Analysis of the Ownership of Financial Products: Evidence to Contribute to Financial Inclusion in Bolivia

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Abstract

This paper analyzes the determinants of owning financial products as opposed to not owning any, placing special emphasis on variables such as households' socioeconomic level, education, and financial literacy. To complement this, the behavior of households was assessed in relation to their ownership of informal products, and their ownership of formal products together with informal ones, evaluating the outcomes using the same set of variables. The results showed that ownership of financial products in Bolivia mostly depends on households' socioeconomic level. It was seen that women are more likely than men to own informal financial products. Moreover, households with a low socioeconomic level and adults with a primary education level are the most likely to use these types of products. In the case of financial literacy, the likelihood of using these products was similar for people with medium to high literacy. As for owning informal and formal products together, a growing probability was observed, but it was only significant for households with lower-middle and upper-middle socioeconomic level. Adults with only a secondary education level are more likely to acquire both products, while people with medium and high financial literacy are similarly likely to own such products.

Keywords: financial inclusion, probit, multinomial logit, marginal effects.
JEL classification: C81, G1.

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1. INTRODUCTION

Financial inclusion (FI) has been treated as a matter of interest by different international institutions since the year 2000 and became more important after the 2007-2009 financial crisis. Such interest stems from various studies that demonstrated a strong correlation between poverty and exclusion from the formal financial sector, as well as the impact greater FI can have in reducing the vulnerability of low-income households by giving them the ability to smooth their consumption patterns and better confront events that might jeopardize their regular income flows.

Levels of FI can be affected by the percentage of the population, mostly the vulnerable and poor, that turns to informal channels or their own resources to be able to make the majority of their financial transactions, including transferring money to family members, saving, investing in education, leveraging work opportunities, or facing shocks (Allen et al., 2012). These alternative channels, outside the financial sector, are more costly, limited, and unsafe (Karlan, Ratan and Zinman, 2014), and can worsen the standards of living in such households (Morduch, 1994; Holzman et al., 2003).

The financial system in Bolivia has improved substantially, driven by the country's sustained economic growth over the last 10 years, low inflation, and greater political stability. In 2007, the number of financial service points (FSPs) was 1,673, while by 2015 this number had tripled to 5,130. In terms of location, these services had significant coverage in rural areas with a total of 261 FSPS in 2007, which by 2015 had reached 4,946. The number of branches, agencies, and other FSPS tripled, while automated teller machines (ATMs) increased fivefold. Moreover, according to the Financial System Supervisory Authority (Autoridad de Supervisión del Sistema Financiero, ASFI) data, the total number of deposit accounts grew by 219% between 2007 and 2015, while the number of borrowers increased 52% between 2010 and 2015.

However, the Financial Capabilities Survey in the Andean Countries of Colombia, Ecuador, Peru, and Bolivia (FCS) has shown that, in terms of financial product ownership, 35% of respondents in Bolivia mentioned having a savings account. This was the largest proportion, followed in second place by those having credit cards with 14%, and those having current accounts with 12%, while 33% of respondents reported not having any financial products.

The main objective of this study, therefore, is to determine what type of socioeconomic characteristics influence the likelihood that a Bolivian household has some kind of financial product as opposed to not having any at all. It will also consider the probability that households have some kind of informal product or own an informal product alongside a formal product, taking into account their socioeconomic characteristics. To carry out the analysis, we employed the FCS elaborated by the CAF-Development Bank of Latin America, and a probit regression and a multinomial logit regression. We observed that, in Bolivia, people with a higher socioeconomic level and those with greater financial literacy are more likely to own financial products. Meanwhile, individuals with a lower socioeconomic level and less education generally tend to turn to the ownership of informal products. Nevertheless, financial literacy could have less influence on this decision given that the probabilities of acquiring such products remained the same for individuals with a medium level of financial literacy as for those with a high level. Finally, there is a significant growth in the number of people owning both formal and informal products among households with lower- and upper-middle socioeconomic levels, individuals with primary and secondary education, and people with medium or high financial literacy.

The paper is organized as follows: Section 2 examines the definition of FI, its demand-side determinants, and FI in Bolivia. Section 3 describes the results of the FCS in terms of financial literacy and ownership of financial products for the case of Bolivia. Section 4 outlines the model used and the main results obtained. Finally, Section 5 presents the conclusions of the study.

2. FINANCIAL INCLUSION

The International Network on Financial Education defined FI as the process of promoting affordable, timely and adequate access to a wide range of regulated financial products and services, broadening their use by all segments of society through the implementation of existing tailored and innovative approaches, including financial awareness and education, with a view to promoting financial welfare, as well as economic and social inclusion. Meanwhile, the Alliance for Financial Inclusion cites that financial inclusion should be defined based on four dimensions: access, usage, quality, and welfare.

Access is understood as "the ability to use the products and services offered by formal financial institutions," and usage as "the depth or extent of financial services and product use." Quality would indicate whether the attributes of products and services meet the needs of customers and whether product development takes such needs into account. Finally, welfare is defined as "the positive impact that a financial device or service has had on the lives of customers" (AFI, 2011).

Since the start of 2000, financial inclusion (FI), along with financial education (FE), has been a matter of interest for different international bodies.[1] Such interest stems from the publication of several studies demonstrating that there is a high level of correlation between poverty and exclusion from the formal financial sector. Thus, governments of the Latin America and the Caribbean region, as well as the rest of the world, have seen in the policies of FI and FE as a tool to encourage economic growth and social equity, within a context of financial stability (Roa et al., 2014).

Olloqui et al. (2015) state that the aim of FI is to provide the necessary tools for individuals to be able to sustain their livelihoods and more effectively create assets, smooth consumption and manage idiosyncratic risks such as those related to health, unemployment, death, and other shocks that destabilize household consumption patterns. All the aforementioned are in addition to the basic benefit of being able to manage daily transactions more practically and safely.

In the case of households, which obtain different levels of excess income according to their consumption, it is also important to take into account the volatility of these consumption flows. Thus, household saving is an important variable for absorbing unexpected flows in consumption. If markets were complete, agents would have an asset portfolio that maximized their income and therefore favor their consumption and contribute to reducing volatility. However, this scenario is subject to some significant deviations that undermine the most vulnerable households.

The distribution of assets in vulnerable households includes accumulating low yield but highly appropriate assets, which can be liquid (cash) or illiquid, depending on preferences and income patterns.

[1] The G20, the World Bank, the United Nations, the International Network on Financial Education, and the Alliance for Financial Inclusion are among the most important.

In both cases, this allocation can result in relatively high losses in value. Policies that enable assets to be reallocated into appropriate financial instruments can considerably improve the yields households obtain, as well as reduce the losses incurred during severe disturbances that in the absence of such instruments would have to be met by selling assets (Olloqui et al., 2015).

Thus, it can be seen how two important effects of access to financial services contribute to reducing the vulnerability of the poorest households. First, financial inclusion smooths the variability of consumption, using mechanisms that allow adverse shocks (be they on income or prices) to be addressed more effectively. And second, it increases the value of assets, be they human capital (health and education) or physical/productive.

FI not only affects the well-being of households, but also the stability of the financial system in general, and thereby economic growth. Hence, greater FI reflected in broader access to and use of bank deposits can significantly mitigate bank deposit withdrawals in times of financial stress (Han and Melecky, 2013). In the same way, at the macro level, increased access to financial services has positive effects on growth and on reducing inequality. With respect to the latter, inequality rises as countries progress through the early stages of financial development, but declines substantially in the intermediate and advanced stages (Jahan and McDonald, 2011). Studies show how financial inclusion has the potential to reduce inequality and poverty, and drive economic growth. In particular, a 10% increase in access to financial services has been shown to generate a reduction of 0.6 points in the Gini inequality index (Honohan, 2007).

On the demand-side, it has been demonstrated how FI faces the following obstacles (Cano et al., 2013): *1*) low levels of information on existing financial products among the population; *2*) low levels of financial capabilities or education[2] among the population; *3*) the high costs associated with opening and maintaining financial

[2] According to the Organization for Economic Cooperation and Development (OECD, 2005), financial education is defined as the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction, and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being.

products, *4*) agents' inability to supply all the required documentation; *5*) lack of technical or specialized advice from experts that explain clearly and independently the portfolios of financial services available, their costs, advantages, and disadvantages; *6*) lack of collateral or guarantees that satisfy banks' demands, and a general incapacity to back operations with their income when not in formal and stable employment; and *7*) distrust among some segments of the population for formal financial institutions.

In addition, Simpson and Buckland (2009) compared results from 1999 to 2005 and found that one of the reasons why individuals do not use the financial system is that they do not understand the products offered by financial institutions. The results showed that unbanked individuals generally have low incomes and wealth, are young with low levels of education and a large family, and belong to areas specifically characterized by poverty. Furthermore, age, income, and wealth have a nonlinear relation with bankarization according to the life cycle theory.

Under the above scheme it was possible to identify that levels of FI are affected by households' socioeconomic characteristics, specifically those of the vulnerable and/or poor population that turn to their own resources or informal channels to be able to perform the majority of their financial transactions, including transferring money to family members, saving, investing in education, leveraging employment (income generating) opportunities or facing shocks (Allen et al., 2012). These alternative channels outside the financial sector are more costly, limited, and unsafe (Karlan et al., 2014), and can worsen even further the standards of living of these households (Morduch, 1994; Holzman et al., 2003). Moreover, private debt in the informal sector can become a potential source of systemic risk, either directly or through its connection with the regulated financial system.

Despite the significant progress made in terms of financial inclusion, substantial differences still exist between regions, income levels, sex, and other dimensions. The most recent demand-side study is the Global Financial Inclusion (Global Findex) Database of the World Bank and the Bill and Melinda Gates Foundation (Demirgüç-Kunt et al., 2014). This study provides detailed data for 2011 and 2014 on how individuals save, lend, make payments, and manage risk. In 2014, this database had over 100 indicators that can be broken down by sex, age group, and household income. The indicators

were calculated based on surveys conducted among 150,000 randomly chosen adults over the age of 15 representing each of 143 selected countries.

Between 2011 and 2014, 700 million adults became account holders, while the number of adults without an account fell by 20% to 2 billlion. At the international level, 61% of adults had a bank account in 2014 as compared to 51% in 2011. In Latin America, the percentage of adults with accounts at a financial institution rose 12 percentage points, the second largest increase behind Asia. In the case of loans, the trajectory was also upwards, although the size was smaller than the trend for bank accounts. This trajectory might be a result of the cyclical path of the economy, an extension in alternative sources of financing or the still weak recovery from the global financial crisis in many parts of the world. Finally, it is important to mention that compared to high-income OECD countries, all other regions are at a disadvantage given that 94% of the adult population in developed countries have an account and 18% have a loan (Demirgüç-Kunt et al., 2014; Sahay et al., 2015).

Furthermore, although the first step in financial inclusion is having a bank account, the degree of usage of these accounts is more important. In this regard, the Global Findex estimated that, in 2014, 37% of adults with a bank account did not make any deposits or withdrawals for one month. In Latin America, 18% of individuals use their account to receive government payments and 6% use accounts to pay for services, figures similar to those registered at the international level, but below those observed for developed countries.

2.1 Financial Inclusion in Bolivia

In Bolivia, the financial system has strengthened significantly, driven by the sustained economic growth of the last 10 years, low inflation, and greater political stability. Thus, in mid-2013, the government introduced Financial Services Law No. 393,[3] which modified the

[3] Financial Services Law No. 393 of 2013 replaced Bank Law No. 1488 of 2004. The new law benefits the manufacturing and social interest housing sectors by granting them preferential interest rates set by the government, not charging the reference interest rate, establishing maximum commissions financial entities can charge, setting a minimum annual rate of 2% for individual savings bank accounts in domestic currency for persons that maintain an average monthly

functioning of the Bolivian financial system, demanding that financial institutions implement and put into practice tasks and programs that did not exist previously. For 2015, according to data from the Financial System Supervisory Authority, the strengthened Bolivian financial system recorded outstanding figures, and deposits as a percentage of gross domestic product (GDP) grew from 38% in 2005 to 63% in 2015. In the same way, the portfolio as a percentage of GDP increased from 35% in 2005 to 50% in 2015. As for coverage, the number of financial services points tripled between 2007 and 2015, benefitting both urban and rural areas of the country.

The structure of financial system intermediaries in Bolivia consists of 52 institutions, 17 of which are banks and 35 are nonbank entities. Among bank entities, there are a total of 14 commercial banks and three small and medium enterprise (SME) banks, while nonbank entities include eight mortgage lending institutions and 27 open savings and credit cooperatives. There are also 58 entities in the process of adaptation, of which 12 are development banks and 46 are savings and credit cooperatives and credit unions.

The coverage of financial services has improved considerably in Bolivia during recent years. In 2007, there was a total of 1,673 financial access points, of which 806 were ATMs and 867 were branches, agencies, and others. The number of FSPs tripled in 2015, reaching a total of 5,130, of which 2,810 are ATMs and 2,320 are branches, agencies, or others. In terms of location, these services extended considerably into rural areas: In 2007 there were 261, while in 2015 there were 4,946. A break down by type of service reveals that branches, agencies, and others tripled in number, and ATMs increased fivefold. Furthermore, according to data from the ASFI, the number of deposit accounts grew 219% between 2007 and 2015, while the number of borrowers increased by 52% between 2010 and 2015.

Since mid-2014, monetary policy in Bolivia has followed an expansive countercyclical path. Thus, by 2015 there was a downward trend in passive interest rates on fixed term deposits (FTD) and savings accounts in domestic currency, while interest rates on foreign

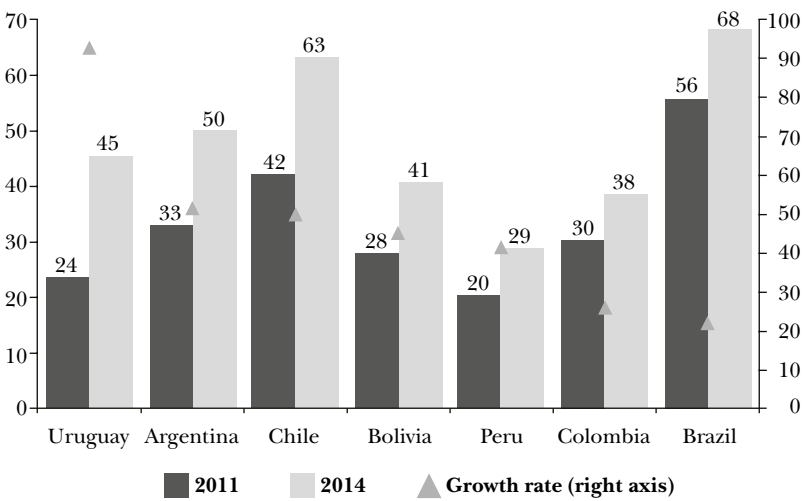
balance of above BOB 70,000 (USD 10,000), and a minimum interest rate for individuals who at the time of making a fixed term deposit (FTD) do not have more than BOB 70,000 (USD 10,000 approximately). In these types of deposits, for instance, an individual with an FTD of 361 at 720 days would obtain a minimum rate of 4 per cent.

currency denominated FTD and savings accounts also remained at historically low levels. Moreover, the domestic currency interest rate of reference decreased. As for active rates, these also fell significantly, in line with that set forth in the new Financial Services Law No. 393.

To compliment the above, data from the survey conducted by the World Bank Global Findex (Global Financial Inclusion Database) shows the number of bank accounts and loans for individuals over the age of 15. With respect to the former, the growth rate of bank accounts between 2011 and 2014 placed Bolivia in fourth place behind Uruguay, Chile, and Argentina, and above Peru, Colombia, and Brazil (Figure 1), while loans recorded a positive rate of growth that was only higher than that reported for Peru (Figure 2). Looking at data on account and loan ownership by sex, it can be seen that both men and women had more accounts and loans at financial institutions in 2014 than in 2011 (Figure 3). Meanwhile, account holding has also increased among individuals belonging to the 40% of the population with low income and those belonging to the 60% of the population with higher income. Nevertheless, it stands out that in the case of loans, the increase is small for the population belonging

Figure 1

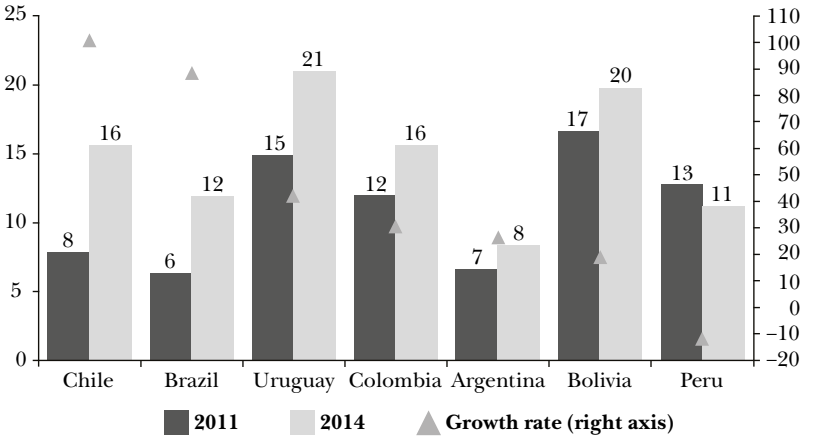
ACCOUNTS IN FINANCIAL INSTITUTIONS
Over 15 years old, percentages



Source: Global Findex-World Bank.

Figure 2

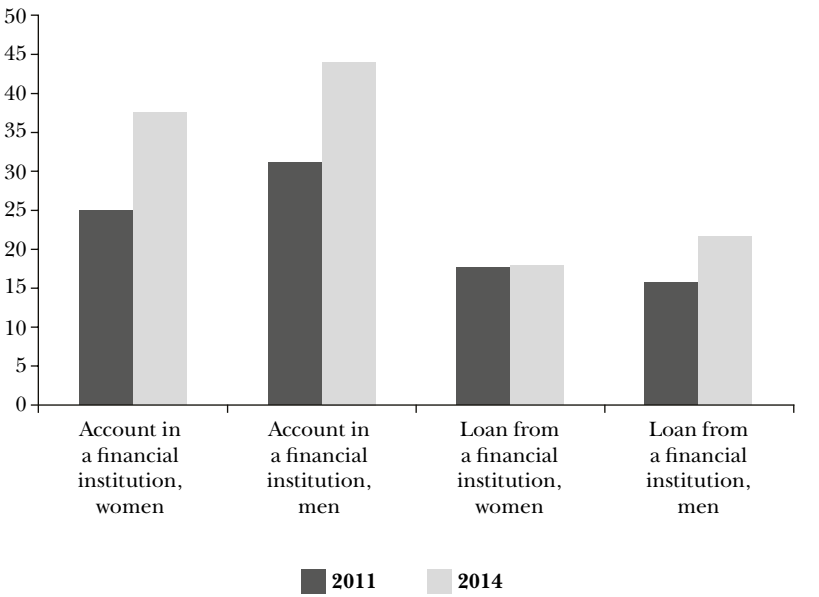
LOANS FROM A FINANCIAL INSTITUTION
Over 15 years old, percentages



Source: Global Findex-World Bank.

Figure 3

ACCOUNTS HOLDING AND LOANS IN/FROM FINANCIAL INSTITUTIONS BY SEX
Over 15 years old, percentages

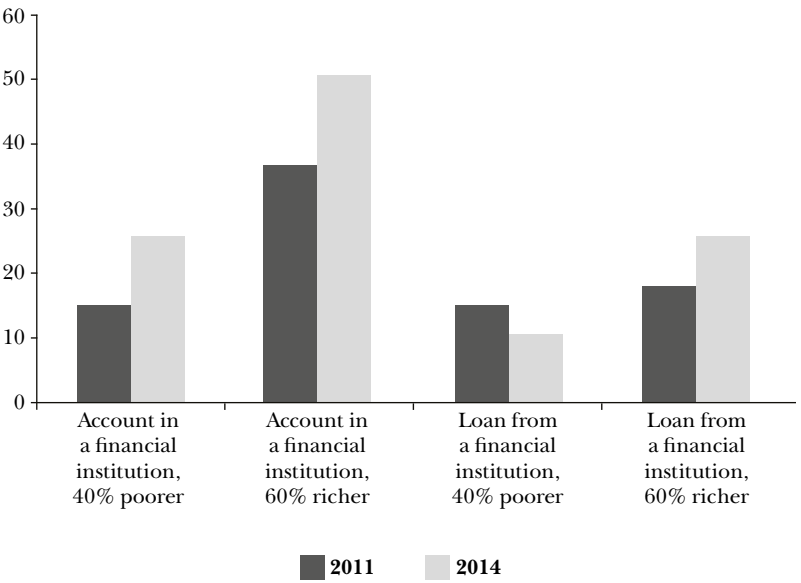


Source: Global Findex-World Bank.

Figure 4

ACCOUNTS AND LOANS IN/FROM FINANCIAL INSTITUTIONS BY INCOME DISTRIBUTION

Over 15 years old, percentages



Source: Global Findex-World Bank.

to the 40% with lower income, while the population with higher income exhibited a sharp upward trajectory (Figure 4).

The above description highlights the progress made in Bolivia regarding access to the financial system by the population and reflects improvements in terms of FI. However, it is important to continue increasing access to accounts as well as loans at financial institutions and identify any shortcomings that might be hampering the progress of FI in Bolivia. In fact, the data described above allows for identifying patterns that should be considered in the case of loans, given that it can been seen how the number of women with loans grew only marginally and remained relatively constant between 2011 and 2014, while the increase has been larger among men. Moreover, when looking at income distribution it can be seen that the population with higher income generally has a larger percentage of loans as compared to the population with lower incomes.

As established in the previous section, the most vulnerable households, characterized by lower levels of income and education, tend to turn to the financial system less and use more informal sources of financing.[4] According to data from the Global Findex for Bolivia, in 2014 2.8% of the population over the age of 15 used an informal private lender, while 14% saved through informal means such as savings clubs or with someone different from their family environment. Compared to women, men have a larger percentage of loans from informal institutions and save more through informal methods. In terms of income, the 40% of the population with the lowest income has more loans with informal private institutions than the 60% of the population with higher incomes. The opposite behavior is observed for savings, where the 60% of the population with greater resources has more savings in these types of institutions. Finally, it can be seen that individuals with a secondary or higher level of education have a larger percentage of savings and loans with these types of intermediaries (Figures 5-8).

One of the lessons that can be learned from the 2008 international financial crisis is the lack of knowledge and information among a large part of the population regarding basic economic and financial matters, which limits their ability to make responsible, conscious, and competent decisions. Thus, FI depends heavily on financial education, given that the latter not only facilitates the effective use of financial products, but also helps people develop the skills for comparing and selecting the products that are best suited to their needs, and empowering them to exercise their rights and responsibilities (Roa et al., 2014).

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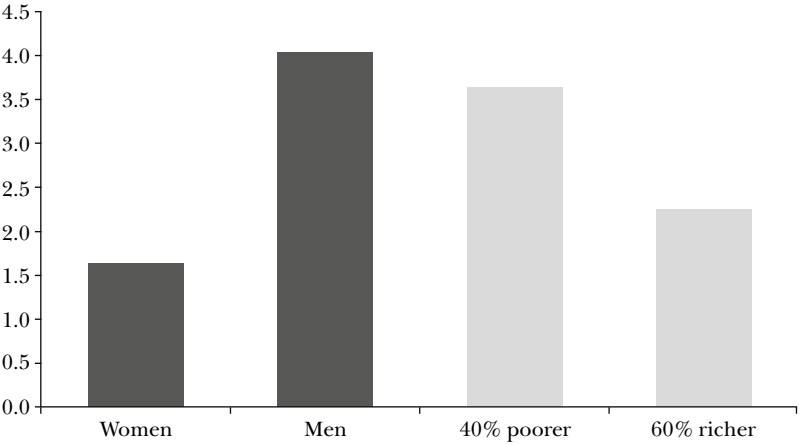
[4] The term *informal* used throughout this paper also encompasses unregulated institutions. Informal loans include lenders and pawnshops that are among the answer options for the question on whether the respondent knows/has any financial products. In the case of saving products, answer options for the question on whether the respondent has been saving money in any of the following, include the option of saving in groups (*pasanaku*) and saving at home. Nevertheless, it is possible that lenders have sufficient capital to set themselves up as financial institutions, but are in the process of adaptation. For instance, the option of saving in groups includes savings in Promujer, an institution that is in the process of adaptation according to the Financial System Supervisory Authority. Such institutions are unregulated rather than informal.

Figure 5

LOANS FROM AN INFORMAL PRIVATE LENDER, BY SEX AND INCOME DISTRIBUTION

Over 15 years old, percentages

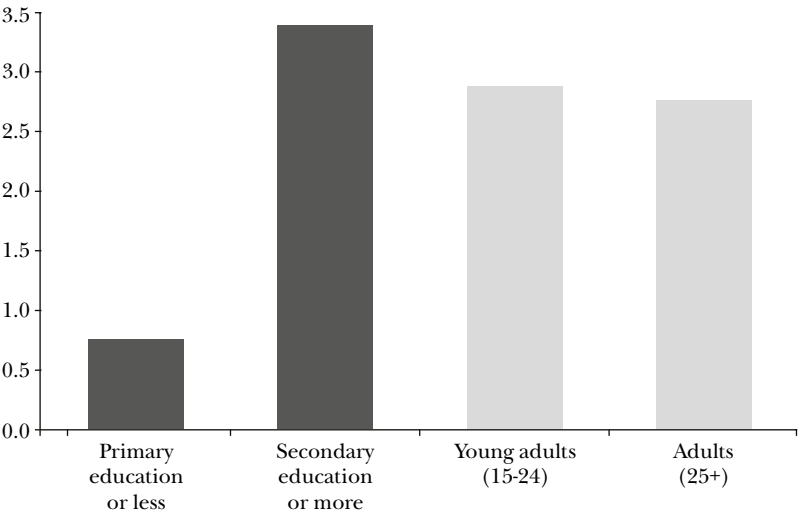


Source: Global Findex-World Bank.

Figure 6

LOANS FROM AN INFORMAL PRIVATE LENDER BY EDUCATION AND AGE

Over 15 years old, percentages

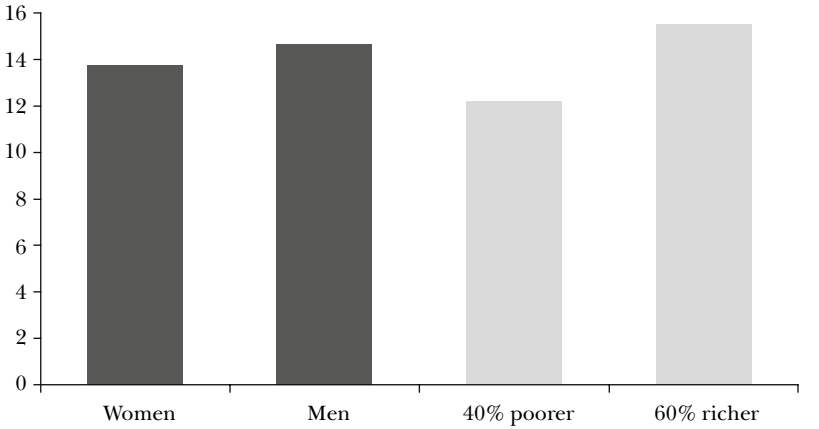


Source: Global Findex-World Bank.

Figure 7

SAVINGS IN INFORMAL INSTITUTIONS BY SEX AND INCOME DISTRIBUTION

Over 15 years old, percentages

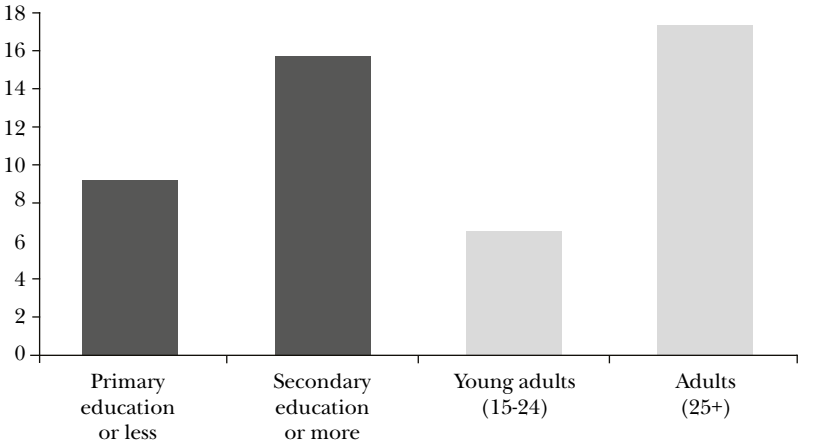


Source: Global Findex-World Bank.

Figure 8

SAVINGS IN INFORMAL INSTITUTIONS BY EDUCATION AND AGE

Over 15 years old, percentages



Source: Global Findex-World Bank.

3. OWNERSHIP AND KNOWLEDGE OF FINANCIAL PRODUCTS

In 2013, the CAF, through the Asociación Solidaridad Países Emergentes, Consorcio de Organizaciones Privadas de Promoción al Desarrollo de la Micro y Pequeña Empresa (Copeme), and the Organization for Economic Cooperation and Development, conducted the Financial Capabilities Survey in four countries of the Andean region: Bolivia, Colombia, Ecuador, and Peru. The survey was designed to identify the knowledge, skills, attitudes, and behaviors of individuals with regards to financial topics.

The total database consists of 1,200 respondents, half men and half women. Respondents from urban areas amount to 780 individuals (65%), while 420 are from rural areas (35%). By taking a demand-side approach, the database identified population characteristics connected with financial education and inclusion, demonstrating among its main results the existence of significant sociodemographic gaps, mainly associated to sex, geographic environment, education, and income levels. In the majority of aspects studied, education and income levels mark the most important differences (Mejía et al., 2014).

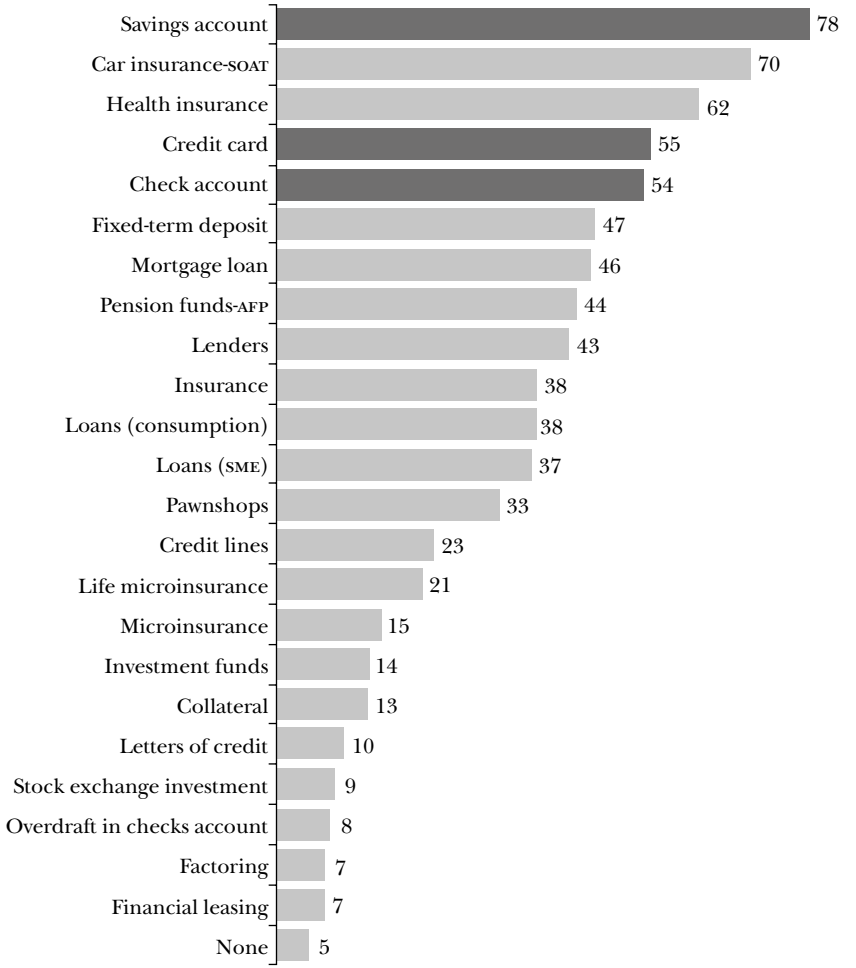
In the case of Bolivia, the main results of the FCS regarding financial literacy were that[5] when respondents were asked to report the types of financial products they know–from a list including savings account, fixed term deposit, small/midsize business loan, credit card, money lender, and pawnshop, among others–78% of respondents had heard of savings accounts, 55% of credit cards, and 54% of current accounts (Figure 9).

In geographical terms, the financial products on offer are better known in urban than rural areas, except for the product named *money lender*. With respect to the latter, answers affirming knowledge of this informal product in rural areas appear in 45% of cases, while in urban areas they do so in 42%. Greater knowledge of money lenders in rural areas is consistent with the smaller penetration of formal financial products in such areas. Meanwhile, it was found that individuals in the 25-39 age group know more about financial

[5] The question asked in the survey was: Please tell me, have you heard of any of the following financial products offered by financial institutions such as banks, finance companies, cooperatives, or others?

Figure 9

KNOWLEDGE ABOUT FINANCIAL PRODUCTS
Percentages



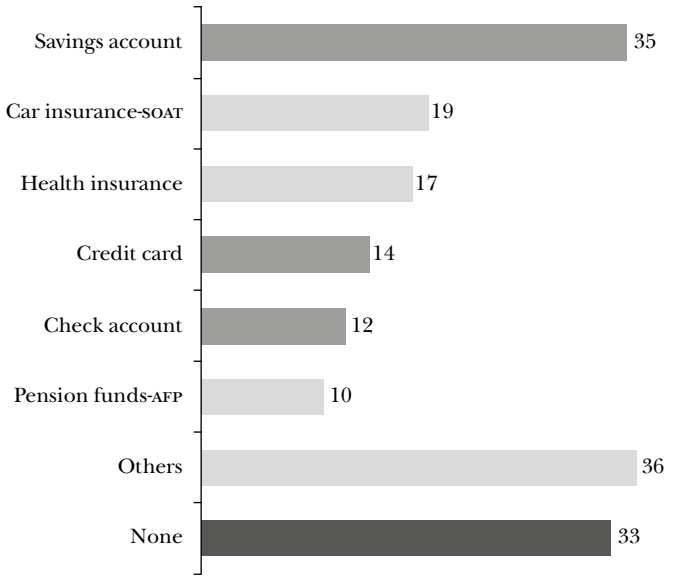
Note: Total database of interviewees, 1,200.
Source: Financial Capabilities Survey in Andean Countries-CAF.

products offered by the market, while the over 40s know less about such products. According to socioeconomic strata, it can be seen how households in the highest strata know most about the different financial products. Moreover, as would be expected, respondents with the highest levels of education are those who know most about financial products in Bolivia.

In terms of ownership for the same range of products, it was found that 35% of respondents mentioned having a savings account, this being the largest percentage, with credit cards coming in second with 14%, followed by current accounts with 12%. One result that stands out is that 33% of respondents reported not having any type of financial product (Figure 10).

Figura 10

HOLDING OF PRINCIPAL PRODUCTS
Percentage



Note: Total database of interviewees, 1,200.
Source: Financial Capabilities Survey in Andean Countries-CAF.

In addition, in the same way as for knowledge of financial products, the lower the socioeconomic level the lower the possession of financial products. The same panorama can be seen for education, where the higher the level of completed studies, the higher the ownership of financial products. Finally, those who possess financial products are mainly individuals who work as employees.

Considering the results described above, the main objective of this study is to determine what type of socioeconomic characteristics influence the probability of a Bolivian household having some kind of financial product as opposed to not having any. It will also explore the likelihood of households having an informal product, and owning informal products together with formal products, according to their socioeconomic characteristics.

3.1 Data

The data employed for carrying out the analysis was obtained from the FCS and based on the question asked to respondents regarding the ownership of different financial products. The question was answered by 1,132 individuals, of which 372 reported not having any financial products and 760 said they had some kind of saving, credit, or insurance product offered by financial institutions such as banks, finance companies, or cooperatives. Moreover, out of the individuals that have some type of financial product, it can be observed that 676 report owning formal financial products (saving or credit), 61 report owning some type of formal as well as informal financial products (saving or credit), and 23 report only owning some type of informal financial product (saving or credit).

To identify the households that only have informal financial products (saving and credit) and those that own some type of informal financial product together with formal products, answers to two questions from the FCS were studied. The first one is: Please tell me, do you currently own (personally or jointly with another person or other persons) any of these products? Where answer options were "Lender" and "Pawnshop." The second question is: During the last 12 months, have you saved money in any of the following ways? Where an answer option was: "Group saving (informal collective fund, e.g. Promujer, *pasanaku*)."

As stated previously, the survey on the ownership of financial products is available for a total of 1,132 individuals, a sample that might be considered limited if a more detailed analysis is required.

Hence, the number of persons that reported only having credit or saving products is small, 65 and 132, respectively. Most respondents mentioned owning saving as well as credit products. An analysis that assesses the specific behavior for saving and credit products separately would consequently produce erroneous results. The constructed variables did not, therefore, distinguish between saving and credit products, given that this allows for having a larger sample, and estimates that can produce relevant outcomes.

Despite these limitations, it is still important to carry out an analysis of the available sample, considering that there is a large number of individuals that reported not having any financial product. The initial analysis, therefore, focuses on observing the type of socioeconomic determinants that generally influence the ownership of financial products by Bolivian households. To complement this, a simple analysis is also performed regarding households' ownership of informal products, considering households that only own informal financial products and those that have formal as well as informal products. It is important to point out that respondents who mentioned not having any financial product could be potential customers for informal lending or saving institutions, or may have this type of product but do not mention it.

The FCS is the first survey with a true financial approach for the case of Bolivia that also considers important variables such as income, education, and financial literacy, among others. The analysis carried out in this paper, therefore, firstly assesses the socioeconomic determinants of financial product ownership in Bolivia.

In accordance with the proposed objective, the FCS is used to study the impact of households' socioeconomic characteristics, such as respondents' employment status, sex, geographic location, age, socioeconomic level, level of education, and a variable that allows for assessing financial literacy. With respect to the latter, this variable is related to the understanding of key concepts, as well as the capability and skill individuals have for applying it to their daily life (Mejía et al., 2015). Thus, this variable takes into account eight questions that assess the level of financial literacy among people surveyed, obtaining an overall score according to the number of correct answers each respondent gave, and then using this to assess whether they have a low, medium, or high level of financial literacy.[6]

[6] This variable was calculated using the description in the 2015 Financial Capabilities Survey in Andean Countries: Bolivia, Colombia, Ecuador,

4. METHODOLOGY AND RESULTS

To be able to assess the likelihood of owning some type of financial product as opposed to not owning any at all for the socioeconomic variables mentioned above, a probit regression was employed. At the same time, a multinomial logistic regression was used to determine the likelihood of households owning just informal financial products, formal and informal products together, just formal products or no products at all. In the latter case, the multinomial logit regression was used while considering that there was a nominal dependent variable with more than two categories (polytomous), this being a multivariate extension of the classic logit regression.

One example of the use of a multinomial logit regression is that applied by Schmidt and Strauss (1975), who estimate a model for predicting occupation based on a sample of 1,000 observations over three years. For each sample, individual data consists of the occupation variable that takes value 0 if menial, 1 if blue collar, 2 if craft, 3 if white collar and 4 if professional. Independent variables are education, experience, race, sex, and a constant. The model would, therefore, be written as follows,

$$\text{Prob}(Y_i = j) = \frac{e^{\beta_j' x_i}}{\sum_{k=0}^{4} e^{\beta_k' x_i}}, \quad j = 0, 1, \ldots, 4. \tag{1}$$

Model 1 is known as a multinomial logistic regression. The estimated equations provide a set of probabilities for *J+1* choices of a decision-maker, with characteristics x_i.

Multinomial logistic regressions should generally consider that it is important to remove indeterminacy from the model. Therefore, by defining $\beta_j^* = \beta_j + q$ for any q vector, probabilities can be reformulated using β_j^* that produce the same set of probabilities because all the terms that involve q are eliminated. A suitable normalization that solves the problem is fixing $\beta_0 = 0$. (This is possible because the

and Peru (Mejía et al.), which also shows that Bolivia achieves outstanding scores in terms of financial literacy and education.

probabilities sum to one, therefore only parameter vectors are required to determine the *J+1* probabilities). Probabilities are:

2 $$\text{Prob}\left(Y_i = j \middle| x_i\right) = \frac{e^{\beta_j' x_i}}{1 + \sum_{k=1}^{J} e^{\beta_k' x_i}}, \quad \text{for } j = 0, 2, \ldots, J, \beta_0 = 0.$$

The model, therefore, implies that J log-odds ratios can be calculated

$$\ln\left[\frac{P_{ij}}{P_{ik}}\right] = x_i'\left(\beta_j - \beta_k\right) = x_i'\beta_j \quad \text{if} \quad k = 0.$$

Finally, log-likelihood can be derived by defining d_{ij}= 1 if individual j chooses alternative i, and 0 if they do not choose it, for possible results J–1. Therefore, for each i, only one of all d_{ij} is 1. The log-likelihood is a generalization of the former for a probit or logit binomial.

$$\ln L = \sum_{i=1}^{n}\sum_{j=0}^{J} d_{ij} \ln \text{Prob}\left(Y_i = j\right).$$

To obtain derivatives:

$$\frac{d \ln L}{d\beta_j} = \sum_{i}^{n}\left(d_{ij} - P_{ij}\right)x_i \quad \text{for } j = 1, \ldots, J.$$

The coefficients of this model are difficult to interpret given that β_j can be associated with the j-th result, which is misleading. The method to observe this is obtained from Equation 2, where the marginal effects of the characteristics on probabilities are:

3 $$\delta_j = \frac{dP_j}{dx_i} = P_j\left[\beta_j - \sum_{k=0}^{J} P_k \beta_k\right] = P_j\left[\beta_j - \bar{\beta}\right].$$

Thus, each subvector of β is found in each marginal effect through the probabilities as well as the weighted average that appears in δ_j. These values can be calculated from the estimated parameters.

Under the above scheme, a probit model was estimated whose dependent variable takes a value of 1 if the household has any financial saving or credit product and 0 if it does not have any. The multinomial regression also has a dependent variable that takes a value of 0 if the household does not own any financial product, 1 if the household only has informal saving or credit products, 2 if the household owns formal as well as informal saving and credit products, and 3 if it has formal financial products. To estimate the multinomial logit, "The household does not have any financial product" has been chosen as a baseline category.

The independent variables used in both estimations were age, sex as a dichotomous variable that takes a value of 1 if the respondent is a man and 0 if it is a woman, geographical location that takes a value of 1 if the household belongs to an urban area and 0 if a rural area, and the level of education of the respondent with values of 1 if they have no education (includes uneducated persons or those with incomplete primary education), 2 if they have completed primary education, 3 if they have secondary education and 4 for individuals with higher education. For the households' socioeconomic status, the FCS identified four socioeconomic levels based on a study of socioeconomic levels in Bolivia conducted by the market research company Ipsos[7] among 2,651 heads of household. This variable is equal to 1 if the household has a low socioeconomic level and 4 if it has a high socioeconomic level. Finally, a financial capability indicator (described in the previous section) was taken with values from 0 to 2, taking a value of 0 if the respondent has low financial literacy and 2 if their level of financial literacy is high.

The first results observed are those of the probit model (Table 1), for which two models were estimated: one that only includes the education variable, and another that includes education and financial literacy. The results and significance of the variables did not display large differences. It can be observed that the likelihood of having financial products as opposed to not having any is significant and becomes larger as the socioeconomic level rises, meaning

[7] In 2009, the study of socio-economic status by Ipsos presented socio-demographic data divided into five levels or strata, which are internationally identified in the market research area by letters A, B, C, D and E. The report explains the main characteristics of each level (profiles), as well as their size (number of individuals and households).

higher income households are more likely to have financial products than not to have them. One outstanding result is that associated with financial education and literacy. In the case of education, the variable is not significant but shows that more educated individuals have a greater probability of having financial products. On the other hand, the financial literacy variable is significant and its behavior displays an upward path, showing that greater financial literacy implies a higher probability of having financial products as opposed to not having any.

As for marginal effects (Table 2), it could be seen that higher levels of education lead to higher probabilities of having financial products, in the same way as greater financial literacy. The values of marginal effects for both variables are similar, meaning it could be concluded that education and financial literacy are both important for the ownership of financial products. Meanwhile, the socioeconomic variable reported marginal effects with slightly higher values, showing that households at higher socioeconomic levels are more likely to acquire financial products. It can also be seen that a household belonging to a high socioeconomic level is almost twice as likely to have some type of financial product as a household belonging to a low socioeconomic level. Thus, there is a wide gap between the probability of households with a low socioeconomic level and those with a high level with respect to acquiring financial products. This result is not observed in the case of education or financial literacy, making it possible to conclude that the income variable plays an important role in the ownership of financial products.

The multinomial logit regression was estimated for three models: Model 1 includes education and financial literacy variables; Model 2 only considers the education variable, and Model 3 only includes financial literacy. Table 3 shows the estimation in the case of households with informal financial products. The estimation with the three models shows that only the sex variable is significant, which also has a negative sign that determines women are more likely than men to use this type of financial product, as opposed to none at all. The other variables were not significant, with the calculation of marginal effects remaining pending.

For the case where households own formal as well as informal financial products (Table 4), it was seen that the employment status variable is significant and negative, showing that households with independent employment or other types of status (inactive or

Table 1

PROBIT MODEL ESTIMATION FOR OWNERSHIP OF FINANCIAL PRODUCTS

Variables 1	*Model 1* *b/se*	*Model 2* *b/se*
Constant	−0.748[b]	−1.155[c]
	(0.24)	(0.26)
Urban/rural (urban = 1)	0.117	0.103
	(0.09)	(0.09)
Depend./indep. (dependent = 1)		
Independent	−0.189	−0.166
	(0.11)	(0.11)
Other	−0.466[c]	−0.427[c]
	(0.12)	(0.12)
Sex (man = 1)	−0.137	−0.162
	(0.09)	(0.09)
Socioeconomic level (lowest = 1)		
Lower-middle	0.666[c]	0.640[c]
	(0.14)	(0.14)
Upper-middle	1.154[c]	1.089[c]
	(0.16)	(0.16)
Highest	1.481[c]	1.364[c]
	(0.21)	(0.22)
Education (none = 1)		
Primary	0.002	−0.041
	(0.13)	(0.13
Secondary	0.143	0.082
	(0.13)	(0.13)
Higher	0.362[a]	0.262
	(0.16)	(0.16)
Age = 1 (between 18 and 24)		
Between 25 and 39	0.171	0.168
	(0.13)	(0.14)
Over 40	−0.309	−0.282
	(0.23)	(0.23)
Age2	0.014[a]	0.014[a]
	(0.01)	(0.01)
Financial literacy (low lit. = 1)		
Medium literacy		0.409[b]
		(0.13)
High literacy		0.643[c]
		(0.13)

Note: [1] the dependent variable takes a value of one if the household has financial products and zero if it does not have any. [a] $p<0.05$, [b] $p<0.01$, [c] $p<0.001$.

Table 2

PROBIT MODEL MARGINAL EFFECTS

Has some type of financial product?

	Margin	*Standard error*[1]	*z*	*P>|z|*	*95% confidence interval*	
Socioeconomic level						
Lowest	0.3880	0.0492	7.89	0.000	0.291897	0.484846
Lower-middle	0.6234	0.0225	27.69	0.000	0.579288	0.667540
Upper-middle	0.7685	0.0227	33.74	0.000	0.723858	0.813150
Highest	0.8387	0.0360	23.24	0.000	0.768063	0.909515
Education						
None	0.6500	0.0324	20.01	0.000	0.586380	0.713709
Primary	0.6367	0.0280	22.67	0.000	0.581738	0.691853
Secondary	0.6759	0.0228	29.56	0.000	0.631158	0.720804
Higher	0.7297	0.0327	22.29	0.000	0.665625	0.793959
Financial literacy						
Low	0.5126	0.0417	12.28	0.000	0.430827	0.594511
Medium	0.6524	0.0219	29.75	0.000	0.609472	0.695427
High	0.7253	0.0183	39.50	0.000	0.689343	0.761328

[1] Delta-method.

unemployed) are less likely to acquire both products as opposed to none. That is, a dependent worker is more likely to opt for owning both products. Moreover, the socioeconomic variable is significant and positive for all three models: A higher socioeconomic level leads to a higher probability of households having both products as opposed to none. Lastly, in this case, it was seen that only the higher financial literacy variable is significant and positive, meaning a high level of financial literacy implies a greater probability of acquiring both products.

Finally, in the case of households that only own formal financial products (Table 5), it could be seen that households with dependent employment status are more likely to have formal financial products as compared to households that are independent or in another type of employment status. In addition, the socioeconomic variable was positive and significant, showing once again that the socioeconomic level of a household is important in the ownership of those

Table 3

MULTINOMIAL LOGIT ESTIMATION
Has some type of informal financial product?[1]

	Model 1 *b/se*	*Model 2* *b/se*	*Model 3* *b/se*
Constant	−3.918[b]	−2.906[a]	−4.353[c]
	(1.39)	(1.21)	(1.32)
Urban/rural (urban = 1)	−0.170	−0.157	−0.177
	(0.45)	(0.45)	(0.45)
Depend./indep. (dependent = 1)			
Independent	−0.073	−0.145	0.086
	(0.59)	(0.59)	(0.57)
Other	−0.894	0.982	−0.739
	(0.67)	(0.67)	(0.65)
Sex (male = 1)	−1.524[b]	−1.469[b]	−1.545[b]
	(0.53)	(0.53)	(0.53)
Socieconomic_level (lowest = 1)			
Lower-middle	0.264	0.358	0.214
	(0.62)	(0.61)	(0.60)
Upper-middle	0.393	0.535	0.073
	(0.78)	(0.78)	(0.72)
Highest	−13.607	−11.773	−13.337
	(1,195.47)	(531.89)	(852.90)
Education (none = 1)			
Primary	0.086	0.126	
	(0.57)	(0.57)	
Secondary	−0.803	−0.702	
	(0.69)	(0.69)	
Higher	−0.709	−0.579	
	(0.97)	(0.97)	
Financial literacy (low = 1)			
Medium	1.127		1.041
	(0.80)		(0.80)
High	1.291		1.193
	(0.82)		(0.82)
Age = 1 (between 18 and 24)			
Between 25 and 39	0.091	0.068	0.176
	(0.72)	(0.71)	(0.71)
Over 40	−2.130	−2.223	−1.945
	(1.37)	(1.36)	(1.36)
Age2	0.048	0.047	0.052
	(0.03)	(0.03)	(0.03)

Note: [1]Results are compared to the baseline category of "the household does not have any financial products." [a] p<0.05, [b] p<0.01, [c] p<0.001

Table 4

MULTINOMIAL LOGIT ESTIMATION
Has some type of informal as well as formal financial product?[1]

	Model 1 *b/se*	*Model 2* *b/se*	*Model 3* *b/se*
Constant	−6.285[c]	−4.980[c]	−5.837[c]
	(1.45)	(1.28)	(1.39)
Urban/rural (urban = 1)	−0.336	−0.310	−0.355
	(0.32)	(0.32)	(0.32)
Depend./indep. (dependent = 1)			
Independent	−1.012[b]	−1.043[b]	−0.997[b]
	(0.36)	(0.36)	(0.35)
Other	−1.305[b]	−1.366[c]	−1.235[b]
	(0.41)	(0.41)	(0.40)
Sex (male = 1)	−0.509	−0.455	−0.468
	(0.30)	(0.30)	(0.30)
Socieconomic_level (lowest = 1)			
Lower-middle	1,694	1,764	1,790
	(1.05)	(1.05)	(1.05)
Upper-middle	3.026[b]	3.157[b]	3.205[b]
	(1.06)	(1.06)	(1.04)
Highest	3.832[c]	4.077[c]	3.995[c]
	(1.13)	(1.13)	(1.10)
Education (none = 1)			
Primary	0.416	0.500	
	(0.58)	(0.58)	
Secondary	0.687	0.796	
	(0.57)	(0.57)	
Higher	0.473	0.656	
	(0.63)	(0.62)	
Financial literacy (low = 1)			
Medium	1.404		1.405
	(0.77)		(0.77)
High	1.748[a]		1.750[a]
	(0.76)		(0.76)
Age = 1 (between 18 and 24)			
Between 25 and 39	0.725	0.726	0.647
	(0.53)	(0.53)	(0.52)
Over 40	−0.094	−0.164	−0.250
	(0.86)	(0.86)	(0.85)
Age2	0.032	0.031	0.031
	(0.02)	(0.02)	(0.02)

Note: [1]Results are compared to the baseline category of "the household does not have any financial products". [a] $p<0.05$, [b] $p<0.01$, [c] $p<0.001$.

Table 5

MULTINOMIAL LOGIT ESTIMATION
Has some type of formal financial product?[1]

	Model 1 b/se	*Model 2* b/se	*Model 3* b/se
Constant	−2.060[c]	−1.423[c]	−2.031[c]
	(0.46)	(0.41)	(0.43)
Urban/rural (urban = 1)	0.245	0.265	0.252
	(0.15)	(0.15)	(0.15)
Depend./indep. (dependent = 1)			
Independent	−0.221	−0.272	−0.299
	(0.19)	(0.19)	(0.19)
Other	−0.672[b]	−0.743[c]	−0.743[c]
	(0.21)	(0.21)	(0.21)
Sex (male = 1)	−0.208	−0.156	−0.199
	(0.15)	(0.15)	(0.15)
Socioeconomic level (lowest = 1)			
Lower-middle	1.079[c]	1.117[c]	1.072[c]
	(0.25)	(0.25)	(0.25)
Upper-middle	1.815[c]	1.913[c]	1.977[c]
	(0.28)	(0.28)	(0.27)
Highest	2.252[c]	2.447[c]	2.489[c]
	(0.39)	(0.38)	(0.37)
Education (none = 1)			
Primary	−0.111	−0.039	
	(0.22)	(0.21)	
Secondary	0.135	0.233	
	(0.22)	(0.22)	
Higher	0.514	0.668[a]	
	(0.28)	(0.28)	
Financial literacy (low lit. = 1)			
Medium	0.595[b]		0.622[b]
	(0.23)		(0.23)
High	1.031[c]		1.077[c]
	(0.23)		(0.23)
Age = 1 (between 18 and 24)			
Between 25 and 39	0.243	0.241	0.299
	(0.23)	(0.23)	(0.23)
Over 40	−0.453	−0.494	−0.469
	(0.40)	(0.39)	(0.39)
Age2	0.022[a]	0.022[a]	0.023[a]
	(0.01)	(0.01)	(0.01)

Note: [1]Results are compared to the baseline category of "the household does not have any financial products". [a] p<0.05, [b] p<0.01, [c] p<0.001.

Table 6

MULTINOMIAL LOGIT MARGINAL EFFECTS - INFORMAL FINANCIAL PRODUCT

Has some type of informal product?

	Margin	*Standard error*[1]	*z*	*P>|z|*	*95% confidence interval*	
Socioeconomic level						
Lowest	0.0318	0.0168	1.90	0.058	−0.001081	0.064869
Lower-middle	0.0239	0.0067	3.55	0.000	0.010741	0.037159
Upper-middle	0.0159	0.0074	2.14	0.033	0.001310	0.030639
Highest	9.32e-09	0.0000	0.00	0.999	−0.000022	0.000022
Education						
None	0.0292	0.0125	2.33	0.020	0.004605	0.053936
Primary	0.0330	0.0111	2.96	0.003	0.011132	0.054916
Secondary	0.0121	0.0054	2.22	0.027	0.001403	0.022901
Higher	0.0106	0.0081	1.31	0.189	−0.005269	0.026626
Financial literacy						
Low	0.0110	0.0078	1.40	0.162	−0.004412	0.026461
Medium	0.0236	0.0070	3.38	0.001	0.009962	0.037420
High	0.0215	0.0067	3.18	0.001	0.008289	0.034906

[1] Delta-method.

products. One significant result was that only the financial literacy variable was significant and positive, while education did not exhibit the same behavior.

The conditional likelihoods consist of an initial calculation and various reference-only cases, meaning it is important to assess marginal effects. Taking into account the previous results, marginal effects were evaluated for socioeconomic, education, and financial literacy variables, which are the ones that exhibit important behaviors according to the results of the estimation. In the case of owning some type of informal product, Table 6 shows that the probability decreases as the socioeconomic level rises and stops being significant at the highest level. In the case of education, the probability increases until the household has primary education, after which it falls and

Table 7

MULTINOMIAL LOGIT MARGINAL EFFECTS-INFORMAL AS WELL AS FORMAL FINANCIAL PRODUCTS

Has some type of formal as well as informal products?

	Margin	*Standard error*[1]	*z*	*P>|z|*	*95% confidence interval*	
Socioeconomic level						
Lowest	0.0113	0.0113	1.00	0.320	−0.010959	0.033571
Lower-middle	0.0337	0.0086	3.90	0.000	0.016783	0.050626
Upper-middle	0.0719	0.0135	5.31	0.000	0.045355	0.098480
Highest	0.1091	0.0241	0.05	0.957	−3.891848	4.110079
Education						
None	0.0398	0.0184	2.15	0.031	0.003596	0.076083
Primary	0.0624	0.0185	3.37	0.001	0.026174	0.098738
Secondary	0.0689	0.0136	5.04	0.000	0.042119	0.095773
Higher	0.0433	0.0104	4.14	0.000	0.022856	0.063908
Financial literacy						
Low	0.0221	0.0155	1.43	0.154	−0.008291	0.052545
Medium	0.0561	0.0121	4.62	0.000	0.032345	0.080034
High	0.0571	0.0090	6.28	0.000	0.039319	0.074990

[1] Delta-method.

is not significant for the most educated households either. Finally, with respect to financial literacy, it can be seen that the likelihood of having some type of informal financial product is only significant for households with medium and high literacy, and the likelihoods do not show any large differences in the values reached.

In the case of owning informal as well as formal financial products (Table 7), it can be seen that lower-middle and upper-middle socioeconomic levels have a higher and more significant probability of acquiring such products as opposed to acquiring none. In terms of education, the likelihood increases for individuals that have a secondary education, but decreases for those with higher education. Finally, with respect to financial literacy, just as with owning some

Table 8

MULTINOMIAL LOGIT MARGINAL EFFECTS-FORMAL FINANCIAL PRODUCT

Has some type of formal product?

	Margin	*Standard error*[1]	*z*	*P>|z|*	*95% confidence interval*	
Socioeconomic level						
Lowest	0.3453	0.0493	6.99	0.000	0.248562	0.442149
Lower-middle	0.5672	0.0231	24.48	0.000	0.521841	0.612672
Upper-middle	0.6820	0.0252	27.04	0.000	0.632586	0.731446
Highest	0.7271	0.0448	16.22	0.000	0.639280	0.814990
Education						
None	0.5809	0.0360	16.12	0.000	0.510340	0.651604
Primary	0.5416	0.0313	17.28	0.000	0.480192	0.603090
Secondary	0.5944	0.0249	23.83	0.000	0.545532	0.643321
Higher	0.6805	0.0349	19.46	0.000	0.612051	0.749125
Financial literacy						
Low	0.4820	0.0426	11.29	0.000	0.398421	0.565778
Medium	0.5708	0.0233	24.41	0.000	0.525012	0.616665
High	0.6488	0.0197	32.80	0.000	0.610094	0.687629

[1] Delta-method.

kind of informal product, the likelihood increases as literacy declines, but remains steady when the household reports having medium and high literacy.

Finally, in the case of formal financial products, all the marginal effects were significant, while the likelihoods are high and above those observed in the two previous cases (Table 8). The behavior is as would be expected, higher socioeconomic levels do indeed increase the likelihood of having formal financial products, in the same way as higher levels of education and financial literacy increase the likelihood that households have formal products rather than none at all.

5. CONCLUSIONS AND RECOMMENDATIONS

Microdata analysis is important for determining how households behave or what type of characteristics influence their day-to-day saving and investment decisions, and thereby FI. It has been established that FI levels can be particularly affected by the decision of the population to use informal channels or their own resources to be able to carry out most of their financial transactions. Such channels are more costly, limited, and unsafe, and can worsen households' standards of living.

This paper analyzed the determinants of owning financial products as opposed to not owning any, placing special emphasis on socioeconomic determinants such as socioeconomic level, education, and financial literacy. It also assessed households' behavior as regards owning informal products and owning formal products together with informal products, for the same socioeconomic variables. The results of the estimation show that ownership of financial products in Bolivia is more likely among higher-income households, there being a significant gap between households with low and high socioeconomic levels. It should also be emphasized that education and financial literacy play a leading role in the ownership of financial products.

In the case of informal financial products, it has been seen that women are more likely to own such products than men. Moreover, as would be expected, households with high socioeconomic levels are less likely to use informal products, in the same way as people with higher levels of education. In the case of financial literacy, it has been seen how this characteristic would not influence the decision to acquire informal products; the likelihood instead remaining constant for those with medium and high literacy. Ownership of informal and formal products together is more likely among households with a middle (lower-upper) socioeconomic level. As for the education variable, the likelihood of acquisition is higher among households with only primary and secondary education. Finally, in the case of financial literacy, the behavior is similar to that for education, the likelihood remains constant for medium and high levels of literacy.

The results obtained show that socioeconomic level constitutes an important variable in the ownership of formal financial products among households. Education and financial literacy also stand out,

and are variables that need to be strengthened in order to encourage households to acquire formal financial products.

It is important to point out that lower income households tend to have informal products, while households with a middle socioeconomic level prefer to use a combination of formal and informal products. This suggests that these households still face restrictions for acquiring formal financial products such as the range of requirements formal financial institutions demand for granting loans, the drawn out processes this involves, financial service offerings that still do not meet households' saving requirements, a lack of collateral or guarantees that satisfy the demands of financial institutions, and finally, a certain amount of distrust for formal financial institutions among some segments of the population. Another interesting result is that financial literacy is not a determinant in the acquisition of informal products, or formal and informal financial products combined, given that households with high and low literacy levels have the same likelihood of acquiring said products.

Significant progress has been made in Bolivia in increasing the income of the population. The minimum wage has more than tripled over the last ten years and this has been higher than in other countries such as Peru and Mexico. Social indicators have recorded improved figures, while inequality and poverty have decreased considerably, reflecting the impact of government policies. Significant progress has also been made in terms of FI and FE. The new Financial Services Law No. 393 is a testimony to this, and as a result increasingly more people have begun to access and acquire different financial products in recent years. Furthermore, the Banco Central de Bolivia has played an important role in promoting financial education and inclusion, by organizing activities in schools that enable the population to become familiar with the common financial terminology, and by providing saving options that promote FI among all socioeconomic strata.

It is therefore important to analyze more deeply the restrictions faced by the population in matters of access to financial products, study the requirements requested by financial institutions, and assess the financial products on offer, without ignoring the associated risks. Finally, it is also essential to continue the promotion and implementation of a national strategy to further improve levels of FI and FE, as well as economic literacy among the population as a whole.

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