of fathers with that of their sons and mothers with their daughters is a response to the dynamics of intergenerational transmission, which are often influenced by gender norms and specific roles in many societies. Previous studies have shown that fathers and mothers tend to influence the development of their same-gender children due to cultural and social practices that promote this differentiated transmission of values, knowledge, and resources (Chetty et al., 2014; Erola et al., 2016). Comparing father-son and mother-daughter pairs allows us to better capture these transmission patterns according to gender norms and roles, providing a more complete view of the specific barriers and facilitators that men and women face in their social and educational mobility.

Figure 5 shows that, for both genders, financial inclusion is positively associated with intergenerational educational mobility, although the trends vary between men and women. For men, the father's educational level has a similar relation with the son's educational achievement for both financially included and excluded individuals, with a slight advantage for those included. This relationship suggests that, while financial inclusion may provide some additional support in terms of access to educational resources, it does not generate a substantial difference in the education attained when controlling for the father's education.

Figure 5: Educational mobility by sex and financial inclusion status



Source: Authors' calculations based on ESRU-EMOVI 2023.
Notes: Ordinary least squares (OLS) regression of sons' education on fathers' education and daughters' education on mothers' education. Survey weights applied.

In the case of women, the association of the mother's education with the daughter's educational achievement is notably greater for those who are financially excluded, which suggests that in the absence of financial inclusion, the mother's education has a stronger association with the educational level achieved by the daughters. However, for financially included women, the coefficient is smaller. This could indicate that financial inclusion acts as a factor that moderates the dependence of the daughter's educational achievement on the mother's educational level, perhaps allowing financially included daughters to have development opportunities that are less conditioned by the family context. This could suggest that financial inclusion not only provides access to resources but also greater autonomy in educational achievement, particularly among women.

6. Conclusions

This study examined the relationship between financial inclusion and social mobility in Mexico, with emphasis on gender differences and the intergenerational transmission of financial attitudes and gender norms as reflected in household financial socialization. Framed in policy terms, our results speak to whether financial inclusion functions primarily as a ladder, supporting upward mobility, or as a safety net, supporting stability and reducing downward mobility. Using ESRU–EMOVI 2023, we document that financial

inclusion is associated with both upward movement and persistence at the top of the socioeconomic distribution, but with clear gender differences in how these patterns appear.

Assessing our hypothesis, the evidence is consistent with the idea that women's financial inclusion is more tightly linked to circumstances of origin and to gender-norm-related socialization within households. In particular, variables capturing origin conditions and parental background are strongly associated with financial inclusion, and the observed gender gap narrows substantially once individual within-control factors—most notably education and employment—are accounted for. This pattern is consistent with structural constraints shaping women's financial inclusion disadvantage rather than an inherent gender effect per se. At the same time, indicators of household financial socialization—interpreted as proxies for gender norms regarding who is expected to engage with money and financial decisions—also relate to inclusion outcomes, suggesting that gender norms may operate through everyday practices of transmission rather than only through explicit beliefs.

First, we find a robust association between financial inclusion and social mobility in Mexico, with important gender variation. Financial inclusion is linked to a more favorable mobility profile—particularly persistence at the top—while its association with upward mobility from the bottom appears more limited for women, consistent with structural and gender-based constraints that shape how resources translate into mobility opportunities. Financially included women are more likely to remain in higher quintiles, whereas upward mobility from the bottom remains comparatively constrained. In contrast, the association between inclusion and upward mobility from lower and middle quintiles appears stronger for men. Taken together, these descriptive patterns suggest that inclusion may operate more as a stability mechanism for women—especially in protecting position at the top—while it is more strongly linked to upward movement for men.

Second, resources and knowledge transmitted within families matter in ways that are plausibly shaped by gender norms. Household financial socialization—especially when it fosters money management, planning, and engagement with financial topics—is associated with a higher probability of inclusion in the next generation. However, we also observe gender inequalities in this transmission: daughters appear to receive less financial instruction and exposure than sons, which may weaken women's later inclusion and reduce their ability to convert inclusion into mobility gains. This highlights the relevance of gender norms not only as attitudes, but as patterned practices that allocate financial learning and responsibility unevenly within households.

Viewed through the ladder-versus-safety-net lens, policies should aim not only to expand access, but also to strengthen women's capacity to convert inclusion into upward mobility. Financial inclusion has the potential to support greater persistence and mobility, but this potential is conditioned by structural barriers and gender norms. Effective inclusion policies therefore need a gender perspective that targets women-specific barriers in both domains:

the structural conditions that shape education and labor-market opportunities, and the gendered socialization processes through which financial skills, confidence, and engagement are transmitted. Promoting money management practices from early ages—alongside interventions that normalize women's active financial participation—can foster a more equitable intergenerational transmission of financial skills and knowledge, enabling more inclusive social mobility.

From a development-policy perspective, our findings suggest that advancing gender equality through financial inclusion requires pairing inclusion efforts with measures that relax structural constraints shaping women's mobility and address gender-norm-related barriers that limit women's financial engagement.

Finally, limitations remain. We do not identify causal relationships; results should be interpreted as associations. In addition, our financial inclusion indicator captures use of formal savings/credit and does not measure service quality, intensity of use, digital usage, affordability, or product appropriateness. Future work should consider broader measures of financial inclusion—including access and service quality—and explore mechanisms through which inclusion may influence mobility. Also, our proxy measures for gender-norm-related financial socialization are retrospective and do not directly elicit normative beliefs or social norms; future work should incorporate direct norm-elicitation modules to better distinguish socialization from norms per se. Deepening analysis along these lines will clarify how different dimensions of inclusion contribute to long-run socioeconomic development and inequality reduction.

Statements and Declarations

Competing interests

Financial interests: This article builds on research originally conducted as part of a consultancy project commissioned by the Centro de Estudios Espinosa Yglesias (CEEY). Both authors received consultancy compensation for that prior project. The manuscript submitted here is an independent academic extension of that work. No specific funding was received for the preparation of this article.

Non-financial interests: none.

Data availability

The data analyzed in this study come from the ESRU–EMOVI 2023 survey. Access to the data is subject to the terms and conditions established by the data provider. Replication materials and documentation necessary to reproduce the results will be deposited in a publicly accessible repository upon acceptance, in accordance with the Journal of Economic Inequality information deposit policy.

Code availability

The Stata code used for data management and analysis will be made publicly available in a repository upon acceptance.

Author contributions

All authors contributed to the study conception and design. Data preparation and formal analysis were performed by both authors. The first draft of the manuscript was written by the authors, and both authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

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Appendix

Transition Matrices*

Full sample

Origin \ Dest	Q1	Q2	Q3	Q4	Q5
Q1	0.547 [0.495, 0.598]	0.255 [0.211, 0.304]	0.115 [0.087, 0.144]	0.057 [0.036, 0.082]	0.027 [0.010, 0.050]
Q2	0.302 [0.256, 0.350]	0.289 [0.248, 0.336]	0.205 [0.168, 0.242]	0.148 [0.114, 0.186]	0.056 [0.032, 0.086]
Q3	0.149 [0.104, 0.205]	0.237 [0.191, 0.282]	0.270 [0.228, 0.316]	0.200 [0.164, 0.246]	0.144 [0.112, 0.182]
Q4	0.045 [0.025, 0.072]	0.130 [0.104, 0.159]	0.259 [0.221, 0.299]	0.320 [0.277, 0.362]	0.246 [0.202, 0.296]
Q5	0.013 [0.007, 0.021]	0.064 [0.042, 0.088]	0.128 [0.096, 0.163]	0.232 [0.187, 0.279]	0.563 [0.515, 0.612]

Group 1 — Men, Not included

Origin \ Dest	Q1	Q2	Q3	Q4	Q5
Q1	0.550 [0.470, 0.640]	0.221 [0.138, 0.310]	0.096 [0.057, 0.141]	0.089 [0.045, 0.143]	0.044 [0.006, 0.102]
Q2	0.286 [0.208, 0.370]	0.311 [0.226, 0.393]	0.137 [0.090, 0.190]	0.207 [0.133, 0.280]	0.059 [0.011, 0.139]
Q3	0.123 [0.077, 0.177]	0.271 [0.200, 0.336]	0.272 [0.204, 0.341]	0.228 [0.168, 0.296]	0.106 [0.066, 0.152]
Q4	0.058 [0.014, 0.115]	0.129 [0.089, 0.177]	0.297 [0.224, 0.374]	0.270 [0.200, 0.347]	0.246 [0.154, 0.351]
Q5	0.010 [0.002, 0.022]	0.107 [0.053, 0.173]	0.178 [0.112, 0.254]	0.242 [0.189, 0.311]	0.464 [0.381, 0.544]

Group 2 — Men, Included

Origin \ Dest	Q1	Q2	Q3	Q4	Q5
Q1	0.340 [0.127, 0.530]	0.298 [0.144, 0.512]	0.174 [0.017, 0.371]	0.094 [0.000, 0.228]	0.094 [0.000, 0.237]
Q2	0.093 [0.020, 0.197]	0.232 [0.075, 0.401]	0.232 [0.112, 0.366]	0.303 [0.152, 0.468]	0.141 [0.043, 0.272]
Q3	0.053 [0.008, 0.109]	0.167 [0.029, 0.362]	0.216 [0.119, 0.330]	0.204 [0.128, 0.321]	0.359 [0.225, 0.496]
Q4	0.007 [0.000, 0.017]	0.062 [0.020, 0.114]	0.199 [0.114, 0.304]	0.369 [0.250, 0.510]	0.363 [0.253, 0.477]
Q5	0.001 [0.000, 0.003]	0.031 [0.002, 0.077]	0.065 [0.031, 0.107]	0.136 [0.084, 0.196]	0.767 [0.693, 0.836]

Group 3 — Women, Not included

Origin \ Dest	Q1	Q2	Q3	Q4	Q5
Q1	0.562 [0.493, 0.627]	0.279 [0.210, 0.350]	0.117 [0.075, 0.163]	0.034 [0.016, 0.057]	0.008 [0.001, 0.019]
Q2	0.350	0.301	0.227	0.086	0.036

	[0.282, 0.411]	[0.238, 0.368]	[0.169, 0.282]	[0.055, 0.124]	[0.019, 0.055]
Q3	0.210 [0.124, 0.307]	0.253 [0.199, 0.312]	0.267 [0.207, 0.336]	0.154 [0.108, 0.210]	0.116 [0.070, 0.175]
Q4	0.046 [0.019, 0.079]	0.163 [0.116, 0.214]	0.260 [0.206, 0.321]	0.335 [0.256, 0.404]	0.197 [0.130, 0.278]
Q5	0.041 [0.018, 0.068]	0.092 [0.043, 0.148]	0.204 [0.119, 0.291]	0.325 [0.232, 0.430]	0.338 [0.264, 0.421]

Group 4 — Women, Included

Origin \ Dest	Q1	Q2	Q3	Q4	Q5
Q1	0.528 [0.318, 0.720]	0.232 [0.082, 0.388]	0.179 [0.064, 0.299]	0.025 [0.002, 0.081]	0.036 [0.000, 0.096]
Q2	0.277 [0.049, 0.468]	0.176 [0.056, 0.311]	0.316 [0.179, 0.493]	0.151 [0.024, 0.333]	0.080 [0.032, 0.160]
Q3	0.025 [0.002, 0.062]	0.089 [0.029, 0.175]	0.336 [0.195, 0.524]	0.335 [0.162, 0.521]	0.216 [0.059, 0.411]
Q4	0.048 [0.008, 0.103]	0.104 [0.040, 0.175]	0.202 [0.117, 0.296]	0.379 [0.257, 0.497]	0.267 [0.185, 0.377]
Q5	0.000 [0.000, 0.000]	0.017 [0.003, 0.040]	0.059 [0.029, 0.101]	0.232 [0.133, 0.360]	0.692 [0.573, 0.798]

* 95% confidence intervals are computed using a nonparametric bootstrap (500 replications), resampling individuals with replacement and recomputing each transition probability in every replication.