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SOCIO-ECONOMIC DETERMINANTS OF FINANCIAL EDUCATION

EVIDENCE FOR BOLIVIA, COLOMBIA,
ECUADOR AND PERU

CAF BANCO DE DESARROLLO
DE AMÉRICA LATINA

CREDITS

Socio-Economic Determinants of Financial Education. Evidence for Bolivia, Colombia, Ecuador and Peru

Authors:

Diana Margarita Mejía Anzola
Guillermo Rodríguez Guzmán

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Gustavo Ardila

Vicepresident of Productive and Financial Sectors

Juan Carlos Elorza

Director of Productive and Financial Development

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FOREWORD

Productive transformation has been one of the areas that CAF, as the development bank of Latin America, has fostered as a necessary condition for reaching a high and sustainable development in the region.

The experience and expertise generated in each project during the last decades have made the Institution a Latin American point of reference in areas such as competitiveness, Corporate Governance, local and business development, and productive inclusion.

The public policies necessary to drive productive transformation are based on the development of those capabilities aimed at the implementation of good practices and specific supports for improving business management and productivity. Thus, CAF makes its knowledge and expertise available and offers efficient support to a variety of sectors while, at the same, it creates documentation and does research on success stories that are relevant for the region.

“Public Policy and Productive Transformation” consists of a series of documents aimed at disseminating those experiences and success stories in Latin America as an instrument for spreading the knowledge that CAF makes available to the countries in the region so that better practices with respect to business development and productive transformation practices can be implemented.

L. Enrique García

Executive President

EXECUTIVE SUMMARY

Evidence about the determinants of financial education is hard to come by at a global scale and is mostly limited to developed countries. To address this need, towards the end of 2013, CAF - development bank for Latin America - deployed a survey to measure the financial capabilities of four countries in the Andean region: Bolivia, Colombia, Ecuador and Peru. The purpose of the survey was to carry out an analysis that would allow identifying the knowledge, skills, attitudes and behaviors of individuals with regards to financial topics.

This study allows for the identification of the main socio-economic determinants of financial education by gathering relevant information for these four countries and building three indices (home economics, attitudes and behaviors, and concepts and knowledge) that are used to measure individuals' financial education.

The results of the econometric estimates also allow for the identification of important socio-demographic gaps, especially in terms of gender, age, geographic location, education, income, and saving capacity. However, after studying the determinants of each one of the indices constructed from survey results, important differences can be observed:

1. Among the most relevant variables that help to explain changes in the Home Economics Index, the impact of age was quite striking, as well as the capacity to save, especially through formal mechanisms, and the fact of living in an urban environment and earning a regular income.
2. In the case of the Attitudes and Behaviors Index, saving capacity also has a high explanatory power. Furthermore, individuals that are middle-aged, with higher levels of education, and a regular and higher level of income also demonstrate attitudes that are more conducive to their financial wellbeing. It is also worth pointing out that receive

government transfers show a higher propensity to believe that money is there to be spent.

3. Middle-aged men living in urban contexts, with a higher level of education and a formal full-time job, who also earn a regular and higher level of income, and who save through formal channels tend to achieve better results in the Concepts Index. Additionally, we also found evidence that indicates that those who receive government transfers are the worst performing group in the Concepts Index.

In terms of gender, we found that women who are heads of family tend to have better attitudes and behaviors. This segment of women is also less averse to risk, they personally take care of their finances and show the highest propensity to plan based on long-term financial goals.

All these results allow for the identification of important implications for public policies:

1. The findings highlight the importance of establishing differentiated strategies for different segments of the population, where those that score lowest in financial knowledge skills are: people with lower levels of education, lower incomes, those without regular sources of income, those who reside in rural areas, women, as well as the young, senior citizens, and those without saving capacity.
2. Results show that the capacity to save, especially through formal mechanisms such as savings accounts, has a significant impact on individuals' financial capabilities. This means that inclusion and financial education programs must focus not only on conveying concepts and knowledge, but also on exerting influence on attitudes related to the importance of saving, and the relative costs of informal saving.

3. The analysis demonstrates that gender differences do not impact all women equally, as women who are heads of family demonstrate better financial attitudes and behaviors.
4. Results also show that people who receive government transfers or subsidies achieve the worst results in the Concepts and Knowledge Index, and also show contrarian attitudes towards saving. Thus, these findings also suggest that these social programs must go hand in hand, not only with basic financial concepts education, but also with innovative strategies to promote saving among beneficiaries.

INTRODUCTION

In recent years, globalization and technological progress have brought about a series of changes in social and economic interactions that have increased the number and complexity of available financial products and services. This has increased the need to improve the financial knowledge of individuals in order for them to be in a better position to make financial and economic decisions that contribute to their wellbeing. Accordingly, financial knowledge, attitudes and behaviors can have a huge impact on a family's prospects of financial accumulation and wellbeing, as well as on the adequate functioning of markets.

One of the most important lessons of the global financial crisis of 2008 was the evident lack of knowledge and misinformation of a large part of the population about basic financial and economic issues, which limited their capacity to make responsible, mindful and competent decisions. In this sense, financial education is a critical component of inclusion not only because it enables the effective use of financial products, but also because it allows people to develop skills to compare and select such products in accordance with their needs and possibilities, thus empowering them to exercise their rights and responsibilities.

Many academics and public policy-makers have been interested in the fact that individuals that lack basic financial knowledge do not have the necessary tools to make decisions that are most advantageous for their economic wellbeing, and that this has an impact both on their long-term behavior and on their capacity to purchase tangible goods, invest in human capital, or save for retirement. It also affects their behavior when managing their daily financial resources. Additionally, if these deficiencies are generalized among important segments of the population they can create frictions that hinder the optimum functioning of

markets (Braunstein and Welch, 2002; Lusardi 2008; Jappelli 2010; Jappelli and Padula 2011; Lusardi and Mitchell 2008, 2011). In accordance with the latter view, authors such as Gnan, Silgoner and Weber (2007), and Mandell (2009) suggest that financial education is conducive to the general wellbeing of the economy. According to Gnan et al. (2007), financial education optimizes the way financial markets work in so far as improved decision-making by citizens as a whole can reduce crisis events and favor the stability of the system; also, the authors posit that financial education promotes sustainable economic policies in so far as greater levels of financial and economic education mean that the population is better equipped to face the economic and social policies adopted by its government. On the other hand, Mandell (2009) considers that bad financial decisions by consumers have a negative effect on the economy, such as low savings rates and lower capital raising levels, lower levels of pension funding and higher levels of inequality in terms of income distribution.

Furthermore, even though the impact of financial education on individuals' economic wellbeing shows mixed results, by using estimates of instrumental variables (Behrman et al, 2010; Carpena et al., 2011), Behrman et al. (2010) have obtained causal evidence and reveal that the ordinary minimum squared estimate actually underestimates the impact that education levels and financial education have on a family's accumulation of wealth. Along the same lines, but using a random experiment, Carpena et al. (2011) have determined that financial education does not allow individuals to discern some of the financial costs and benefits of certain products that require more complex mathematical and statistical tools, but it does allow them to broaden their knowledge about certain basic concepts and promotes some favorable attitudes conducive to their financial wellbeing. In any case, several studies have indicated, including in a causal way, that people that have

difficulty in understanding the financial context in which they find themselves in have a lower probability of accumulating assets and saving in retirement funds, apart from tending to make worse decisions in terms of debt and diversification, among other behaviors that limit their possibility of achieving a higher standard of living (Banks and Oldfield, 2007; Van Rooij et al., 2007; Lusardi, 2008; Banks et al., 2010; Behrman et al, 2010; Jappelli and Padula, 2011; Almenberg and Save-Soderbergh, 2011). For this reason, public policy-makers throughout the world have made efforts to improve the financial education of the population as a mechanism to expand the accumulation of wealth of families, even though there has been mixed evidence about the impact of these efforts on the attitudes of individuals. On the other hand, after assessing specific programs, Xu and Zia (2012) maintain that financial education has a positive and significant impact on the financial behavior of individuals.

In any case, evidence about the determinants of financial education is hard to come by at a global scale and is mostly limited to developed countries such as United States (Lusardi, 2008), Sweden (Almenberg and Save-Soderbergh, 2011) and Italy (Fornero and Monticone, 2011). There aren't many studies focusing on so-called transition countries, but worth highlighting among these are the works by Cole et al. (2009) in Indonesia and India, and Kharchenko (2011) in Ukraine. In the case of Latin America, studies devoted to this topic are quite recent; worth highlighting are a study measuring the impact of a financial education program in Brazilian schools (Bruhn et al., 2013) and another for the city of Bogota (Colombia), by García Bohórquez et al. (2013).

To address this need, towards the end of 2013, CAF - development bank for Latin America - applied a survey to measure the financial capabilities of four countries in the Andean region: Bolivia, Colombia, Ecuador and Peru. The

purpose of the survey was to carry out an analysis that would allow us to identify the knowledge, skills, attitudes and behaviors of individuals with regards to financial topics. The survey was created following the methodology developed by the International Network for Financial Education (INFE) of the Organization for Economic Cooperation and Development (OECD) and was implemented by market research company Ipsos, simultaneously in the four countries object of our study. In each country, samples were comprised by approximately 1,200 respondents over the age of 18¹.

The surveys included a total of 33 questions about financial behaviors, knowledge and attitudes, as well as other questions about financial inclusion and socio-demographic information. Nine questions were designed to measure financial behavior and gather information about financial control, covering expenses, selection and use of financial products, and short- and long-term financial planning. In order to gather information about financial knowledge, the survey includes eight questions related to knowledge of simple and compound interest, inflation, the value of money over time, risk and return, and risk diversification. In the case of financial attitudes, four questions touch on respondents' saving vs. spending propensities, temporary preferences and risk profiles. For financial inclusion, we have included questions about knowledge of financial products, holding and using products (savings, credit and insurance) and saving habits. Finally, to identify the socio-demographic profile of individuals, we included information on variables such as age, gender, education, work and income.

The purpose of this study is to define the socio-economic determinants of financial education in the four Andean countries previously mentioned.

1. Documents with survey results can be found at : <http://scioteca.caf.com/handle/123456789/740>

CHAPTER 1

LITERATURE REVIEW: DETERMINANTS OF FINANCIAL EDUCATION

Recent literature about the determinants of financial education, both in developed and developing countries concludes that there is a highly consistent relationship between the different measures of financial education and the different socio-demographic characteristics of individuals. In this sense, some empirical consistencies can be found in terms of gender, age, education levels, income and occupations of respondents (Almenberg and Save, 2011; Atkinson and Messy, 2012, Behrman et al, 2010; Chen and Volpe, 2002; Cole et al., 2009; Fonseca et al., 2011; Fornero and Monticone, 2011; Hung et al., 2009; Japelli and Padula, 2011; Kharchenko, 2011; Lusardi, 2008, 2012; Lusardi and Mitchell 2008, 2011, 2013; Lusardi et al, 2013; Wagland and Taylor, 2012).

First, all of the related literature finds a positive correlation between financial education indicators and income levels of families, although there is a potential causality issue that previous works have approached, albeit with mixed results. As mentioned, both Behrman et al. (2010) and Capena et al. (2011) identified a causal relationship according to which better financial education indicators lead to a greater accumulation of wealth. However, Japelli and Padula (2011) show that financial education and wealth accumulation levels tend to be determined jointly and maintain a high degree of correlation at every stage of an individual's life cycle. Finally, Lusardi and Mitchell (2015) also look into the direction of the causality between financial education and the economic behavior of individuals. Based on survey results in several countries and based on several methods of econometric calculations, the authors conclude that people with higher levels of financial education plan better, save more, earn more from their investments and manage their retirement funds more efficiently. This has important implications as people with greater levels of financial education are more resilient in

the face of economic shocks, including events such as the international financial crisis of 2008-2009.

A second empirical consistency found refers to individuals' human capital. In this sense, aggregate studies such as Japelli's (2010) reveal that several indicators related to education coverage and quality such as years of schooling, school attendance percentages and results of PISA standardized testing show a high level of correlation with financial education indicators. On the other hand, studies centered on individuals, both from developed and developing countries, agree with this conclusion and reveal that individuals that have obtained a university degree tend to achieve the highest results in the different financial education indicators (Almenberg and Save, 2011; Atkinson and Messy, 2012, Behrman et al, 2010; Chen and Volpe, 2002; Cole et al., 2009; Fornero and Monticone, 2011; Kharchenko, 2011; Lusardi, 2008, 2012; Lusardi and Mitchell 2008, 2011, 2013; Lusardi et al, 2013). Other studies have delved deeper into this topic and determined that the type of academic studies of individuals, especially in fields such as economics or business, also has an impact on their levels of financial education (Almenberg and Save (2011); Chen and Volpe (2002); Lusardi and Mitchell, 2007).

Thirdly, there is also consistent evidence that points to a non-linear relationship with the age of individuals: almost all the studies that include these variables conclude that the youngest and oldest cohorts are the worst-performing groups in the different financial education indicators. Almenberg and Save (2011), and Fornero and Monticone (2011) agree that the best results can be seen in the 36 to 50-year cohorts, while the worst outcomes belong to the over 65s. In line with these findings, Cole et al. (2009) have determined that these relationships peak at around 40 years of age in India and close to 45 years in Indonesia. Only Kharchenko (2011)

finds contradictory results, as the age variable does not have a significant impact on his estimates.

The fourth consistency observed refers to the gender gaps identified by several authors (Almenberg and Save, 2011; Bucher-Koenen et al., 2014; Chen and Volpe, 2002; Cole et al., 2009; Fonseca et al., 2011; Fornero and Monticone, 2011; Hung et al., 2009; Kharchenko, 2011; Lusardi, 2008, 2012; Lusardi and Mitchell 2007, 2008, 2011, 2013; Lusardi et al., 2013).

Lusardi and Mitchell (2008) examine the determinant factors of retirement planning by women. The authors conclude that women in the US that have some sort of financial literacy have a higher probability of planning their pensions successfully. Additionally, they find that older women have very low levels of financial literacy and that generally speaking most of them do not plan for their retirement. In another study, Lusardi and Mitchell (2007) compare the *baby boomers* cohort in 2004 to another group of a similar age (51 to 56 years) at a different moment (1992) in order to ascertain if wealth at the age of retirement is influenced or not by a basic level of financial education. The authors find that wealth levels are positively related with the financial knowledge implemented by individuals in their personal planning. On the other hand, Bucher-Koenen et al. (2014) have established important gender gaps in the levels of financial education in the United States, Germany and Holland. Based on the results of financial education surveys in these countries, the authors show not only that there is a lower probability that women will answer questions correctly, but that there is also a higher probability that they will admit to not knowing the answers to basic financial education questions. It is worth pointing out that the gender gaps are similar among countries and that they persist even after taking into account variables such as marital status, education, income levels and other socio-economic

characteristics. The authors also found gender gaps in financial education when it comes to young women, despite their higher levels of schooling and participation in the workforce. Also, they observe that women do not tend to consult with financial advisors to compensate for their lack of knowledge.

These results have important implications in so far as women tend to live longer than men and interrupt their professional careers because of motherhood, which means they have different savings needs. The authors also found that financial education can be linked to behaviors as there is a higher probability that people who are financially literate will save for their retirement, invest in the securities markets, be aware of financial costs and borrow at lower interest rates. To summarize, financial education can be linked to greater levels of financial wellbeing.

However, other studies limit this negative gender effect to women that do not participate actively in planning and managing family finances as those that are involved register improved scoring in financial education indicators (Almenberg and Save, 2011; Fonseca et al., 2011).

Moreover, several studies also indicate that employed individuals have better financial attitudes and knowledge than those that are unemployed (Almebner and Save, 2011; Fornero and Monticone, 2011; Kharchenko, 2011; Lusardi and Mitchell, 2013). In particular, in Italy, the self-employed group obtained the highest scores in the different financial knowledge and attitudes measures, as determined by Fornero and Monticone (2011).

Finally, there is also evidence that suggests that certain racial groups, specifically Afro-Americans and Latinos, have worse results in the samples studied by Lusardi (2008, 2012), and Lusardi and Mitchell (2008, 2011, 2013) in the United States,

while in urban contexts results tend to be better in some of the financial education indicators analyzed in developing countries (India - Cole et al., 2009) as well as in developed countries (United States - Lusardi and Mitchell, 2013).

CHAPTER 2

METHODOLOGY

Data was gathered from a series of surveys carried out in four countries (Bolivia, Colombia, Ecuador and Peru) between October and December 2013, with representative samples comprised by men and women over 18 years of age, belonging to every socio-economic level and residing in both urban and rural contexts. The size of the national sample was of 1,200 surveys, with a margin of error of +/-2.8%. Surveys were carried out face-to-face and designed to be representative at a national level, following the recommendations and measurements used by the OECD (2012). For additional information about the design of the surveys, please refer to Appendices 1 to 4.

Apart from a section covering the socio-economic identification of respondents, the surveys included three large thematic areas for which we formulated indicators: Home Economics, Attitudes and Behaviors, and Concepts. They also included information pertaining to knowledge, use and selection of financial products.

The first section, Home Economics, explores the level of participation of the respondent in their family's financial decisions, if they have a budget, if it is a general or specific budget, and the degree to which they follow that plan. This allows us to determine the level of financial planning followed by families.

Second, the Attitudes and Behaviors indicator includes information about individuals' inclination to adopt attitudes conducive to their financial wellbeing. The indicator incorporates measurements that refer to the degree to which individuals consider their payment capacity before purchasing something, their inclination to "live one day at a time" and not worry about their future, their preferences in terms of spending or saving, their degree of risk aversion, if they manage their financial affairs personally, if they set themselves long-term financial goals, and if they consider that money is there to be

spent. In the cases of “living one day at a time” and considering that money is there to be spent, we observed inverted results as both behaviors can be considered as damaging to the economic wellbeing of individuals.

The third indicator, Concepts and Knowledge, includes some of the variables that are typically used to assess financial knowledge, as well as other critical criteria that are usually excluded from other measurements. The indicator incorporates information about whether an individual can carry out a simple division, identify the value of money over time, and recognize the existence of interest payments. Also measured is their understanding of the relationship between risk and return, the impact of inflation on prices and the benefit of investment diversification. Similarly, the indicator reveals if the individual can adequately carry out simple calculations of simple and compound interest.

All of the indices are formulated with scores from 0 to 10, with the highest scores indicating a better position in terms of financial knowledge and attitudes of respondents. For additional information about the construction of indices, please refer to Appendix 5.

After designing the indicators to measure the financial education of individuals, the empirical strategy consists of a *weighted-OLS* model with robust statistics for any heteroscedasticity and weighting problems to make data representative at a national level. First of all, we carried out estimates for all available data, including a dummy value per country, and we also performed exclusive regressions with data from each country to investigate if there were any noticeable differences between the mechanisms that operated in some countries or others.

In every case, the dependent variable is the index under analysis, while the independent variables include a series of socio-economic factors; among these we assessed if the respondent lived in an urban or rural context (*urban*), if they were of the female gender (*woman*), their average age in years (*age*), their age squared to explore any non-linear considerations (*age2*), marital status (*single*), number of children (*n_children*), years of schooling (*education*), if in formal full-time employment (*formal_employmentft*), income levels (*income*), if they earned a regular income (*regular_income*), if they have been able to save in the last year (*savings*), if they have saved through formal mechanisms (*formal_savings*), and if they receive any type of government transfer (*transfer*). For information on the specific coding of each variable, please refer to Appendix 6.

Additionally, it is also interesting to assess the determining factors of each one of the index components. In this case, we used a Logit model to determine the probability that individuals fulfill the required conditions in each case, and maintain the same methodological specifications of previous models. However, in the case of the Attitudes variables we used an Ordered Logit model as these variables are categorical, with values between 1 and 5.

Model Extensions

Some of the common references in the literature indicate the existence of a gender gap in topics related to financial education, which is why we devoted a first extension of the original model to study the impact of women who are actively involved in the financial management of their families, as well as those who are single mothers and those who receive

government transfers, in form of conditional cash transfers or subsidies. Similarly, a second extension of this model evaluates the determinants when individuals do not answer the questions associated with financial education concepts studied in each of the surveys. In each of the sections devoted to these model extensions we describe in detail the construction of the indicators and interactions used.

CHAPTER 3

EMPIRICAL RESULTS

General Results

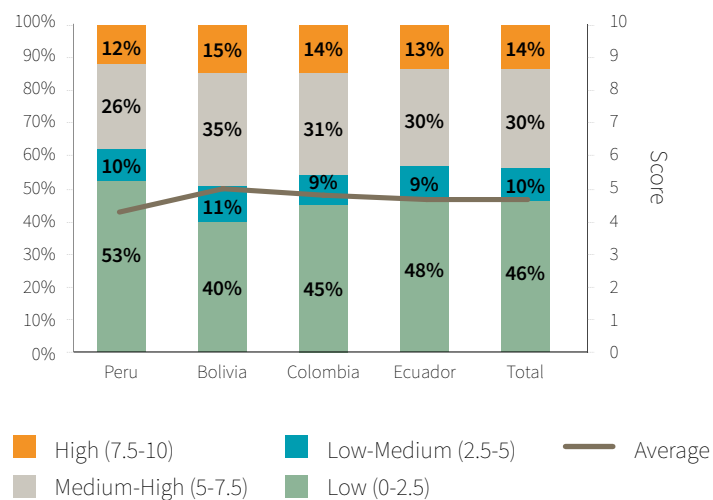
Home Economics

The results show that in the four countries under analysis the home economics indicator registers low scores, always under 5 in a scale of 1 to 10. Peru has the worst results, with 53% of individuals with low scores (between 0 and 2.5 points), and an average of only 4.27 in the index. In contrast, Bolivia registered the best results, with 50% of individuals scoring higher than 5 and a total average of 4.98 (see Chart 1).

Regarding the distribution of results according to some of the most relevant socio-economic variables, we observed that the most educated segments of the population -with higher levels of income but not at the tails of the distribution- and middle-aged respondents obtained the best results in the Home Economics indicator.

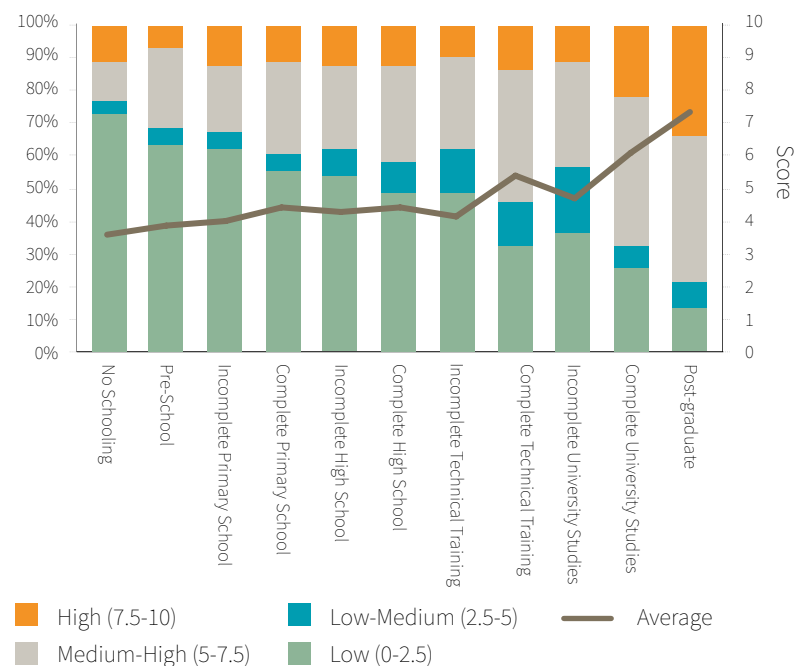
More specifically, Chart 2 indicates that the results for this index double from 3.57 obtained on average by the under-educated group, up to 7.23 for those that reached post-graduate level. A standout point is the fact that access to university studies seems to be associated to a considerably larger proportion of individuals taking part in their family's financial decisions, and that this is done through budget planning, as suggested by the leap from 4.16 points (scored by those with incomplete technical training) to 6.06 points (scored by those who have obtained a university degree) to 7.23 (scored by those who have continued their studies beyond tertiary education).

Chart 1. Home Economics Index Distribution by Country



Source: Own calculations

Chart 2. Home Economics Index Distribution by Education Level



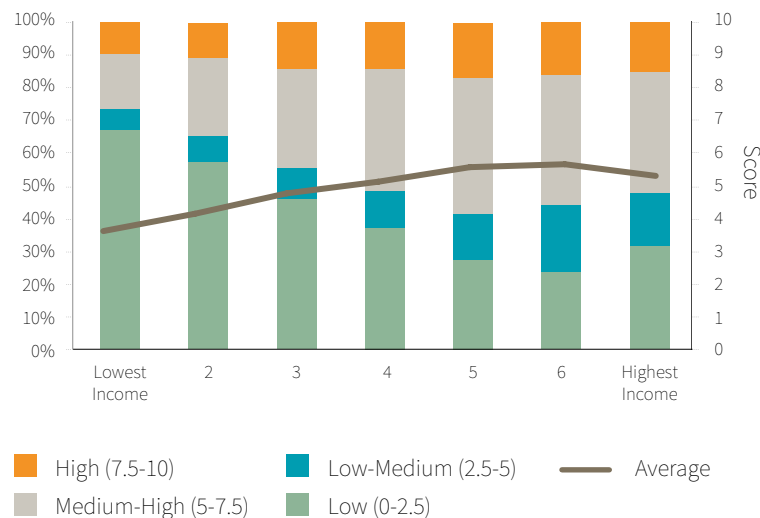
Source: Own calculations

Similarly, as reflected in Chart 3, one can observe a direct relationship between the home economics scores and family income scores. In this sense, there are significant differences between those belonging to the lower segments (3.61 points) and those in the fifth income level in our scale of 1 to 7 (5.58 points). From then on, we see a moderate increase for results corresponding to level six (5.62 points) and a drop in the

indicator for the more affluent group (5.33 points). One possible explanation is that among higher income groups the family's financial decisions could be monopolized by a single agent, or that given the lower degree of financial restriction there is less of an obligation to strictly follow a predetermined financial plan.

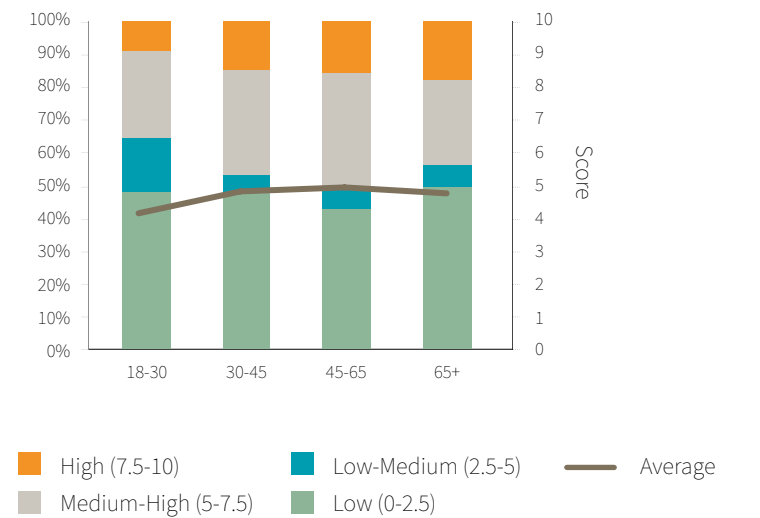
On the other hand, Chart 4 shows that the Home Economics indicator has a slightly inverted U-shape, increasing for the first three age groups (18-30, 30-45 y 45-65 years) from 4.08 to 5.11 points, and then decreasing for respondents over 65 years, whose average score is 4.87 points. Finally, there are no observable differences between men and women.

Chart 3. Home Economics Index Distribution by Income Level



Source: Own calculations

Chart 4. Home Economics Index Distribution by Age Group



Source: Own calculations

Also, significant differences between countries can be found when analyzing each of the index components individually, as seen in Table 1. On average, 74% of respondents say that they are involved in the use and management of money at home, with Ecuador registering the highest percentage: 78%. On the other hand, 55% of respondents in the four countries said they kept a budget, although there are important differences; while 61% of Bolivian respondents said they adhered to some sort of financial planning, in Peru the percentage is under 50%. Also worth highlighting is the fact that a high proportion of respondents (a total of 82%) admitted that they only keep a very general budget, and less than 30% actually follow such financial plan.

Lastly, the results of the econometric analysis help to reveal the impact of several socio-economic variables on the Home Economics indicator, as well as the differences between countries. Complete results are available in Appendix 7. Firstly, urban residents, with higher education levels, in formal full-time employment, with greater levels of income, regular sources of income and the possibility of saving, especially through formal mechanisms, tend to be more involved in managing financial issues at home and therefore achieve higher scores in this index. In contrast, single individuals, families with more children, or those who receive government transfers, obtain lower scores. Additionally, as seen in Chart 5, there is a non-linear relationship with age as the Home Economics Index

Table 1. Results of the Home Economics Index components by country

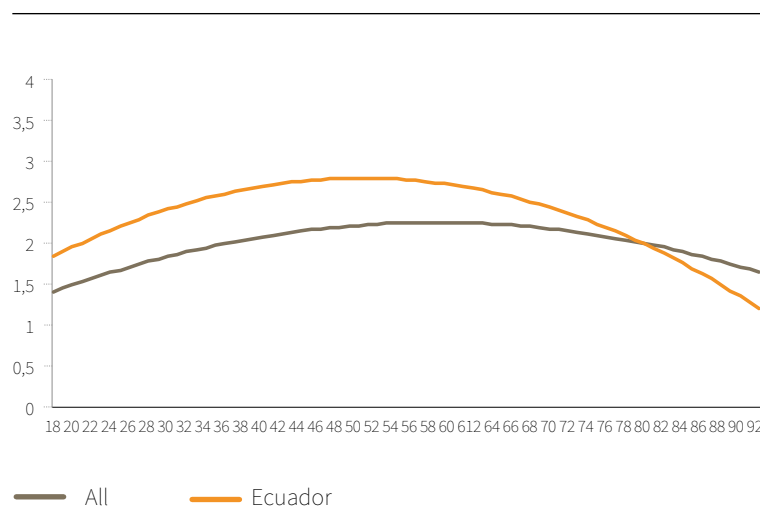
	Peru	Bolivia	Colombia	Ecuador	Total
In charge of money	70.7%	75.3%	71.7%	77.6%	73.8%
Has a budget	48.4%	60.5%	56.4%	52.9%	54.6%
Exact budget	16.0%	18.3%	20.1%	16.2%	17.7%
Sticks to budget	25.8%	32.1%	34.3%	27.0%	29.8%

Source: Own calculations

Note: Percentage that answers every question affirmatively.

tends to drop among individuals belonging to the older age groups. According to our estimates, for the four countries under study, on average the effect starts to revert at 59 years of age, although in Ecuador it happens much earlier: at 51 years of age. In the other three cases, the variable that explores non-linear considerations is not significant, although it has the expected algebraic sign.

Chart 5. Marginal effect of age on the Home Economics Index



Source: Own calculations

As mentioned, among the most relevant variables that help to explain changes in the Home Economics Index, the impact of age was quite striking as was the capacity to save, especially through formal mechanisms, living in an urban environment and having a regular source of income. In this sense, having the possibility to save and doing it through formal mechanisms have an impact of 0.59 and 0.5 points, respectively, on the Home Economics Index. On the other hand, having a regular source of income helps to increase the index score by 0.72 points. Similarly, living in an urban setting and being in full-time formal employment contribute 0.43 and 0.31 points, respectively, while a variation of one standard deviation in income and education levels increases the indicator by 0.18 and 0.17 points, respectively. Finally, families with more children have lower scores in this indicator, registering 0.016 points less after an increase of one standard deviation, while single individuals register a drop of 0.75 points. Also, receiving government transfers is associated with a 0.19 point drop in the score.

Looking at each country individually, we can find both noticeable similarities and differences. Generally, having a regular source of income and being able to save have a positive effect, but the size of this effect varies considerably. While in Peru having a regular income has an impact of 1.06 points, the impact is far lower in the remaining countries: 0.43 points for Bolivia, 0.52 in Colombia and 0.65 in Ecuador. On the other hand, while the capacity to save translates into higher Home Economics Index scores in Peru and Ecuador, for Bolivia and Colombia, this favorable impact is limited to those who saved through formal mechanisms. Furthermore, being single has a significant negative impact in the four countries, and is especially relevant in Bolivia and Ecuador, where the impact is even greater to that of being able to save or saving through formal mechanisms, respectively.

In terms of education and income, the study shows that the former helps to explain the differences in Peru and Ecuador, while the latter is the significant variable in Bolivia and Colombia. Regarding the age variable, Colombia is the only country where we do not observe a linear relationship with the Home Economics Index. In Peru and Bolivia we do observe a linear relationship because the variable that explores non-linear considerations is at the margin of statistical significance, although it has a negative sign as one would expect. As mentioned, for Ecuador we do observe a non-linear relationship that begins to deteriorate after 50 years of age. As in Colombia, Ecuadorian individuals that live in urban contexts tend to have better scores in the Home Economics Index. Moreover, Colombia stands out as being the only country where being in formal full-time employment helps to positively explain the changes in the indicator. Finally, gender differences are a feature only seen in Bolivia, where being a woman is linked to a 0.37 score increase in the index.

Furthermore, it is also interesting to analyze the results of each of the components that comprise the Home Economics Index. The complete results of these estimates are available in Appendix 8. Having a budget, and that it represents a precise and specific plan and is used as such, is closely related to being part of the urban population, being a woman, having greater levels of education, and a regular source of income as well as the capacity to save. Both income and education levels help to explain the fact that respondents have a budget and use it in a precise manner. Likewise, the fact that individuals save through formal mechanisms increases the probability that they create a budget and that they follow it in a strict manner. On the contrary, there is a lower probability that larger families can formulate a detailed and precise budget. On the other hand, being involved in the management of daily finances tends to

be linked to men that are not single, are formally employed and have the capacity to save through formal channels. In so far as age is concerned, a non-linear effect can be observed, where the highest probability of being linked to family finances reaches its peak at 55 years of age, after which this impact starts to drop. Additionally, it is revealing that for families with higher levels of income or that live in rural contexts, respondents tend to be less involved in the managing of family finances, probably because this task is monopolized by the head of the family.

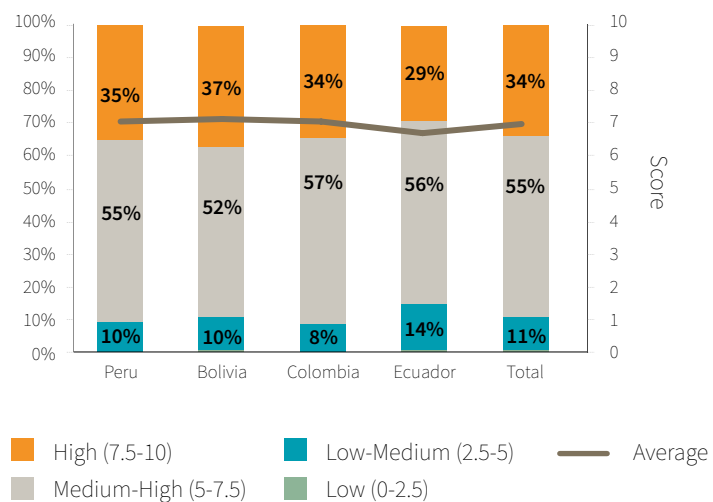
Attitudes and Behaviors

The second dimension under analysis is that of the financial attitudes and behaviors of respondents. The vast majority of respondents score highly in this section, with averages above 7 points. Once again, Bolivia has the best results, with an average score of 7.13 points, compared to Ecuador in last place with an average of 6.77 points (see Chart 6) for this index.

Regarding the relationship with some socio-demographic variables, we observe a direct link with higher levels of schooling, although the variation is much lower than in the case of the Home Economics Index: the indicator varies from 6.70 points among those with no schooling to 7.60 for those that reached the highest levels of education, as reflected in Chart 7.

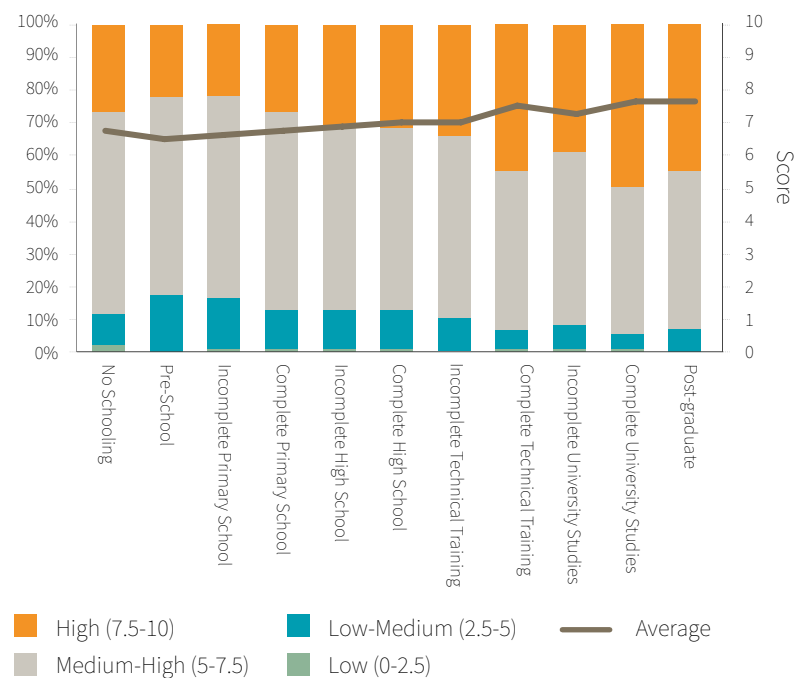
In terms of income levels of individuals, similarly to the previous case, we can observe an ascending relationship up to the fifth level of income, from 6.55 to 7.39 on average, after which there is a more moderate increase up to the sixth social group (7.41 points), and then a drop for the segment with the highest levels of income (7.18 points), as observed in Chart 8.

Chart 6. Attitudes and Behaviors Index Distribution by Country



Source: Own calculations

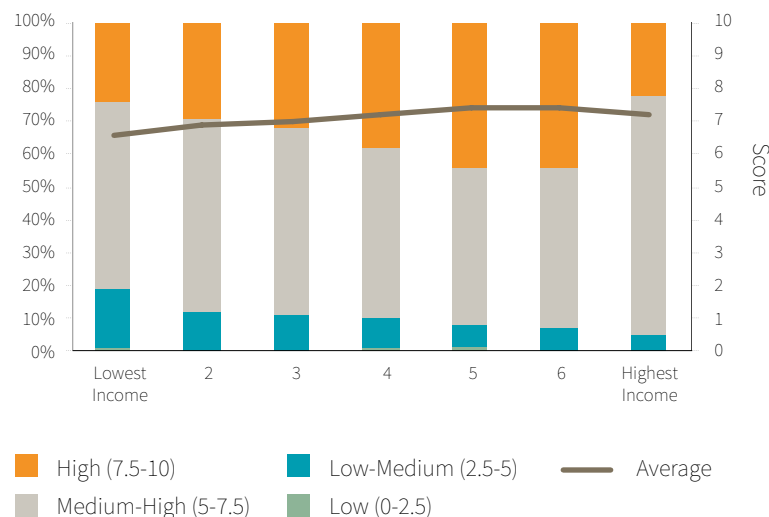
Chart 7. Attitudes and Behaviors Index Distribution by Education Level



Source: Own calculations

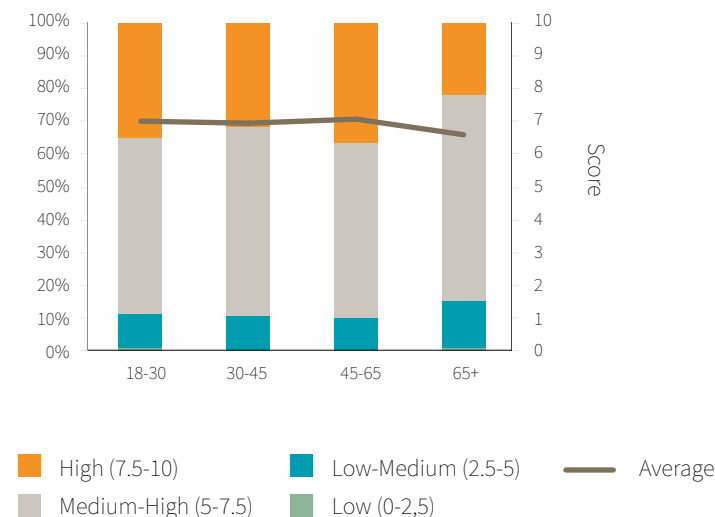
Finally, as seen in Chart 9, there is very little difference in the attitudes of individuals between 18 and 65 years of age, with averages of 7.04, 6.94 and 7.09 for those in the first three age groups. However, what is quite noticeable is the average score of 6.56 for the over-65s in the Attitudes and Behaviors Index.

Chart 8. Attitudes and Behaviors Index Distribution by Income Level



Source: Own calculations

Chart 9. Attitudes and Behaviors Index Distribution by Age Group



Source: Own calculations

Important differences can be observed in the components of the Attitudes and Behaviors Index. On the one hand, 67% of respondents answered that they consider their payment capacity before they purchase a product, 53% said they paid their bills on time, while 50% expressed they personally monitor their financial affairs. Among the countries included in the sample, Colombia scored the highest with 76%, 62% and 55% of respondents, respectively, confirming that they comply with these statements.

Table 2. Average Scores of Attitudes and Behaviors Index components

	Peru	Bolivia	Colombia	Ecuador	Total
Considers their payment capacity	4.40	4.31	4.59	4.54	4.47
Pays debts on time	4.22	4.13	4.39	4.21	4.24
Willing to take risks	3.32	3.51	3.48	3.38	3.43
Monitors finances personally	4.01	4.12	4.22	4.12	4.12
Plans long-term financial goals	3.79	3.90	3.94	3.70	3.83
Does not prefer living one day at a time	3.76	3.63	3.21	3.28	3.47
Preference for saving	3.81	3.84	3.67	3.43	3.69
Money is not there to be spent	3.32	3.21	3.05	2.98	3.14

Note: Own calculations. Indicators from 1 to 5, where 1 is "Totally disagree" and 5 is "Totally agree".

On the other hand, only 39% have long-term financial goals, and 36% say they plan ahead and prefer not to live one day at a time. Finally, 41% revealed a high preference for saving, which was slightly higher in the Peruvian and Bolivian cases, where 44% of the sampled population felt this way. However, this preference contrasts with the much more equal distribution seen when the question is if money is there to be spent, where 28% of the sample hovers around the intermediate level.

In the case of multi-variable analysis, described in greater detail in Appendix 7, once again the highly significant explanatory

power and weight of saving capacity is worth highlighting. Having saved in the last year can be associated to a 0.31 point increase in the Attitudes Index, something especially important for those who decided to save through formal mechanisms, which is a variable with an additional marginal impact of 0.27 points. Also, individuals with higher levels of education, and higher levels of income also show attitudes that are more conducive to their financial wellbeing. Additionally, there is evidence that middle-aged individuals have better attitudes that are conducive to their financial wellbeing, but this positive

relationship deteriorates quite quickly among the older age groups, with the exception of Ecuador, where age has no significant impact. As seen in Chart 10, for Colombia, Peru, and the regional average, this impact starts to wane between the ages of 35 and 38, and becomes negative for the over 69s in Peru and the over 72s in Colombia. On the other hand, this favorable relationship is longer lasting in Bolivia, where it keeps growing up to the age of 52, after which the effect begins to reverse.

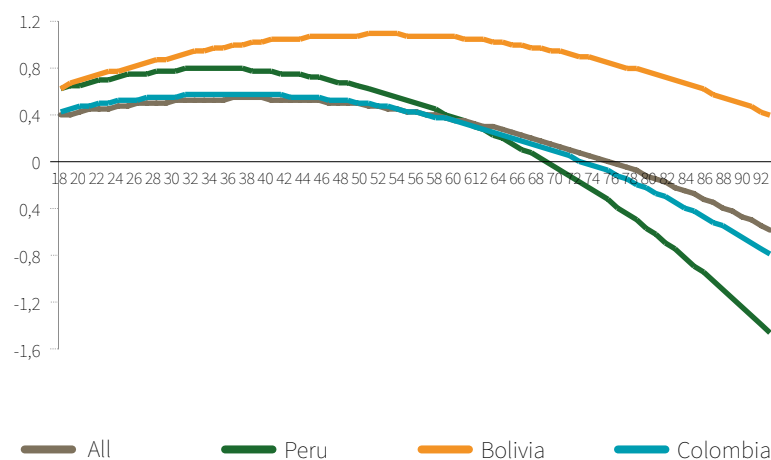
Education levels, on their own, have an important impact in every country, although the impact of one standard deviation

is considerably higher in Bolivia and Peru (0.28 points) than in Colombia and Ecuador (0.05 and 0.12 points). Similarly, the possibility of saving money is also consistent with having better financial attitudes in every country within the sample. For Peru, individuals that manage to save, irrespective of the mechanism they use, achieve higher scores in the Attitudes and Behaviors Index. However, in Bolivia and Ecuador, this effect is limited to those who save through formal mechanisms, where the marginal impact is 0.24 and 0.37 points, respectively. Finally, the Colombian case is unique as those that manage to save achieve scores of 0.397 in the index, but the effect is even larger for those that save formally, where the indicator is 0.28 points higher.

On the other hand, a positive impact is observed among those with higher levels of income, with impacts after a change of one standard deviation varying from 0.09 in Colombia to 0.15 points in Bolivia. By contrast, in Peru there is a negative relationship of 0.13 points after a change of one standard deviation in income levels, but this also contrasts with the positive impact attributable to having a regular source of income: 0.30 points. For Colombia and Ecuador, we found opposite results in the relationship between urban population and the attitudes of respondents: while the urban population in Ecuador shows a more favorable financial predisposition, the opposite is true of Colombia, where the inhabitants of rural areas tend to have a better financial attitude. Additionally, single individuals achieved the worst results, both on the aggregate regional level (0.16 points) and in the cases of Colombia and Ecuador (0.18 and 0.25 points, respectively).

We also found some interesting determinants when assessing the results of each one of the sub-indices. Once again, education levels and saving capacity, especially formal saving, are highly significant when explaining the attitudes of

Chart 10. Non-linear effect of age on the Attitudes and Behaviors Index



Source: Own calculations

surveyed individuals, with the exception of those that believe that money is there to be spent. However, there are also other relevant variables that explain each of the points addressed by this index. First of all, individuals that live in an urban context have greater levels of risk aversion and reject the notion that money is there to be spent. Secondly, gender differences can also be observed: women tend to give greater weight to their payment capacity before purchasing a product, and reveal greater levels of risk aversion than men. Thirdly, middle-aged individuals tend to have a greater propensity to watch over their finances, set long-term goals and not live one day at a time as observed results are non-linear, reaching peak levels at 53, 32 and 41 years of age, respectively, after which the impact starts to deteriorate and even becomes negative at 62 and 80 years of age for the cases of establishing long-term goals and not living one day at a time. Additionally, being in formal full-time employment is linked to individuals that establish long-term goals, while families with higher levels of income are willing to take on higher levels of risk and are less inclined to think that money is there to be spent. Furthermore, individuals that report to have a regular income are more inclined to pay their bills on time, are less risk averse and establish long-term financial goals, even though they are more inclined to think that money is there to be spent, maybe as a consequence of having less of a need to save given the foreseeable nature of their income. Finally, it is worth pointing out that individuals that receive government transfers show a greater propensity to believe that money is there to be spent. The details of these estimates are available in Appendix 8.

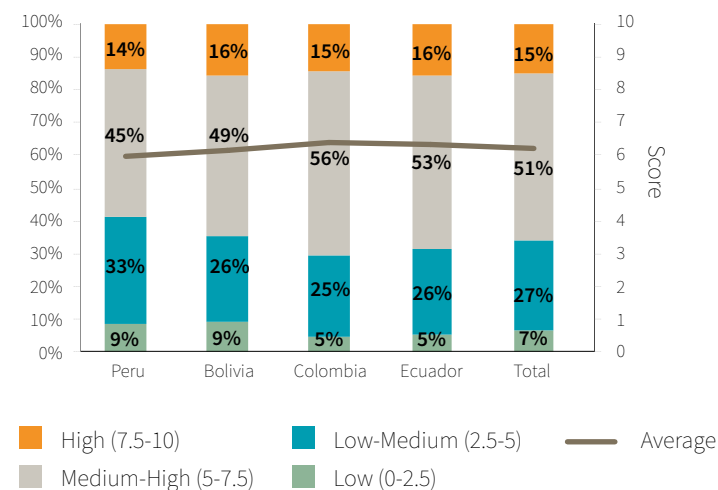
Concepts and Knowledge

The third dimension refers to basic financial concepts and knowledge that are identified as critical to enable adequate

financial decision-making. In this section, Colombia and Ecuador register higher average scores (6.37 and 6.35 points), than Peru and Bolivia (5.94 and 6.12 points), respectively. It is worth pointing out that in every country the largest groups, representing close to half of respondents, achieve middle to high range scores in the Financial Concepts and Knowledge Index.

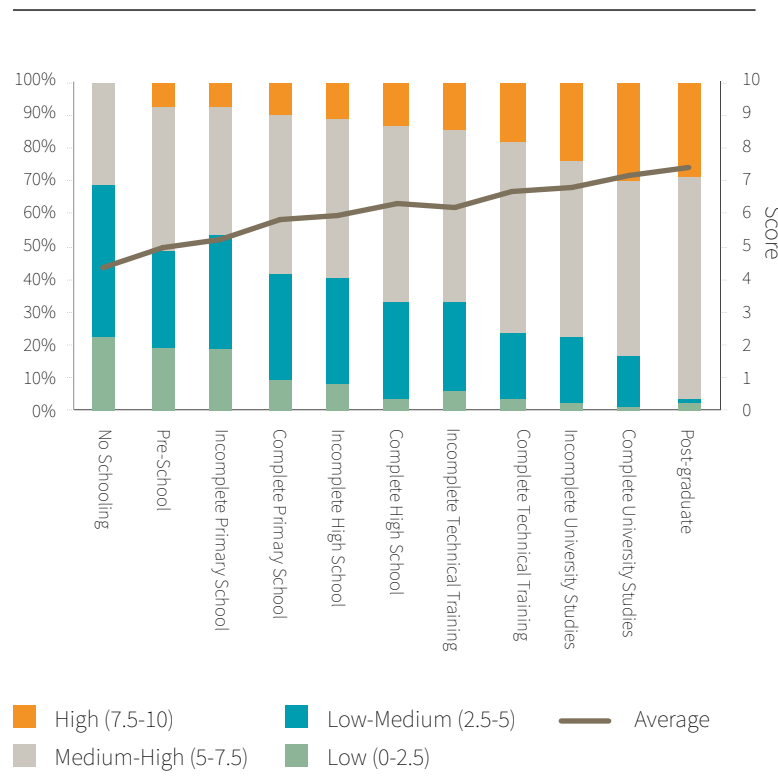
As could be expected, in the case of socio-economic variables we observe a marked and sustained positive relationship between our concepts indicator and the education levels of respondents; scores vary from 4.36 points for those lacking any type of schooling to 7.42 points for those who reached post-graduate level (see Chart 12).

Chart 11. Concepts Index Distribution by Country



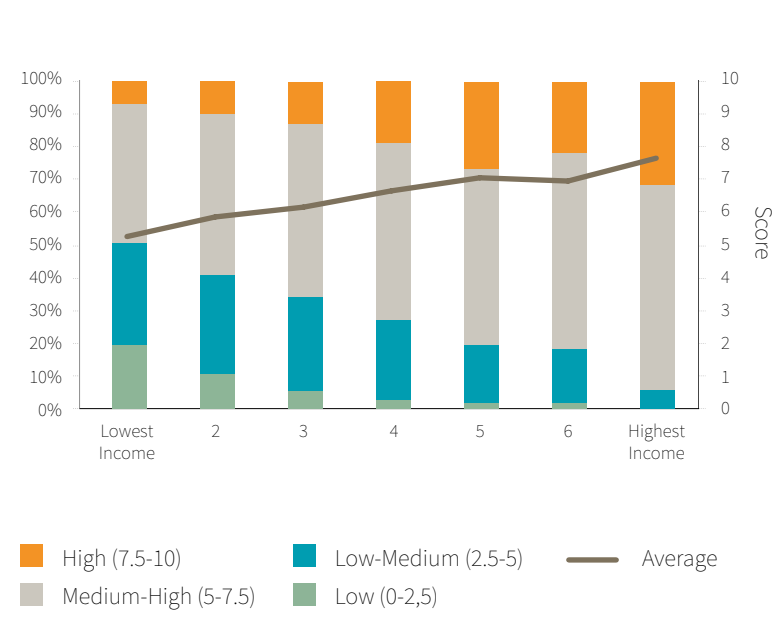
Source: Own calculations

Chart 12. Concepts Index Distribution by Education Level



Source: Own calculations

Chart 13. Concepts Index Distribution by Income Level

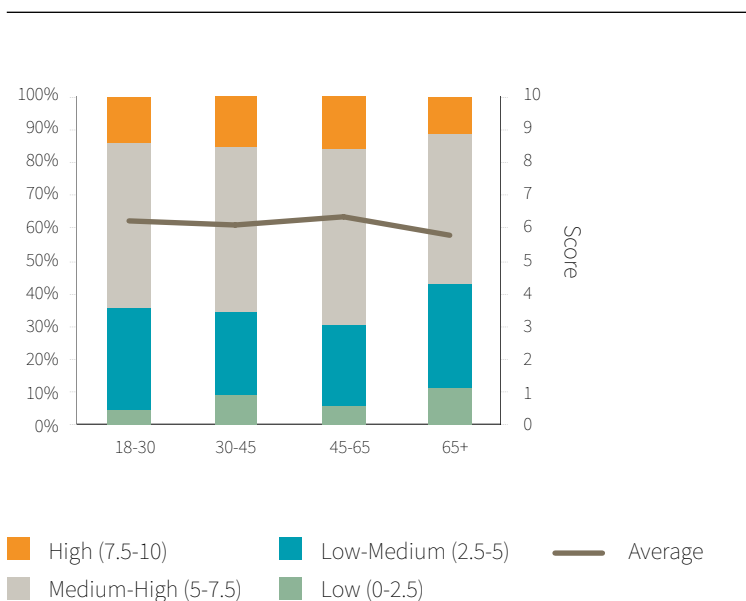


Source: Own calculations

Likewise, there is a direct relationship between income levels of individuals and the average results obtained in the Concepts Index; these vary from 5.21 to 7.57 between those in the lower and upper income levels (see Chart 13).

Lastly, one can observe only small differences between individuals belonging to the first three age groups, with scores ranging from 6.21 (18-30 years), to 6.09 (30-45 years) and 6.35 (45-65 years), but these drop drastically among older individuals who on average score 5.75 points..

Chart 14. Concepts Index Distribution by Age Group



Source: Own calculations

On the other hand, large differences can be observed in each one of the index components (see Table 3). Colombia has the highest percentage of correct answers in 5 of the 8 components of the index, while Peru has the worst results in 5 of the 8 components of the indicator.

While the vast majority of individuals are capable of identifying the existence of interest payments in a simple scenario (87.7% on average with a maximum of 89.1% in Ecuador), only around 21% can correctly carry out a simple interest calculation, even

though that percentage is significantly lower in Colombia (12%). However, it is revealing that a larger proportion of people (34.1% on average and 40.7% in Ecuador) can adequately carry out a more complex operation such as a compound interest calculation, although this could be attributable to the way in which the question was proposed (multiple choice vs. the open nature of the simple interest question). Also, almost 80% of respondents carried out a simple division exercise, as well as correctly identifying the concepts of inflation and the existence of a risk/return relationship. Conversely, a significantly smaller proportion of respondents (around 65%) identified the benefit of asset diversification as a way of reducing risk, while only 43.8% identified the importance of the value of money over time.

On the other hand, the results of our econometric exercise are consistent with the stylized facts identified by the literature. In this sense, middle-aged men, living in urban contexts, with a higher level of education and a formal full-time job, who also have a regular and higher level of income, and who save through formal channels, tend to have better results in the Concepts Index. Additionally, we also found evidence that indicates that those who receive transfers from the government are the worst-performing group in the Concepts Index. In particular, income and education levels, as well as earning a regular income and saving through formal mechanisms are the most significant determinants of the Concepts indicator, with an impact of 0.25 and 0.18 points after a change of one standard deviation in the first two cases, and of 0.30 and 0.22 in the last two. Additionally, formally employed individuals have index scores that are 0.12 higher, while being an urban dweller adds 0.14 points to the index. Furthermore, the gender effect is quite noticeable as being a woman is associated with having an indicator 0.25 points lower, which is equal to one standard deviation change in income levels. On the other hand,

Table 3. Results of the Concepts Index Components by Country

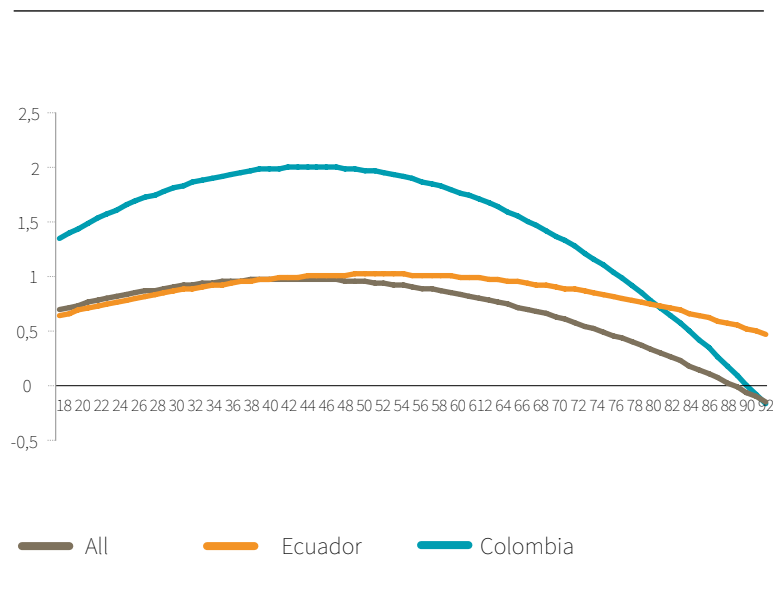
	Peru	Bolivia	Colombia	Ecuador	Total
Division	76.6%	79.6%	84.7%	78.3%	79.9%
Money over time	42.6%	43.2%	45.8%	43.6%	43.8%
Interest	85.2%	88.1%	88.6%	89.1%	87.7%
Simple Interest	19.8%	26.8%	12.0%	25.0%	20.8%
Compound Interest	29.5%	33.3%	33.1%	40.7%	34.1%
Risk/Return	80.4%	76.6%	88.7%	87.3%	83.3%
Inflation	79.6%	79.7%	86.5%	77.9%	81.0%
Diversification	61.2%	62.7%	70.5%	66.3%	65.2%

Source: Own calculations. Note: Percentage that answers every question correctly.

receiving government transfers reduces the indicator by 0.13 points. Finally, a positive relationship can be found with age, although this deteriorates over time as a reflection of the worse results seen among the older age groups. As seen in Chart 15, the largest impact on the Concepts indicator occurs around 45 years of age, both in the regional average and in the case of Ecuador, where the relationship is statistically significant. In Colombia, age has a larger impact and reaches its peak at age 52, after which the effect of age starts to diminish at a higher rate than the average seen in the Andean countries included in the sample.

In so far as the effects seen in each country, income level is the only one that remains consistently positive, although it is much higher in Bolivia and Ecuador than in Peru and Colombia (0.25 and 0.21 vs. 0.15 points). On the other hand, for Bolivia, Ecuador and Peru, education levels also have a significant impact: in Peru one standard deviation change in the education level implies a change of 0.58 points, and even though this is lower in the other two countries, the impact of this variable on the indicator is greater than 0.4 points. On the other hand, living in urban areas only has a significant impact in Colombia, where the size of the impact is also important: 0.4 points. In terms of gender differences, these are only relevant in Peru

Chart 15. Non-linear Effect of Age on the Concepts Index



Note: Own calculations.

(-0.49) and Colombia (-0.35), where women score below men. Regarding age, we only observe positive effects in Colombia and Ecuador, but as mentioned before these diminish after reaching the older groups. On the other hand, earning a regular income has an important and sizeable impact in Peru and Bolivia (0.46 and 0.63 points), while it is non-relevant in Colombia and Ecuador. By contrast, in the latter two countries, receiving government transfers is linked to worse results in the Concepts Index, as is being single, although this impact is three times higher in the case of Colombia. Finally, results show that Bolivian individuals that save through formal mechanisms

have higher Concepts Index scores (0.51 points higher), while in Ecuador, those that save tend to have lower Concepts Index scores (0.29 points lower). The tables corresponding to these estimates are available in Appendix 7.

When assessing the components of the Concepts Index, one can observe fewer consistencies than in the previously mentioned cases. Level of income can explain 6 of the 8 indicators under study, meaning that it is the most relevant variable, followed by education level, which allows explaining 5 of the 8 components of the indicator. Similarly, age plays a significant explanatory role in 5 of the cases, even though as seen in previous sections, the identified effects are non-linear as a consequence of the worse relative performance of older groups. Specifically, the impact of age reaches its peak at different ages depending on the component under analysis, after which this effect starts to diminish (makes simple interest calculations: 40 years; understands the benefit of asset diversification: 48 years; can divide correctly: 50 years; identifies the value of money over time: 51 years; and, identifies the concept of inflation: 54 years). Additionally, being a woman has a negative impact in four of the measurements, where all arithmetic operations included in the index tend to stand out. On the other hand, earning a regular income contributes to a greater probability of correctly identifying another three concepts, while being able to save and receiving government transfers are also relevant in some cases, even though the algebraic signs are not always the same. Detailed results are available in Appendix 8.

CHAPTER 4

MODEL EXTENSIONS

Gender Interactions Results

A large part of the literature and some empirical results suggest that women tend to perform worse when it comes to the measurement of their financial knowledge. However, other empirical evidence indicates that the active role of women in family financial planning can help to significantly reduce this negative gender impact (Almenberg and Save, 2011; Fonseca et al., 2011).

Considering the former, we repeated the previous exercises, but included an additional explanatory value equal to one when women are heads of family and zero in the opposite case. Likewise, we assess interactions with women that have received government transfers as there are some social programs that explicitly target women. Finally, we also explored the possible effect that being a single mother could have on a woman's financial knowledge and attitudes.

Women as heads of family

In the first place, worth highlighting is the high proportion of women (73%) that are actively involved in their family's financial decisions, which is very close to the percentage of men considered as heads of family (74%). Also observed is a slightly decreasing trend in the number of women that carry out this role as the income level of a family increases, with the exception of the most affluent group among which 83% are heads of family. A similar relationship can be observed with education levels, where the percentage of women that are heads of family drops until they reach the level of incomplete university studies, after which the percentage of women that carries out this role increases significantly until it reaches more than 89% for those with post-graduate studies.

By including this variable, we also observe a change in the gender effect both in the Home Economics Index and in the

components of the same. Thus, the impact of being a woman becomes negative, although it is clearly compensated by the number of women that are heads of family, both in the measurement that includes all available data and in the national sub-samples. These women are more inclined to carry out a budget with a specific income and spending plan, and to follow it strictly. On the other hand, we found that women who are heads of family tend to have better attitudes and behaviors. For Bolivia, the positive effect identified for women disappears and is only relevant in the case of women that participate in the financial decision-making process of their families. Additionally, this group of women is also less risk-averse (even though they do not overcome the negative impact associated to the female gender), they personally take care of their finances and show the highest propensity to plan based on long-term financial goals. Lastly, this variable is non-significant for the financial concepts and knowledge indicator, with the exception of a lower understanding of the concept of the value of money over time. These results are available in Appendices 9 and 10.

Women who receive government transfers

For women who receive government transfers, huge differences can be observed between countries. While in Peru and Ecuador only 22% and 24% of women are favored by these types of programs, the percentage rises to 32% in Colombia, although this is the only country in the sample where a higher proportion of men are benefited by this type of program. On the other hand, Bolivia stands out from the rest as 71% of women receive these types of transfers, even though the proportion of men is also high (65%). In terms of the level of income, we observed that the proportion that receives transfers is cut in half as the level of income of families increases, even though the percentage of people who receive these resources recovers significantly (33%) in the more affluent segment.

Concerning education levels, we observe a constant drop in the proportion of people receiving government transfers as the years of schooling grow.

In this case, we hardly found any significant relationships when assessing the regressions results with controls for this subgroup. Only women who receive transfers in Peru actually achieve a higher score in the Home Economics Index, while in the case of Ecuador the negative effect observed in the Concepts and Knowledge Index seems to be limited exclusively to women receiving these types of funds. For additional details, please refer to Appendices 9 and 10.

Women, single mothers

Finally, we were also interested in the group comprised by single mothers as this is one of the factors usually associated with aggravating the poverty cycle. 18% of the women in our sample identify themselves as single mothers, with figures ranging from 16% (Peru) to 20% (Colombia). However, the lack of a clear relationship between income levels and the proportion of single mothers came to our attention, while there was a clear relationship when considering their education levels, which seems to increase as women gain greater levels of schooling, peaking at 42% among the group with incomplete university studies.

In this sense, the inclusion of the variable does not modify the relationships observed in the Home Economics indicator. However, as could be expected, it does increase the probability that single mothers take charge of their household's daily finances, maybe because their condition makes them become more independent. On the other hand, we found evidence that indicates that these groups, especially in Peru, have better attitudes that are conducive to the financial wellbeing of their families. Lastly, we also observed that single mothers achieved

better results in the Financial Knowledge and Concepts Index, although at a regional level this impact does not compensate for the negative effect associated to the female gender. The Bolivian case deserves a special comment as it is the only country in the sample in which single mothers demonstrate a better understanding of these concepts. In particular, single mothers show a greater propensity to understanding the value of money over time, and to correctly carry out simple arithmetic, such as calculating a division or simple interest. All the calculations referred to here are available in Appendices 9 and 10.

No Reply Results

Generally speaking, individuals tend to think they are more knowledgeable than what they actually are, and this can lead them to make decisions without having the adequate tools, even though they may be convinced they are acting to improve their wellbeing (Jappelli, 2010). However, authors such as Lusardi and Mitchell (2013) and Bucher-Koenen et al. (2014) have demonstrated not only that women are less knowledgeable in financial matters, but that there is also a greater probability that they would admit to not knowing the answers to basic financial education questions. Similarly, when assessing their own financial knowledge, women tend to score themselves below men.

In this sense, it is also interesting to explore what are the socio-economic determinants that make people show a greater propensity to admit that they are ignorant about certain financial topics. With this purpose in mind, we built an indicator to inform about the percentage of questions in the concept and knowledge indicator that individuals failed to reply. As observed in Table 4, a different percentage of individuals

answers all the questions in each country. Peru and Ecuador represent the two extremes, with the former showing the largest average percentage of non-replies, the largest standard deviation for this indicator and the lowest number of individuals answering all of the financial concepts questions. By contrast, Ecuador led in these three aspects, with the lowest percentage of non-replies, the lowest data variability and the largest proportion of individuals answering all of the questions.

Moreover, our econometric results shed more light on this topic. First of all, it is worth highlighting the impact that three variables (education level, income level, and saving capacity) have on reducing the percentage of questions that individuals fail to answer. Furthermore, earning a regular income and living in urban contexts also works in the same direction, despite the differences among the countries where this impact is considered significant (Peru and Bolivia in the first case, and Colombia and Ecuador in the second). However, it is another variable that really captures our attention. As observed by Bucher-Koenen et al. (2014), women show a greater propensity to not answer some financial concepts questions, both for the regional sample as in the cases of Peru, Colombia and Ecuador. In the case of Bolivia, the indicator lies at the margins of statistical significance. These results can be seen in greater detail in Appendix 11..

Table 4. No Reply Percentages per Country

	Total	Peru	Colombia	Bolivia	Ecuador
% No Reply Average	11.49%	14.44%	12.07%	11.89%	7.53%
% No Reply Standard Dev.	13.49%	14.81%	14.36%	12.87%	10.59%
% that answers every question	41.86%	32.89%	41.58%	38.30%	54.92%

Source: Own calculations

CHAPTER 5

DISCUSSION AND IMPLICATIONS

This analysis allows for the identification of the main socio-economic determinants of financial education through relevant information gathered in four countries: Bolivia, Colombia, Ecuador and Peru.

In general, important socio-demographic gaps can be identified, especially in terms of gender, age, geographic context, education, income level, as well as saving capacity. However, after studying the determinants of each one of the indices constructed from survey results (home economics, attitudes and behaviors, and concepts and knowledge), we can observe important differences.

Among the most relevant variables that help to explain changes in the Home Economics Index, the impact of age was quite striking, as well as the capacity to save, especially through formal mechanisms, and the fact of living in an urban environment and earning a regular income.

On the other hand, by analyzing the results of each of the components that comprise the Home Economics Index, we observe that having a budget, and that it represents a precise and specific plan and is used as such, is closely related to being part of the urban population, female, with greater levels of education, having a regular source of income and the capacity to save. Both income and education levels also help to explain the fact that respondents have a budget and use it in a precise manner. Likewise, the fact that individuals save through formal mechanisms increases the probability that they will formulate a budget and follow it in a strict manner. On the contrary, there is a lower probability that larger families can formulate a detailed and precise budget.

In the case of the Attitudes and Behaviors Index, saving capacity also has a high explanatory power. Also, middle-aged individuals with a higher level of education, and a regular

and higher level of income also show attitudes that are more conducive to their financial wellbeing. Additionally, there is evidence that middle-aged individuals have better attitudes that are conducive to their financial wellbeing, as in general there is evidence that this positive relationship deteriorates quite quickly among older groups. Finally, it is worth pointing out that individuals who receive government transfers show a greater propensity to believe that money is there to be spent.

On the other hand, middle-aged men, living in urban contexts, with a higher level of education and a formal full-time job, who also have regular and higher levels of income, and who save through formal channels tend to have better results in the Concepts Index. Additionally, we also found evidence that indicates that those who receive transfers from the government are the worst performing group in the Concepts Index. In particular, we found that income and education levels, as well as earning a regular income and saving through formal mechanisms are the most significant determinants of the Concepts indicator.

In terms of gender, we found that women who are heads of family tend to have better attitudes and behaviors. This group of women is also less averse to risk, personally take care of their finances and show the highest propensity to plan based on long-term financial goals, which is consistent with other findings in the literature that limit this negative gender effect to women that do not participate actively in managing family resources.

Another salient point is the fact that saving through formal channels is a critical determinant of the three indices of financial capabilities we have described: Home Economics, Attitudes and Behaviors, and Concepts and Knowledge. In line with our results, Bosch et al. (2015) analyze the different personal factors that have an impact on saving conditions

in the cities of Lima and Mexico D.F. The analysis reveals the existence of a group of informal workers that live in poor economic conditions, which have a negative effect on their savings decisions (people that usually belong to the lower income quintiles, with a greater percentage of women and lower levels of schooling). The study also shows significant and very positive results in terms of motivational factors, which are represented by the impact of variables such as confidence in the future and satisfaction with working conditions.

The results of our analysis allow us to identify important implications for public policies. First, they highlight the importance of establishing differentiated strategies for different segments of the population, where those with the lowest financial capabilities are: people with a limited education, low income levels, without a regular source of income, who live in rural areas, women, younger segments, senior citizens, and those without saving capabilities. Given their peculiarities, each one of these groups requires dedicated programs to address the specific deficiencies that hinder the results for each of the indices under study. Similarly, these results can shed light for the development of financial products that take these features into account and which can even serve as vehicles to convey some of the critical knowledge necessary to improve the financial decisions of individuals.

On the other hand, our results show that the capacity to save, especially through formal mechanisms such as savings accounts, has a significant impact on the financial capabilities of individuals. This means that financial inclusion and education programs must focus not only on conveying concepts and knowledge, but also on exerting influence on attitudes related to the importance of saving, and the relative costs of informal saving *vis-a-vis* the traditional channels designed with this objective in mind. These results coincide with recent findings

in the field of micro-finances, where the importance of asset accumulation through the promotion of savings has been underlined in contrast with the traditional emphasis on access to credit. For this reason, it is very important that new schemes to promote concepts and attitudes that are favorable to the financial wellbeing of families, include in their policies the promotion of innovative saving products that adapt to the needs of the different segments of the population.

Also, as mentioned above, our analysis shows that gender differences do not impact all women equally, and that those who are heads of family tend to have better financial attitudes and behaviors. This result has important policy implications as women that take part in the financial decisions of their households can develop better financial capabilities. Therefore, programs that look to promote the empowerment of women through their inclusion in production processes can also have a positive impact on the behaviors and attitudes of families for them to achieve a higher level of financial wellbeing.

Finally, our results also show that those who receive government transfers or subsidies are the worst performing group in the Concepts and Knowledge Index, and also show contrarian attitudes towards saving. These findings suggest that these types of social programs should be accompanied not only by training efforts related to basic financial concepts, such as the use of debit cards and ATM machines for the withdrawal of money from transfers, but also by innovative strategies to promote saving by the beneficiaries of these subsidies.

In line with the interest shown by academics and public policy-makers about the relevance of financial education for the wellbeing of individuals and adequate functioning of markets, the intent of this work is to take advantage of an innovative database especially designed to circumscribe some of the socio-economic determinants of financial education

in developing countries, specifically in four Latin American countries of the Andean region: Bolivia, Colombia, Ecuador and Peru. Our results are largely in line with the findings of international literature in this field, but they also offer a degree of local specificity that we hope may contribute to focus future public policy interventions directed to the most vulnerable and lagging segments of the Latin American population. We also hope it provides other features that may have a favorable impact on financial education indicators and could re-direct the social and financial inclusion agenda in the region.

BIBLIOGRAPHY

ALMENBERG, JOHAN Y JENNY SAVE-SODERBERGH (2011).

Financial Literacy and Retirement Planning in Sweden. Netspar Discussion Paper No. 01/2011-018.

BEHRMAN, JERE; OLIVIA MITCHELL; CINDY SOO; Y, DAVID BRAVO (2010).

National Bureau of Economic Research Working Paper No. 16452

BOSCH, MARIANO; ÁNGEL MELGUIZO; ENITH XIMENA PENA; Y DAVID TUESTA (2015).

El ahorro en condiciones formales e informales, Documento de trabajo del BBVA, N° 15/23.

BRAUNSTEIN, SANDRA Y CAROLYN WELCH (2002).

Financial Literacy: An Overview of Practice, Research, and Policy. Federal Reserve Bulletin.

BUCHER-KOENEN, TABELA; ANNAMARIA LUSARDI; ROB ALESSIE; Y, MAARTEN VAN ROOIJ (2014).

How Financially Literate are Women? An Overview and New Insights. Global Financial Literacy Excellence Center Working Paper No. 2014-5.

CARPENA, FENELLA; SHAWN COLE; JEREMY SHAPIRO; Y, BILAL ZIA (2011).

Unpacking the Causal Chain of Financial Literacy. Policy Research Working Paper No. 5798.

CHEN, HAIYANG Y RONALD VOLPE (2002).

Gender Differences in Personal Financial Literacy Among College Students. Financial Services Review, Volumen 11: 289-307.

COLA, SHAWN; THOMAS SAMPSON Y BILAL ZIA (2009).

Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets? Harvard Business School Working Paper No. 09-117.

FAZLI, MOHAMAD (2011).

Pathways to Financial Success: Determinants of Financial Literacy and Financial Well-Being among Young Adults. Iowa State University.

FONSECA, RAQUEL; KATHLEEN MULLEN; GEMA ZAMARRO; Y, JULIE ZISSIMOPOULOS (2010).

What Explains the Gender Gap in Financial Literacy? The Role of Household Decision-Making. Rand's Roybal Center for Financial Decision Making. Working Paper No. 762.

FORNERO, ELSA Y CHIARA MONTICONE (2011).

Financial Literacy and Pension Plan Participation in Italy. Netspar Discussion Paper No. 2011-019.

GARCÍA BOHÓRQUEZ, NIDIA; FAYBER ALFONSO ACOSTA PARDO; Y, JORGE LEONARDO RUEDA GIL (2013).

Banco de la República Colombia. Borradores de Economía No. 792.

HUNG, ANGELA; ANDREW PARKER Y JOANNE YOONG (2009).

Defining and Measuring Financial Literacy. Rand's Roybal Center for Financial Decision Making. Working Paper No. 709.

JAPPELLI, TULLIO (2010).

Economic Literacy: An International Comparison. CFS Working Paper No. 2010/16.

JAPPELLI, TULLIO Y MARIO PADULA (2011).

Investment in Financial Literacy and Saving Decisions. CFS Working Paper No. 2011/07.

KHARCHENKO, OLGA (2011).

Financial Literacy in Ukraine: Determinantes and Implications for Saving Behaviour. Kyiv School of Economics.

LUSARDI, ANNAMARIA (2008).

Financial Literacy: An Essential Tool for Informed Consumer Choice? National Bureau of Economic Research Working Paper No. 14084.

LUSARDI, ANNAMARIA (2012).

Numeracy, Financial Literacy, and Financial Decision-Making. Scholar Commons Volumen 5(1): Article 2.

LUSARDI, ANNAMARIA Y OLIVIA MITCHELL (2008).

Planning and Financial Literacy: How Do Women Fare?. National Bureau of Economic Research Working Paper No. 13750.

LUSARDI, ANNAMARIA Y OLIVIA MITCHELL (2011).

Financial Literacy and Planning: Implications for Retirement Wellbeing. National Bureau of Economic Research Working Paper No. 17078.

LUSARDI, ANNAMARIA Y OLIVIA MITCHELL (2013).

The Economic Importance of Financial Literacy: Theory and Evidence. National Bureau of Economic Research Working Paper No. 18952.

LUSARDI, ANNAMARIA; OLIVIA MITCHELL Y VILSA CURTO (2009).

Financial Literacy among the Young: Evidence and Implications for Consumer Policy. National Bureau of Economic Research Working Paper No. 15352.

MANDELL, LEWIS Y LINDA SCHMID (2009).

The Impact of Financial Literacy Education on Subsequent Financial Behavior. Journal of Financial Counseling and Planning, Volumen 20(1): 15-24.

WAGLAND, SUZANNE Y SHARON TAYLOR (2009).

When it comes to Financial Literacy, is Gender Really an Issue? The Australasian Accounting, Business and Finance Journal, Volumen 3(1): 13-25.

WORTHINGTON, ANDREW (2009).

Predicting Financial Literacy in Australia. Financial Services Review, Volumen 15(1): 59-79.

APPENDIX 1

TECHNICAL FACTSHEET OF THE BOLIVIAN NATIONAL SURVEY (URBAN AND RURAL)

1. Name of the market research company : Ipsos Peru / Ipsos Bolivia

2. Legal entity requesting the survey: ASPEm

3. Methodology:

- **Sample Frame.** In order to construct and design the survey the population over 18 years of age has been considered, estimated for 2013 by Ipsos Peru. For the selection of households, Ipsos Bolivia relies on a cartographic sampling frame of household blocks from the 2001 Census for the ten main large capital cities (including El Alto).
- **Sample Design.** A multi-stage probabilistic simple was designed. Strata are defined by crossing the geographic region variable² (nine departments: Beni, Chuquisaca, Cochabamba, La Paz, Oruro, Pando, Potosí, Santa Cruz and Tarija) and the context (urban and rural). In each stratum a sample of localities was selected and, within these, the zones with randomly-chosen starting blocks. After, we carried out a systematic sampling of households in each selected block and applied quotas for gender and age for the selection of people within each household.
- **Sampling Stages.** The selection of sampling units was carried out as follows:

2. For national samples, the most adequate criteria is stratification by department and context.

3. A group of districts that comprise the urban core of a city.

4. A zone is a subdivision of a district as defined by INEI and corresponds to a conglomerate of approximately 40 blocks. In rural areas, or zones where no INEI cartography is available, a locality will be divided into four zones: North, South, East and West, where a zone is selected randomly and appears in the route map.

5. For the starting block (selected randomly), the starting corner, direction of the route and skip for the selection of the first household are defined randomly. In case of rejection, unoccupied household or absent person, the next home is selected. After an effective survey has taken place, three homes are skipped and if the entire block has been covered without completing the quota, interviewers move on to the next block following the specific numbering on the route map. In rural areas, or zones where no INE cartography is available, the interviewer must go to the main square and identify the zones: North, South, East and West of the populated area.

6. Must be a family member over 18. Home workers and visitors are not eligible.

Stage	Sampling unit	Sampling unit selection type
1	Localities ³	Probabilistic. Stratified
2	Zones ⁴	Probabilistic. Systematic with a randomly chosen block as starting point, selection probability is proportional to size (homes)
3	Households ⁵	Probabilistic. Systematic, random starting point
4	People ⁶	By gender and age quotas

4. Sampling system:

For urban areas probabilistic sampling was used, stratified by NSE, with random computerized block selection and systematic selection of households within each block. For peri-urban and rural areas probabilistic sampling with random selection was employed, taking the main squares of these localities as the central reference point until reaching the terminal areas.

5. Size of the sample and sample margin:

	Total	Urban	Rural	Men	Women	18 to 24 years	25 to 39 years	40 years and over
Sample	1,200	780	420	600	600	240	481	479
Margin of error (%)	2.8	3.5	4.8	4.0	4.0	6.3	4.5	4.5

6. Level of representativity

It is the percentage that indicates the level of inference employed by the study for the total population above 18 years of age.

At the provincial level, representativity is calculated numerically by dividing the total population of the provinces included in the universe under study (8,704,759) by the estimated population above 18 years of age (10,624,495). In this case, representativity stands at 81.9%.

7. Respondent selection process:

Respondents were chosen randomly within each household, in observance of the gender and sex quotas, and we carried out direct, face-to-face interviews.

8. Confidence levels:

We assumed a confidence level of 95% and maximum variance for population proportions ($p=q=0.5$).

9. Date of field work:

From October 23 to November 20, 2013.

10. Sample distribution by province and geographic region:

In the Bolivian case, the sample considers nine departments and was distributed according to rural and urban sectors.

Sample distribution by province and geographic area

Department	Urban sample	Rural sample	Total
Beni	35	15	50
Chuquisaca	35	40	75
Cochabamba	130	85	215
La Paz	225	105	330
Oruro	30	20	50
Pando	5	5	10
Potosí	30	60	90
Santa Cruz	250	70	320
Tarija	40	20	60
Total	780	420	1,200

APPENDIX 2

TECHNICAL FACTSHEET OF THE COLOMBIAN NATIONAL SURVEY (URBAN AND RURAL)

1. Name of the market research company: : Ipsos Peru / Ipsos Napoleón Franco

2. Legal entity requesting the survey: ASPEm

3. Methodology:

- **Sample Frame.** The construction and design of the survey is based on the cartographic frame of the DANE 2005 Census and the projected population for 2013.
- **Sample Design.** A multi-stage probabilistic simple was designed. Stratification is based on the departments (23 including Bogota D.C.) and an auxiliary variable known as the Rurality Index; three categories are built with this index, defined by the National Planning Department:
 - Forced inclusion: Bogotá, Medellín, Cali, Barranquilla.
 - Rural: Corresponds to 750 municipalities where there is a greater Rurality Index (more rural).
 - Remainder: The remaining 277 municipalities.Simple random sampling is carried out in each stage.
- **Sampling Stages.** Sampling units were selected as follows:

7. Selection of municipalities within the strata. The selection of municipalities is carried out using the coordinate descent algorithm.
8. The selection of cartographic sections is done using the coordinate descent algorithm. The method for block selection is also coordinate descent. If the selected block cannot be used for having a lower percentage of residents than required, the inverse sampling method is used within the section to select the next block to be surveyed. The order in which the block will be approached is defined before the field trip.
9. Household selection is carried out under a systematic procedure proportionate to size, where households are ordered within the cartographic block based on the information gathered by the DANE Household and Population General Census of 2005. A k value is selected, resulting from dividing the number of households in the block by the total of surveys to be carried out in the block. With this value we build a random starting point between 1 and k, starting the household count at the North-eastern corner and beginning with the household at starting point + k. The route is always traveled to the right in clockwise direction.
10. Must be a family member over 18. Home workers and visitors are not eligible.

Stage	Sampling unit	Sampling unit selection type
1	Municipalities ⁷	Probabilistic. Stratified
2	Zones ⁸	Probabilistic. Systematic with a randomly chosen block as starting point, selection probability is proportional to size (homes)
3	Households ⁹	Probabilistic. Systematic, random starting point
4	People ¹⁰	By gender and age quotas

4. Sampling system:

To manage our cartographic sampling frame for the selection of households, we used a software-driven block sampling system that allows for a systematic selection process with a random starting point so that households may be representative.

5. Size of the sample and sample margin:

	Total	Urban	Rural	Men	Women	18 to 24 years	25 to 39 years	40 years and over
Sample	1,261	1,001	260	586	675	206	410	645
Margin of error (%)	2.8	3.1	6.1	4.1	3.8	6.8	4.8	3.9

6. Level of representativity:

It is the percentage that indicates the level of inference employed by the study for the total population over 18 years of age.

At the department level, representativity is calculated numerically by dividing the total population of the departments included in the universe under study (45,308,744) by the estimated population over 18 years of age (47,121,089). In this case, representativity stands at 96.2%.

7. Respondent selection process:

Respondents were chosen randomly within each household, in observance of the gender and sex quotas, and we carried out direct, face-to-face interviews.

8. Confidence levels:

We assumed a confidence level of 95% and maximum variance for population proportions ($p=q=0.5$).

9. Date of field work:

From November 8 to December 5, 2013.

10. Sample distribution by province and geographic region:

In the Colombian case, the sample considers 23 departments and was distributed according to rural and urban sectors.

Sample distribution by department and geographic region

Departments	Urban sample	Rural sample	Total
Antioquia	163	13	176
Atlántico	81	11	92
Bogotá D.C.	178	0	178
Bolívar	40	10	50

Departments	Urban sample	Rural sample	Total
Boyacá	42	12	54
Caldas	27	12	39
Cauca	15	10	25
Cesar	17	10	27
Chocó	18	12	30
Córdoba	22	9	31
Cundinamarca	45	10	55
Huila	11	22	33
La Guajira	10	12	22
Magdalena	22	10	32
Meta	14	14	28
Nariño	30	12	42
Norte de Santander	26	12	38
Quindío	15	10	25
Risaralda	27	12	39
Santander	40	10	50
Sucre	17	12	29
Tolima	27	12	39
Valle del Cauca	114	13	127
Total	1,001	260	1,261

APPENDIX 3

TECHNICAL FACTSHEET OF THE ECUADORIAN NATIONAL SURVEY (URBAN AND RURAL)

11. The use of stratification was proposed for this design in order to obtain more precise estimates, given that stratified sampling guarantees a greater level of confidence in the sample, which reduces the variance of estimates. Stratification is more efficient the greater the homogeneity of the units that belong to the same stratum, and the greater the heterogeneity of the strata among themselves. Even without fulfilling all of these characteristics, any type of stratification improves the quality of estimates, the only condition being that every sampling unit must belong to one stratum, and only one, and that the union of all strata add up to the total population of the study. It is important to point out that there are two types of stratification carried out: explicit stratification, that is, strata for representative purposes where one expects to obtain trustworthy estimates for comparison purposes or

monitoring; and, within each stratum, an implicit stratification that takes into account the department and province to which each district belongs to, where the strata are used for dispersion purposes, improving the efficiency of the sampling process.

12. Sampling is carried out in several stages as described in detail throughout this document. This consists in extracting the sample by stages, which requires that the sampling units in each stage be sub-sampled from the broadest units obtained from the preceding stage. In the first stage the localities are selected, within these the sampling zones, within these the blocks, within these the households and in the last stage the respondent is selected.

13. In probabilistic sampling, every sampling unit (every individual of the studied population) has a positive and known probability to be selected in the sample.

The sampling methods that satisfy this property allow to estimate sampling variability. This is the necessary base of statistical inference as it provides an objective and scientifically calculated measurement of the distance between the sampling estimate of a variable and its true value in the population (parameter). Hence, probabilistic sampling allows us to perform forecasts and draw conclusions of the sampling results regarding the target population with well-determined confidence margins. It is worth pointing out that the last selection stage is carried out by means of quota sampling, the objective of which is to guarantee a right balance between the gender and age variables. The purpose of this is to ensure that the distribution of individuals in the survey corresponds to the official population statistics.

1. Name of the market research company: Ipsos Peru / Ipsos Consultor

2. Legal entity requesting the survey: ASPEm

3. Methodology:

- **Sample Frame.** The construction and design of the survey was based on the list of sectors of the Household and Population Census of 2010 by the National Institute of Census and Statistics (INEC), which contains information on the total population. Each census sector is identified by its provincial, canton, parish, zone and census sector codes. Moreover, this source provides the most updated (2010) census cartographies for the entire country.
- **Sample Design.** We used a stratified¹¹, multistage¹² and probabilistic¹³ sampling method.
- **Sampling Stages:** Sample units were selected as follows:

14. A group of districts that comprise the urban core of a city.
15. A zone is a subdivision of a district as defined by INEC and corresponds to a conglomerate of approximately 40 blocks. In rural areas, or zones where no INE cartography is available, a locality will be divided into four zones: North, South, East and West, where a zone is selected randomly and appears in the route map.
16. For the starting block (selected randomly), the starting corner, direction of the route and skip for the selection of the first household are defined randomly. In case of rejection, unoccupied household or absent person, the next home is selected. After an effective survey has taken place, three homes are skipped and if the entire block has been covered without completing the quota, interviewers move on to the next block following the specific numbering on the route map. In rural areas, or zones where no INEC cartography is available, the interviewer must go to the main square and identify the zones: North, South, East and West of the populated area. Information gathering for the higher socio-economic levels is carried out through telephone surveys.
17. Must be a family member over 18. Home workers and visitors are not eligible.

Stage	Sampling unit	Sampling unit selection type
1	Localities ¹⁴	Probabilistic. Stratified
2	Zones ¹⁵	Probabilistic. Systematic with a randomly chosen block as starting point, selection probability is proportional to size (homes)
3	Households ¹⁶	Probabilistic. Systematic, random starting point
4	People ¹⁷	By gender and age quotas

4. Sampling system:

To manage our cartographic sampling frame for the selection of households, we used a software-driven block sampling system that allows for a systematic selection process with a random starting point so that households may be representative.

5. Size of the sample and sample margin:

	Total	Urban	Rural	Men	Women	18 to 24 years	25 to 39 years	40 years and over
Sample	1,200	810	390	599	601	249	474	477
Margin of error (%)	±2.8	3.4	5.0	4.0	4.0	6.2	4.5	4.5

6. Level of representativity:

It is the percentage that indicates the level of inference employed by the study for the total population over 18 years of age.

At the canton level, representativity is calculated numerically by dividing the total population of the cantons included in the universe under study (12,294,089) by the estimated population over 18 years of age (15,774,749). In this case, representativity stands at 77.9%.

7. Respondent selection process:

Respondents were chosen randomly within each household, in observance of the gender and sex quotas, and we carried out direct, face-to-face interviews.

8. Confidence level:

We assumed a confidence level of 95% and maximum variance for population proportions ($p=q=0.5$).

9. Date of field work:

From October 22 to November 7, 2013.

10. Sample distribution by province and geographic region:

In the Ecuadorian case, the sample considers 20 of the 24 provinces and was distributed according to rural and urban sectors.

Sample distribution by province and geographic region

Province	Urban sample	Rural sample	Total
Azuay	35	30	65
Bolívar	10	15	25

Province	Urban sample	Rural sample	Total
Cañar	10	10	20
Chimborazo	15	25	40
Cotopaxi	15	5	20
El Oro	50	15	65
Esmeraldas	15	10	25
Guayas	270	30	300
Imbabura	35	10	45
Loja	10	15	25
Los Ríos	40	25	65
Manabí	100	35	135
Morona Santiago	10	15	25
Napo	0	5	5
Orellana	5	5	10
Pichincha	160	95	255
Santa Elena	10	25	35
Sucumbíos	5	5	10
Tungurahua	10	15	25
Zamora Chinchipe	5	0	5
Total	810	390	1,200

APPENDIX 4

TECHNICAL FACTSHEET OF THE PERUVIAN NATIONAL SURVEY (URBAN AND RURAL)

1. Name of the market research company: Ipsos Peru

2. Legal entity requesting the survey: ASPeM

3. Methodology:

- **Sample Frame.** The construction and design of the survey is based on the population over 18 years of age as estimated for 2013 by Ipsos Peru. For the selection of households, Ipsos Peru relies on a cartographic sampling frame of household blocks from the 2007 Census for the Lima metropolitan area and 2005 for large cities.
- **Sample Design.** A multi-stage probabilistic simple was designed. Strata are defined by crossing the geographic region variable (Lima, North coast, South coast, Center coast, North sierra, South sierra, Center sierra, East) and context (urban and rural). In each stratum a sample of localities was selected and, within these, the zones with randomly-chosen starting blocks. After, we carried out a systematic sampling of households in each selected block and applied quotas for gender and age for the selection of people within each household.
- **Sampling Stages.** Sample units were selected as follows:

18. A group of districts that comprise the urban core of a city.
19. A zone is a subdivision of a district as defined by INEI and corresponds to a conglomerate of approximately 40 blocks. In rural areas, or zones where no INEI cartography is available, a locality will be divided into four zones: North, South, East and West, where a zone is selected randomly and appears in the route map.
20. For the starting block (selected randomly), the starting corner, direction of the route and skip for the selection of the first household are defined randomly. In case of rejection, unoccupied household or absent person, the next home is selected. After an effective survey has taken place, three homes are skipped and if the entire block has been covered without completing the quota, interviewers move on to the next block following the specific numbering on the route map. In rural areas, or zones where no INEI cartography is available, the interviewer must go to the main square and identify the zones: North, South, East and West of the populated area. Information gathering for the higher socio-economic levels is carried out through telephone surveys.
21. Must be a family member, over 18 and be eligible for voting. Home workers and visitors are not eligible.

Stage	Sampling unit	Sampling unit selection type
1	Localities ¹⁸	Probabilistic. Stratified
2	Zones ¹⁹	Probabilistic. Systematic with a randomly chosen block as starting point, selection probability is proportional to size (homes)
3	Households ²⁰	Probabilistic. Systematic, random starting point
4	People ²¹	By gender and age quotas

4. Sampling system:

To manage our cartographic sampling frame for the selection of households, we used a block sampling system (SIMUM) within a virtual environment of Ipsos Peru; this software allows for the selection of block samples in a systematic manner with a random starting point so that households may be representative.

5. Size of the sample and sample margin:

	Total	Urban	Rural	Men	Women	18 to 24 years	25 to 39 years	40 years and over
Sample	1,210	937	273	603	607	245	483	482
Margin of error (%)	2.8	3.2	6.0	4.0	4.0	6.3	4.5	4.5

6. Level of representativity:

It is the percentage that indicates the level of inference employed by the study for the total population over 18 years of age.

At the provincial level, representativity is calculated numerically by dividing the total population of the provinces included in the universe under study (14,969,682) by the estimated population over 18 years of age (19,373,424). In this case, representativity stands at 77.3%.

7. Respondent selection process:

Respondents were chosen randomly within each household, in observance of the gender and sex quotas, and we carried out direct, face-to-face interviews.

8. Confidence level:

We assumed a confidence level of 95% and maximum variance for population proportions ($p=q=0.5$).

9. Date of field work:

From October 19 to November 5, 2013.

10. Sample distribution by province and geographic region:

In the Peruvian case, the sample considers 24 departments and was distributed according to rural and urban sectors.

Sample distribution by region and geographic area

Departments	Urban sample	Rural sample	Total
Amazonas	0	10	10
Áncash	45	10	55

Departments	Urban sample	Rural sample	Total
Apurímac	10	10	20
Arequipa	41	0	41
Ayacucho	20	10	30
Cajamarca	10	40	50
Cusco	20	20	40
Huancavelica	0	30	30
Huánuco	0	20	20
Ica	30	10	40
Junín	40	22	62
La Libertad	40	10	50
Lambayeque	45	20	65
Lima	405	0	405
Lima provincias	40	0	40
Loreto	30	10	40
Madre de Dios	10	0	10
Moquegua	10	0	10
Pasco	10	0	10
Piura	51	21	72
Puno	20	20	40
San Martín	30	10	40
Tacna	10	0	10
Tumbes	10	0	10
Ucayali	10	0	10
Total	937	273	1,210

APPENDIX 5

INDEX CONSTRUCTION

Home Economics Index

Made up by the aggregation of 4 sequential questions in the survey:

- Who is responsible for the decisions related to the daily management of money in your household? If the respondent includes themselves the reply is codified as 1, and in every other case the value is 0.
- Does your family have a budget? If they respond affirmatively it is codified as 1 and in any other case as 0.
- Does your family use this budget to plan the use of money in a precise manner or to have a general plan for the use of money? If it is a precise plan it is codified as 1, and in the opposite case the value should be 0.
- Does your family follow this plan for the use of money? The value should be 1 if the answer is "Always", 0.5 if it is "Sometimes" and 0 if they reply "Never".

Home Economics Index =

$$10/4 \text{ (In charge of money + Budget + Exact Budget + Used Budget)}$$

Attitudes Index

Comprised by the aggregation of 8 questions associated to the attitudes of individuals who receive scores between 1 and 5 depending on whether they totally disagree with the statement (1) or totally agree (5):

- Before buying something I carefully consider if I can afford it
- I pay my bills on time
- I am willing to risk some of my own money when I make an investment
- I personally take care of my financial affairs

- I set myself long-term financial goals and I make an effort to achieve them
- I prefer living one day at a time and I am not concerned about the future: scored in opposite order
- I prefer to spend money rather than saving for the future: scored in opposite order
- Money is there to be spent: scored in opposite order

*Attitudes Index = 10/32 (Payment capacity
+ Pays on time + Risk - averse
+ Monitors own finances
+ Long - term goals
+ DOES NOT get by one day at a time
+ Preference for saving
+ Money NOT there to be spent - 8)*

Concepts Index

Made up of 8 questions that explore the capability of identifying concepts and executing simple arithmetic operations:

- Imagine that five brothers receive a donation or gift totaling 1,000 monetary units. If the brothers have to share the money equally, how much would each of them receive? If the answer is correct, codify as 1, and if wrong codify as 0.
- Now imagine that the brothers have to wait one year to receive their share of the 1,000 Monetary Units and inflation remains at an annual rate of 2%. After a year, they will be able to buy ...? If the answer is less than today (option 3) codify as 1, and in any other case codify as 0.
- Imagine that you lent a friend X Monetary Units one evening and that he returned these X Monetary Units the following day. Did your friend pay any interest for this loan? If answered negatively codify as 1, and in the opposite case codify as 0.

- Let's assume you have 100 Monetary Units in a savings account that pays a 2% annual interest rate. You do not pay in any other money nor do you pay anything out. How much money would you have in your account at the end of the first year once the interest has been paid? If they answer 102 Monetary Units codify as 1, and in any other case codify as 0.
- And considering the same 2% interest rate, how much would you have in the account at the end of five years? If they answer "More than 110 Monetary Units" codify as 1, and in any other case codify as 0.
- I would like to know if you consider the following statements true or false...
 - When you invest a lot of money, there is also the possibility of losing a lot of money. If answered affirmatively codify as 1, and in the opposite case codify as 0.
 - High inflation means that the cost of living is rising quickly. If answered affirmatively codify as 1, and in the opposite case codify as 0.
 - The probability of losing all your money is lower if you invest it in more than one place. If answered affirmatively codify as 1, and in the opposite case codify as 0.

*Concepts Index = 11/8 (Division + Value of money over time
+ Interest + Simple Interest
+ Compound Interest + Risk
- Return Relationship + Inflation
+ Diversification)*

APPENDIX 6

CODING OF CONTROL VARIABLES

Variable	Description	Type of Variable	Range	Coding
urban	Type of locality in which the survey is carried out	Categorical	1-4	Rural (1) - Large Urban (4)
gender	Gender of respondent	Dichotomous	0-1	Man (0) - Woman (1)
age	Respondent's age in years	Continuous	18-99	
age2	Age in years squared	Continuous	324-9801	
single	Marital status of respondent	Dichotomous	0-1	Not Single (0) - Single (1)
n_children	Number of children	Continuous	0-9	
education	Education level of Respondent	Categorical	1-11	No schooling (1) - Masters/PhD (11)
formal_employmentft	In Full-time Formal Employment	Dichotomous	0-1	No (0) - Yes (1)
income	Household Income Level	Categorical	1-7	Specific categories comparable by country. Lower (1) - Greater (7)
regular_income	Earning a Regular Income	Dichotomous	0-1	No (0) - Yes (1)
savings	Has saved in the last 12 months	Dichotomous	0-1	No (0) - Yes (1)
formal_savings	Has saved in the last 12 months through formal mechanisms	Dichotomous	0-1	No (0) - Yes (1)
transfers	The respondent or someone in their family receives government transfers	Dicotómica	0-1	No (0) - Yes (1)

APPENDIX 7

FINANCIAL EDUCATION INDEX REGRESSIONS BY COUNTRY

Home Economics					
	All	Peru	Bolivia	Colombia	Ecuador
Urban	0.42917 [4.23]**	-0.026219 [0.11]	-0.018572 [0.10]	0.685531 [2.93]**	1.020821 [5.86]**
Gender	0.145852 [1.59]	0.180664 [0.94]	0.370793 [2.11]*	0.266726 [1.39]	-0.166862 [0.97]
Age	0.090655 [4.94]**	0.102887 [2.50]*	0.069782 [1.99]*	0.051835 [1.44]	0.136241 [4.13]**
Age2	-0.000781 [3.83]**	-0.00073 [1.57]	-0.00058 [1.52]	-0.000364 [0.92]	-0.001353 [3.67]**
Single	-0.750531 [6.47]**	-0.540012 [2.22]*	-1.029124 [4.45]**	-0.581246 [2.54]*	-0.971345 [4.44]**
n_children	-0.011951 [1.72]+	-0.011276 [1.41]	-0.001243 [0.06]	-0.014843 [1.27]	-0.08784 [1.21]
Education	0.075822 [2.45]*	0.320238 [5.50]**	0.065796 [1.60]	0.031738 [1.28]	0.174253 [4.06]**
formal_employmentft	0.3106 [2.59]**	0.071485 [0.25]	-0.039916 [0.16]	0.834248 [3.48]**	0.116549 [0.56]
Income	0.162893 [3.47]**	0.002106 [0.02]	0.303436 [3.65]**	0.197229 [2.19]*	0.056301 [0.65]
regular_income	0.721874 [6.98]**	1.063985 [4.80]**	0.427292 [2.07]*	0.522799 [2.45]*	0.645762 [3.56]**
Savings	0.590864 [5.29]**	1.004564 [4.39]**	0.302237 [1.38]	0.215334 [0.97]	0.859287 [3.84]**

Home Economics					
	All	Peru	Bolivia	Colombia	Ecuador
Formal_savings	0.49939 [3.95]**	0.115973 [0.38]	0.863265 [4.04]**	0.873766 [3.26]**	-0.009754 [0.04]
Transfer	-0.194777 [1.83]+	-0.016849 [0.07]	-0.221299 [1.16]	-0.332366 [1.62]	-0.057392 [0.26]
Observations	4,340	980	1,135	1,094	1,131
R-squared	0.13	0.18	0.12	0.1	0.16

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

Attitudes					
	Todos	Peru	Bolivia	Colombia	Ecuador
Urban	-0.010576 [0.19]	-0.070939 [0.48]	-0.073378 [0.72]	-0.191462 [1.88]+	0.212824 [2.13]*
Gender	0.045589 [0.95]	-0.051482 [0.47]	0.154331 [1.58]	0.069484 [0.81]	-0.00159 [0.02]
Age	0.027435 [2.89]**	0.044697 [1.99]*	0.040986 [2.07]*	0.030598 [2.00]*	0.005976 [0.31]
Age2	-0.000367 [3.51]**	-0.000656 [2.56]*	-0.000401 [1.88]+	-0.000425 [2.58]*	-0.000114 [0.53]

	Attitudes				
	All	Peru	Bolivia	Colombia	Ecuador
Single	-0.163819 [2.73]**	-0.092201 [0.66]	-0.093902 [0.72]	-0.181046 [1.90]+	-0.246288 [2.08]*
n_children	0.005782 [1.34]	0.012414 [1.06]	0.006518 [0.90]	0.005485 [1.25]	0.026122 [0.76]
Education	0.046429 [3.18]**	0.131797 [4.39]**	0.113622 [5.28]**	0.023729 [2.82]**	0.053087 [2.37]*
formal_employmentft	0.050143 [0.82]	-0.072118 [0.48]	-0.008896 [0.07]	0.030576 [0.27]	0.130484 [1.20]
Income	0.081632 [3.32]**	-0.125129 [1.91]+	0.139091 [2.94]**	0.069794 [1.72]+	0.108786 [2.23]*
regular_income	0.076839 [1.47]	0.302475 [2.57]*	-0.015359 [0.13]	0.033307 [0.35]	-0.033541 [0.36]
Savings	0.312422 [5.38]**	0.443843 [3.40]**	0.192309 [1.54]	0.397091 [4.00]**	0.177465 [1.53]
Formal_savings	0.265644 [4.17]**	0.037466 [0.25]	0.249562 [2.16]*	0.282458 [2.40]*	0.371214 [2.88]**
Transfer	-0.063313 [1.12]	-0.103211 [0.67]	-0.004764 [0.05]	-0.050981 [0.55]	-0.220095 [1.88]+
Observations	4,010	819	1,039	1,044	1,108
R-squared	0.08	0.11	0.08	0.1	0.09

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	Concepts				
	All	Peru	Bolivia	Colombia	Ecuador
Urban	0.138116 [2.01]*	0.016417 [0.10]	0.160433 [1.31]	0.39787 [2.93]**	-0.096009 [0.88]
Gender	-0.248675 [4.17]**	-0.491987 [3.41]**	-0.028711 [0.25]	-0.353029 [3.31]**	-0.15613 [1.52]
Age	0.041913 [3.59]**	0.032248 [1.09]	0.007404 [0.32]	0.090313 [4.49]**	0.036556 [1.81]+
Age2	-0.000492 [3.74]**	-0.000368 [1.09]	-0.000087 [0.34]	-0.00102 [4.58]**	-0.000355 [1.56]
Single	-0.053607 [0.73]	0.159135 [0.83]	0.000027 [0.00]	-0.221359 [1.81]+	-0.236881 [1.88]+
n_children	0.003732 [0.53]	-0.000392 [0.04]	-0.009243 [1.27]	0.011332 [2.23]*	0.072823 [1.99]*
Education	0.078569 [2.25]*	0.277983 [6.65]**	0.169544 [6.32]**	0.019152 [1.45]	0.181252 [7.16]**
formal_employmentft	0.121011 [1.69]+	0.046401 [0.26]	0.178435 [1.18]	0.203173 [1.53]	0.015364 [0.13]
Income	0.213329 [6.29]**	0.138852 [1.77]+	0.226021 [4.06]**	0.118764 [2.56]*	0.190278 [3.62]**
regular_income	0.304939 [4.56]**	0.462765 [3.21]**	0.634301 [4.51]**	0.067221 [0.56]	-0.037029 [0.35]
Savings	-0.070107 [0.99]	-0.120226 [0.74]	0.124788 [0.84]	0.120452 [1.04]	-0.290183 [2.27]*

	Concepts				
	All	Peru	Bolivia	Colombia	Ecuador
Formal_savings	0.220318 [2.81]**	-0.037817 [0.21]	0.514771 [3.86]**	-0.023116 [0.16]	0.068958 [0.50]
Transfer	-0.126582 [1.75]+	0.275059 [1.49]	0.119911 [0.99]	-0.400052 [3.31]**	-0.449469 [3.41]**
Observations	4,340	980	1,135	1,094	1,131
R-squared	0.12	0.16	0.18	0.1	0.13

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

APPENDIX 8

FINANCIAL EDUCATION INDEX COMPONENTS REGRESSIONS BY COUNTRY

	-1	-2	-3	-4
	inchg_money_u	budget	exact_budget	used_budget
urban	-0.157 [1.65]+	0.326 [4.24]**	0.359 [3.54]**	0.344 [4.50]**
gender	-0.294 [3.51]**	0.199 [2.87]**	0.183 [2.16]*	0.186 [2.69]**
age	0.188 [12.89]**	0.009 [0.72]	-0.005 [0.33]	0.008 [0.59]
age2	-0.002 [10.76]**	-0.000 [0.17]	0.000 [0.55]	-0.000 [0.12]
single	-1.311 [15.24]**	-0.068 [0.79]	-0.126 [1.17]	-0.120 [1.40]
n_children	-0.001 [0.13]	-0.008 [1.24]	-0.044 [1.66]+	-0.006 [0.98]
education	0.008 [0.67]	0.102 [2.79]**	0.043 [1.63]	0.105 [2.93]**
formal_employmentft	0.560 [4.80]**	0.147 [1.62]	-0.069 [0.62]	0.079 [0.89]
income	-0.150 [3.69]**	0.193 [4.98]**	0.050 [1.21]	0.188 [4.92]**
regular_income	0.007 [0.07]	0.486 [6.57]**	0.399 [3.94]**	0.509 [6.88]**
savings	0.081 [0.81]	0.438 [5.45]**	0.352 [3.35]**	0.399 [4.99]**

	-1	-2	-3	-4
	inchg_money_u	budget	exact_budget	used_budget
formal_savings	0.306 [2.81]**	0.352 [3.67]**	0.015 [0.13]	0.340 [3.60]**
transfers	-0.142 [1.47]	-0.108 [1.34]	-0.016 [0.16]	-0.087 [1.08]
Observations	4,340	4,340	4,340	4,340

Note: All regressions estimated with a constant. Robust Z statistics in brackets +: significant at 10%; *: significant at 5%; **: significant at 10%.

	-5	-6	-7	-8	-9	-10	-11	-12
	cond_paycap	cond_paysontime	cond_risk	cond_monfin	cond_ltgoals	cond_1dayattime	cond_prefspend	cond_moneytbspent1
urban	0.040 [0.52]	-0.040 [0.57]	-0.190 [2.98]**	-0.007 [0.10]	-0.094 [1.36]	-0.010 [0.16]	-0.052 [0.79]	0.191 [3.04]**
gender	0.192 [2.81]**	0.072 [1.14]	-0.317 [5.31]**	0.001 [0.02]	0.081 [1.32]	0.060 [1.03]	0.195 [3.29]**	0.077 [1.34]
age	0.007 [0.58]	-0.013 [1.09]	0.008 [0.64]	0.052 [4.14]**	0.027 [2.24]*	0.029 [2.49]*	-0.001 [0.05]	0.000 [0.00]
age2	0.000 [0.18]	0.000 [1.73]+	-0.000 [1.50]	-0.001 [3.60]**	-0.000 [3.26]**	-0.000 [2.85]**	-0.000 [0.26]	-0.000 [0.22]
single	-0.217 [2.55]*	-0.279 [3.64]**	0.087 [1.20]	-0.114 [1.43]	-0.156 [2.05]*	-0.150 [2.11]*	-0.226 [3.13]**	-0.037 [0.53]

	-5	-6	-7	-8	-9	-10	-11	-12
	cond_ paycap	cond_ paysontime	cond_risk	cond_monfin	cond_ ltgoals	cond_ 1dayattime	cond_ prefspend	cond moneytbspent1
n_children	0.005 [0.51]	0.009 [1.12]	0.011 [1.34]	-0.001 [0.27]	0.010 [0.87]	-0.000 [0.08]	0.002 [0.25]	0.006 [1.73]+
education	0.072 [1.98]*	0.078 [4.77]**	0.033 [2.81]**	0.109 [6.67]**	0.065 [4.19]**	0.038 [2.12]*	0.041 [1.75]+	0.007 [0.60]
formal_ employmentft	-0.048 [0.53]	0.074 [0.90]	0.058 [0.79]	0.122 [1.46]	0.140 [1.81]+	0.007 [0.08]	-0.065 [0.84]	0.060 [0.80]
income	0.035 [0.89]	-0.003 [0.10]	0.049 [1.65]+	0.023 [0.71]	-0.014 [0.43]	0.032 [1.05]	0.064 [2.03]*	0.053 [1.84]+
regular_income	0.023 [0.30]	0.154 [2.26]*	0.139 [2.18]*	0.083 [1.20]	0.342 [5.17]**	0.042 [0.67]	0.051 [0.80]	-0.200 [3.27]**
savings	0.185 [2.23]*	0.316 [4.25]**	0.265 [3.80]**	0.269 [3.58]**	0.402 [5.51]**	0.089 [1.30]	0.191 [2.73]**	0.096 [1.40]
formal_savings	0.040 [0.41]	0.260 [3.01]**	0.051 [0.66]	0.316 [3.84]**	0.326 [4.06]**	0.112 [1.41]	0.154 [1.88]+	0.041 [0.53]
transfers	-0.010 [0.12]	0.093 [1.29]	0.054 [0.80]	-0.005 [0.07]	0.099 [1.37]	-0.098 [1.45]	-0.056 [0.83]	-0.160 [2.48]*
Observations	4,317	4,277	4,225	4,177	4,199	4,322	4,307	4,284

Note: All regressions estimated with a constant. Robust Z statistics in brackets +: significant at 10%; *: significant at 5%; **: significant at 10%.

	-13	-14	-15	-16	-17	-18	-19	-20
	con_division	con_moneytime	con_interest	con_interest_s	con_interest_c	con_riskret	con_inflation	con_diversification
urban	0.048 [0.53]	0.044 [0.57]	0.099 [0.89]	0.213 [2.09]*	-0.017 [0.23]	-0.018 [0.19]	0.302 [3.32]**	-0.091 [1.18]
gender	-0.354 [4.14]**	-0.148 [2.22]*	-0.107 [1.04]	-0.308 [3.64]**	-0.200 [2.91]**	0.061 [0.68]	-0.099 [1.16]	-0.015 [0.22]
age	0.049 [3.24]**	0.025 [2.00]*	-0.015 [0.80]	0.042 [2.36]*	0.013 [0.97]	-0.003 [0.20]	0.046 [2.96]**	0.024 [1.88]+
age2	-0.000 [2.98]**	-0.000 [1.75]+	0.000 [0.29]	-0.001 [2.48]*	-0.000 [1.14]	-0.000 [0.10]	-0.000 [2.54]*	-0.000 [1.80]+
single	-0.025 [0.23]	-0.029 [0.36]	-0.076 [0.62]	0.083 [0.77]	-0.053 [0.63]	-0.029 [0.27]	-0.076 [0.73]	-0.133 [1.60]
n_children	0.048 [1.70]+	0.005 [0.63]	-0.011 [1.23]	-0.010 [0.80]	-0.007 [0.87]	0.026 [1.71]+	0.005 [0.38]	0.005 [0.53]
education	0.232 [9.40]**	0.065 [1.34]	0.128 [4.63]**	0.098 [1.36]	0.017 [0.95]	0.071 [2.94]**	0.106 [4.64]**	0.055 [3.14]**
formal_employmentft	-0.032 [0.27]	0.191 [2.24]*	0.066 [0.45]	0.143 [1.38]	0.044 [0.51]	-0.033 [0.29]	-0.018 [0.16]	0.021 [0.24]
income	0.189 [4.13]**	0.075 [1.80]+	0.097 [1.86]+	0.220 [3.88]**	0.142 [4.16]**	0.048 [1.07]	0.094 [2.21]*	0.031 [0.91]
regular_income	0.132 [1.48]	0.072 [0.95]	0.370 [3.46]**	0.104 [1.03]	0.149 [1.97]*	0.116 [1.22]	0.291 [3.25]**	0.121 [1.63]
savings	0.030 [0.31]	-0.178 [2.26]*	-0.065 [0.55]	-0.028 [0.26]	0.201 [2.46]*	-0.263 [2.56]*	-0.077 [0.77]	-0.029 [0.36]

	-13	-14	-15	-16	-17	-18	-19	-20
	con_division	con_moneytime	con_interest	con_interest_s	con_interest_c	con_riskret	con_inflation	con_diversification
formal_savings	0.137 [1.14]	-0.023 [0.25]	0.047 [0.34]	0.471 [4.06]**	-0.001 [0.01]	0.209 [1.79]+	0.021 [0.19]	0.038 [0.42]
transfers	-0.118 [1.23]	-0.165 [2.05]*	0.023 [0.19]	-0.264 [2.49]*	0.141 [1.80]+	-0.077 [0.77]	0.018 [0.19]	-0.040 [0.51]
Observations	4,340	4,340	4,340	4,340	4,340	4,340	4,340	4,340

Note: All regressions estimated with a constant. Robust Z statistics in brackets +: significant at 10%; *: significant at 5%; **: significant at 10%.

APPENDIX 9

FINANCIAL EDUCATION INDEX REGRESSIONS BY COUNTRY WITH GENDER INTERACTIONS

Home Economics					
	All	Peru	Bolivia	Colombia	Ecuador
Urban	0.441247 [4.52]**	0.050929 [0.23]	0.003273 [0.02]	0.582654 [2.60]**	0.985734 [5.89]**
Gender	-1.821579 [13.67]**	-1.784786 [6.23]**	-1.663159 [6.06]**	-1.593938 [6.06]**	-2.130284 [8.61]**
woman_ headoffamily	2.681747 [19.46]**	2.689415 [8.98]**	2.662423 [9.21]**	2.709583 [9.98]**	2.613678 [10.54]**
Age	0.051645 [2.93]**	0.063308 [1.59]	0.031316 [0.94]	0.012966 [0.37]	0.094987 [3.04]**
Age2	-0.000408 [2.10]*	-0.000341 [0.76]	-0.0002 [0.55]	-0.000012 [0.03]	-0.000947 [2.74]**
Single	-0.539333 [4.82]**	-0.348877 [1.46]	-0.687056 [3.07]**	-0.423267 [1.92]+	-0.853723 [4.12]**
n_children	-0.014115 [2.32]*	-0.014257 [2.09]*	-0.004187 [0.24]	-0.017275 [1.81]+	-0.071858 [1.06]
Education	0.073085 [2.35]*	0.323184 [5.62]**	0.081729 [2.04]*	0.024968 [1.11]	0.169852 [4.16]**
formal_ employmentft	0.245891 [2.11]*	0.064675 [0.23]	-0.012211 [0.05]	0.656251 [2.78]**	0.031052 [0.15]
Income	0.195078 [4.30]**	0.031317 [0.28]	0.303356 [3.82]**	0.244364 [2.79]**	0.098292 [1.18]
regular_income	0.740882 [7.46]**	1.016171 [4.80]**	0.542675 [2.69]**	0.41342 [2.03]*	0.734845 [4.23]**

Home Economics					
	All	Peru	Bolivia	Colombia	Ecuador
Savings	0.592187 [5.52]**	1.017429 [4.60]**	0.319427 [1.51]	0.223522 [1.06]	0.854532 [3.98]**
Formal_savings	0.434988 [3.55]**	0.146556 [0.52]	0.792174 [3.81]**	0.812981 [3.05]**	-0.162613 [0.69]
Transfer	-0.168772 [1.65]+	-0.074798 [0.31]	-0.155772 [0.84]	-0.251755 [1.27]	-0.03866 [0.18]
Observations	4,340	980	1,135	1,094	1,131
R-squared	0.2	0.25	0.17	0.18	0.23

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

Attitudes					
	All	Peru	Bolivia	Colombia	Ecuador
Urban	-0.010225 [0.19]	-0.061517 [0.42]	-0.07128 [0.70]	-0.19446 [1.91]+	0.213358 [2.13]*
Gender	-0.05862 [0.80]	-0.232209 [1.30]	-0.101308 [0.62]	0.010455 [0.09]	0.016787 [0.12]
woman_headoffamily	0.141862 [1.87]+	0.247784 [1.30]	0.333425 [1.99]*	0.085481 [0.73]	-0.02443 [0.17]
Age	0.025446 [2.66]**	0.04062 [1.78]+	0.036782 [1.87]+	0.029533 [1.90]+	0.006373 [0.33]

Attitudes					
	All	Peru	Bolivia	Colombia	Ecuador
Age2	-0.000348 [3.32]**	-0.000614 [2.37]*	-0.000361 [1.71]+	-0.000416 [2.50]*	-0.000118 [0.54]
Single	-0.152263 [2.53]*	-0.073387 [0.52]	-0.048219 [0.36]	-0.175718 [1.84]+	-0.247291 [2.09]*
n_children	0.005772 [1.34]	0.012713 [1.07]	0.006089 [0.82]	0.005404 [1.25]	0.025996 [0.76]
Education	0.046269 [3.17]**	0.13266 [4.43]**	0.115544 [5.37]**	0.023509 [2.81]**	0.053116 [2.37]*
formal_employmentft	0.046792 [0.76]	-0.071437 [0.48]	-0.006674 [0.05]	0.025065 [0.22]	0.131288 [1.21]
Income	0.083404 [3.38]**	-0.121332 [1.85]+	0.138311 [2.92]**	0.071213 [1.74]+	0.108333 [2.21]*
regular_income	0.078319 [1.50]	0.298104 [2.55]*	0.002675 [0.02]	0.030356 [0.32]	-0.034297 [0.37]
Savings	0.312789 [5.39]**	0.448248 [3.44]**	0.191758 [1.54]	0.397479 [4.00]**	0.177386 [1.52]
Formal_savings	0.26273 [4.12]**	0.040407 [0.28]	0.242654 [2.09]*	0.280986 [2.38]*	0.372654 [2.89]**
Transfer	-0.061438 [1.08]	-0.103726 [0.68]	0.002965 [0.03]	-0.048188 [0.52]	-0.220237 [1.88]+
Observations	4,010	819	1,039	1,044	1,108
R-squared	0.08	0.11	0.08	0.1	0.09

Nota: Todas las regresiones se estimaron con constante. Estadísticos T Robustos entre corchetes. +: significativo al 10%, *: significativo al 5%, **: significativo al 10%

	Concepts				
	All	Peru	Bolivia	Colombia	Ecuador
Urban	0.137733 [2.00]*	0.009081 [0.06]	0.16005 [1.31]	0.3933 [2.89]**	-0.095113 [0.87]
Gender	-0.186321 [2.07]*	-0.305079 [1.38]	0.006939 [0.04]	-0.435697 [2.81]**	-0.105989 [0.69]
woman_ headoffamily	-0.084992 [0.91]	-0.255755 [1.10]	-0.046666 [0.23]	0.120384 [0.78]	-0.066748 [0.42]
Age	0.043149 [3.67]**	0.036012 [1.21]	0.008078 [0.35]	0.088586 [4.39]**	0.037609 [1.86]+
Age2	-0.000504 [3.81]**	-0.000405 [1.19]	-0.000093 [0.37]	-0.001005 [4.51]**	-0.000365 [1.59]
Single	-0.060301 [0.82]	0.140959 [0.73]	-0.005969 [0.04]	-0.21434 [1.75]+	-0.239885 [1.89]+
n_children	0.0038 [0.54]	-0.000108 [0.01]	-0.009191 [1.26]	0.011224 [2.17]*	0.072415 [1.97]*
Education	0.078656 [2.26]*	0.277703 [6.63]**	0.169265 [6.31]**	0.018851 [1.43]	0.181365 [7.15]**
formal_ employmentft	0.123062 [1.71]+	0.047048 [0.27]	0.177949 [1.18]	0.195264 [1.45]	0.017547 [0.15]
Income	0.212309 [6.27]**	0.136074 [1.73]+	0.226023 [4.06]**	0.120859 [2.61]**	0.189205 [3.59]**
regular_income	0.304336 [4.55]**	0.467312 [3.24]**	0.632278 [4.49]**	0.062361 [0.52]	-0.039304 [0.37]
Savings	-0.070149 [0.99]	-0.121449 [0.75]	0.124487 [0.84]	0.120815 [1.04]	-0.290061 [2.26]*

Concepts					
	All	Peru	Bolivia	Colombia	Ecuador
Formal_savings	0.222359 [2.84]**	-0.040725 [0.22]	0.516017 [3.87]**	-0.025816 [0.18]	0.072862 [0.53]
Transfer	-0.127406 [1.76]+	0.28057 [1.52]	0.118762 [0.98]	-0.396471 [3.29]**	-0.449947 [3.41]**
Observations	4,340	980	1,135	1,094	1,131
R-squared	0.12	0.16	0.18	0.1	0.13

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

Home Economics					
	All	Peru	Bolivia	Colombia	Ecuador
Urban	0.428861 [4.23]**	-0.026088 [0.11]	-0.018831 [0.10]	0.683454 [2.92]**	1.019582 [5.85]**
Gender	0.137911 [1.37]	0.178017 [0.86]	0.394933 [2.05]*	0.245214 [1.15]	-0.206069 [1.07]
woman_ singlemother	0.0371 [0.18]	0.013843 [0.03]	-0.105713 [0.27]	0.094535 [0.23]	0.18897 [0.50]
Age	0.090537 [4.93]**	0.102855 [2.49]*	0.070782 [2.02]*	0.051891 [1.44]	0.136031 [4.12]**
Age2	-0.00078 [3.82]**	-0.00073 [1.56]	-0.00059 [1.54]	-0.000364 [0.92]	-0.001355 [3.68]**

Home Economics					
	All	Peru	Bolivia	Colombia	Ecuador
Single	-0.763043 [5.58]**	-0.544041 [1.93]+	-0.989504 [3.65]**	-0.612348 [2.26]*	-1.038317 [3.91]**
n_children	-0.012073 [1.74]+	-0.011315 [1.42]	-0.001026 [0.05]	-0.015105 [1.28]	-0.093179 [1.27]
Education	0.07581 [2.46]*	0.320135 [5.51]**	0.066372 [1.61]	0.031936 [1.29]	0.173534 [4.04]**
formal_employmentft	0.308647 [2.56]*	0.070758 [0.25]	-0.03436 [0.14]	0.829929 [3.45]**	0.107197 [0.51]
Income	0.162993 [3.47]**	0.002102 [0.02]	0.302415 [3.63]**	0.197574 [2.19]*	0.056792 [0.65]
regular_income	0.722081 [6.98]**	1.064313 [4.79]**	0.429466 [2.07]*	0.524412 [2.45]*	0.646585 [3.56]**
Savings	0.590898 [5.29]**	1.005041 [4.37]**	0.303798 [1.38]	0.216599 [0.98]	0.852552 [3.80]**
Formal_savings	0.499839 [3.95]**	0.116003 [0.38]	0.86106 [4.02]**	0.872701 [3.26]**	-0.001889 [0.01]
Transfer	-0.196325 [1.83]+	-0.016915 [0.07]	-0.212994 [1.10]	-0.33851 [1.62]	-0.057466 [0.26]
Observations	4,340	980	1,135	1,094	1,131
R-squared	0.13	0.18	0.12	0.1	0.16

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	Attitudes				
	All	Peru	Bolivia	Colombia	Ecuador
Urban	-0.012681 [0.23]	-0.066544 [0.46]	-0.072814 [0.72]	-0.188847 [1.85]+	0.211743 [2.12]*
Gender	0.001842 [0.03]	-0.181826 [1.51]	0.119269 [1.08]	0.092311 [0.98]	-0.040933 [0.41]
woman_ singlemother	0.204882 [2.03]*	0.665837 [2.94]**	0.157163 [0.72]	-0.101128 [0.66]	0.19328 [0.92]
Age	0.026649 [2.80]**	0.044221 [1.97]*	0.038981 [1.95]+	0.03055 [1.99]*	0.005665 [0.29]
Age2	-0.00036 [3.44]**	-0.000653 [2.55]*	-0.000382 [1.77]+	-0.000425 [2.58]*	-0.000114 [0.53]
Single	-0.233517 [3.27]**	-0.288836 [1.76]+	-0.154179 [0.93]	-0.147754 [1.31]	-0.31405 [2.22]*
n_children	0.005018 [1.20]	0.00987 [0.88]	0.006218 [0.90]	0.005735 [1.30]	0.020719 [0.60]
Education	0.046356 [3.23]**	0.125839 [4.20]**	0.112706 [5.24]**	0.023534 [2.79]**	0.052479 [2.35]*
formal_ employmentft	0.039916 [0.65]	-0.112197 [0.75]	-0.016089 [0.12]	0.034546 [0.31]	0.122079 [1.12]
Income	0.082627 [3.36]**	-0.125853 [1.93]+	0.141323 [2.99]**	0.069012 [1.70]+	0.109185 [2.24]*
regular_income	0.077748 [1.49]	0.320445 [2.72]**	-0.018393 [0.16]	0.032163 [0.34]	-0.033369 [0.36]

Attitudes					
	Todos	Peru	Bolivia	Colombia	Ecuador
Savings	0.313208 [5.39]**	0.468863 [3.62]**	0.191525 [1.54]	0.394958 [3.98]**	0.170057 [1.47]
Formal_savings	0.26731 [4.20]**	0.040477 [0.28]	0.251214 [2.17]*	0.284763 [2.41]*	0.380151 [2.97]**
Transfer	-0.071406 [1.26]	-0.113177 [0.74]	-0.016613 [0.16]	-0.04536 [0.49]	-0.218971 [1.87]+
Observations	4,010	819	1,039	1,044	1,108
R-squared	0.08	0.12	0.08	0.1	0.09

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

Concepts					
	All	Peru	Bolivia	Colombia	Ecuador
Urban	0.135743 [1.98]*	0.019289 [0.12]	0.161622 [1.32]	0.393554 [2.89]**	-0.095586 [0.88]
Gender	-0.309651 [4.81]**	-0.549884 [3.57]**	-0.13926 [1.09]	-0.397742 [3.52]**	-0.142744 [1.29]
woman_singlemother	0.2849 [2.21]*	0.302775 [0.91]	0.484112 [2.05]*	0.196489 [0.87]	-0.064516 [0.29]
Age	0.041008 [3.52]**	0.031544 [1.07]	0.002826 [0.12]	0.090428 [4.49]**	0.036627 [1.82]+
Age2	-0.000484 [3.69]**	-0.000361 [1.07]	-0.000044 [0.18]	-0.001022 [4.58]**	-0.000354 [1.55]

	Concepts				
	All	Peru	Bolivia	Colombia	Ecuador
Single	-0.14969 [1.80]+	0.071009 [0.35]	-0.181412 [1.05]	-0.286004 [1.94]+	-0.214016 [1.48]
n_children	0.00279 [0.39]	-0.001226 [0.12]	-0.010234 [1.51]	0.010787 [2.19]*	0.074646 [2.01]*
Education	0.078478 [2.27]*	0.275717 [6.55]**	0.166904 [6.22]**	0.019564 [1.48]	0.181498 [7.15]**
formal_employmentft	0.106012 [1.47]	0.030509 [0.17]	0.152994 [1.01]	0.194196 [1.45]	0.018556 [0.16]
Income	0.214098 [6.33]**	0.138765 [1.76]+	0.230696 [4.16]**	0.119481 [2.56]*	0.19011 [3.61]**
regular_income	0.306527 [4.58]**	0.469941 [3.26]**	0.624347 [4.44]**	0.070573 [0.59]	-0.03731 [0.35]
Savings	-0.069845 [0.99]	-0.109792 [0.68]	0.117641 [0.79]	0.123082 [1.06]	-0.287883 [2.25]*
Formal_savings	0.223772 [2.86]**	-0.037173 [0.20]	0.524866 [3.94]**	-0.025329 [0.18]	0.066274 [0.48]
Transfer	-0.138469 [1.91]+	0.273603 [1.49]	0.081874 [0.67]	-0.412821 [3.37]**	-0.449443 [3.41]**
Observations	4,340	980	1,135	1,094	1,131
R-squared	0.12	0.16	0.18	0.1	0.13

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

Home Economics					
	All	Peru	Bolivia	Colombia	Ecuador
Urban	0.425855 [4.19]**	-0.032336 [0.14]	-0.019081 [0.10]	0.685748 [2.93]**	1.020839 [5.85]**
Gender	0.01596 [0.14]	-0.06669 [0.31]	0.277405 [0.90]	0.268958 [1.16]	-0.174479 [0.91]
woman_transfer	0.35292 [1.89]+	0.918999 [2.00]*	0.135733 [0.37]	-0.007871 [0.02]	0.036639 [0.09]
Age	0.090389 [4.93]**	0.105146 [2.58]*	0.069246 [1.98]*	0.051853 [1.44]	0.136368 [4.13]**
Age2	-0.000778 [3.82]**	-0.000759 [1.64]	-0.000575 [1.50]	-0.000364 [0.92]	-0.001355 [3.67]**
Single	-0.755541 [6.51]**	-0.517802 [2.16]*	-1.036149 [4.47]**	-0.580968 [2.53]*	-0.971133 [4.44]**
n_children	-0.011559 [1.64]	-0.011008 [1.31]	-0.000876 [0.05]	-0.014844 [1.27]	-0.087992 [1.21]
Education	0.076509 [2.46]*	0.316844 [5.45]**	0.065854 [1.60]	0.031719 [1.28]	0.174272 [4.06]**
formal_employmentft	0.30432 [2.53]*	0.075574 [0.26]	-0.041073 [0.17]	0.834304 [3.48]**	0.116434 [0.55]
Income	0.162106 [3.46]**	-0.007042 [0.06]	0.303152 [3.65]**	0.197266 [2.19]*	0.056601 [0.65]
regular_income	0.72487 [7.01]**	1.07943 [4.88]**	0.426224 [2.06]*	0.522586 [2.44]*	0.645868 [3.56]**
Savings	0.589722 [5.28]**	0.966689 [4.24]**	0.305226 [1.39]	0.215437 [0.97]	0.85986 [3.84]**

Home Economics					
	All	Peru	Bolivia	Colombia	Ecuador
Formal_savings	0.499754 [3.95]**	0.139027 [0.46]	0.862459 [4.04]**	0.873752 [3.26]**	-0.010092 [0.04]
Transfer	-0.37777 [2.68]**	-0.524536 [1.56]	-0.286552 [1.08]	-0.32835 [1.15]	-0.077104 [0.24]
Observations	4,340	980	1,135	1,094	1,131
R-squared	0.13	0.18	0.12	0.1	0.16

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

Attitudes					
	All	Peru	Bolivia	Colombia	Ecuador
Urban	-0.010513 [0.19]	-0.073162 [0.50]	-0.073025 [0.72]	-0.184849 [1.81]+	0.212852 [2.13]*
Gender	0.047742 [0.82]	-0.113453 [0.92]	0.27381 [1.60]	0.136552 [1.33]	-0.023824 [0.24]
woman_transfer	-0.005975 [0.06]	0.25107 [0.96]	-0.17542 [0.85]	-0.235542 [1.31]	0.108665 [0.47]
Age	0.027435 [2.89]**	0.046159 [2.04]*	0.041875 [2.11]*	0.031097 [2.02]*	0.006325 [0.33]
Age2	-0.000367 [3.51]**	-0.000672 [2.60]**	-0.00041 [1.92]+	-0.000431 [2.59]**	-0.000118 [0.55]

Attitudes					
	All	Peru	Bolivia	Colombia	Ecuador
Single	-0.163732 [2.73]**	-0.085106 [0.61]	-0.083441 [0.63]	-0.173262 [1.81]+	-0.245514 [2.07]*
n_children	0.005775 [1.34]	0.012293 [1.04]	0.006074 [0.84]	0.005448 [1.30]	0.025661 [0.75]
Education	0.046415 [3.18]**	0.132013 [4.37]**	0.113455 [5.28]**	0.023164 [2.85]**	0.053148 [2.37]*
formal_employmentft	0.050238 [0.82]	-0.072026 [0.48]	-0.009301 [0.07]	0.03192 [0.29]	0.130583 [1.20]
Income	0.081654 [3.32]**	-0.131361 [2.01]*	0.139432 [2.94]**	0.070676 [1.74]+	0.109651 [2.24]*
regular_income	0.076771 [1.47]	0.308793 [2.63]**	-0.014472 [0.13]	0.025843 [0.27]	-0.03354 [0.36]
Savings	0.31241 [5.38]**	0.43622 [3.34]**	0.188162 [1.51]	0.398811 [4.01]**	0.17865 [1.54]
Formal_savings	0.265653 [4.17]**	0.04152 [0.28]	0.25068 [2.16]*	0.282567 [2.40]*	0.370867 [2.88]**
Transfer	-0.060235 [0.78]	-0.240589 [1.19]	0.079229 [0.54]	0.069305 [0.50]	-0.277941 [1.57]
Observations	4,010	819	1,039	1,044	1,108
R-squared	0.08	0.11	0.08	0.1	0.09

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	Concepts				
	All	Peru	Bolivia	Colombia	Ecuador
Urban	0.138794 [2.02]*	0.018257 [0.11]	0.160221 [1.31]	0.398546 [2.92]**	-0.096274 [0.88]
Gender	-0.222083 [3.12]**	-0.417603 [2.66]**	-0.067695 [0.34]	-0.346099 [2.93]**	-0.040117 [0.35]
woman_ transfer	-0.072252 [0.59]	-0.276362 [0.80]	0.056661 [0.24]	-0.02444 [0.10]	-0.557982 [2.19]*
Age	0.041967 [3.59]**	0.031569 [1.06]	0.00718 [0.31]	0.090368 [4.49]**	0.034625 [1.71]+
Age2	-0.000492 [3.75]**	-0.000359 [1.06]	-0.000084 [0.33]	-0.001021 [4.58]**	-0.000331 [1.44]
Single	-0.052581 [0.72]	0.152456 [0.79]	-0.002906 [0.02]	-0.220495 [1.78]+	-0.240113 [1.91]+
n_children	0.003651 [0.52]	-0.000472 [0.05]	-0.00909 [1.24]	0.011329 [2.22]*	0.075131 [2.05]*
Education	0.078428 [2.25]*	0.279003 [6.66]**	0.169568 [6.33]**	0.019094 [1.44]	0.180954 [7.19]**
formal_ employmentft	0.122297 [1.71]+	0.045171 [0.26]	0.177952 [1.18]	0.203348 [1.53]	0.017113 [0.15]
Income	0.213491 [6.30]**	0.141603 [1.80]+	0.225903 [4.06]**	0.118879 [2.56]*	0.185719 [3.56]**
regular_income	0.304325 [4.54]**	0.458121 [3.18]**	0.633855 [4.50]**	0.066559 [0.55]	-0.038633 [0.37]
Savings	-0.069873 [0.99]	-0.108836 [0.66]	0.126036 [0.85]	0.12077 [1.04]	-0.298908 [2.34]*

	Concepts				
	All	Peru	Bolivia	Colombia	Ecuador
Formal_savings	0.220244 [2.81]**	-0.044749 [0.24]	0.514434 [3.86]**	-0.023159 [0.16]	0.074109 [0.54]
Transfer	-0.089119 [0.91]	0.427731 [1.58]	0.092672 [0.54]	-0.387582 [2.12]*	-0.149264 [0.78]
Observations	4,340	980	1,135	1,094	1,131
R-squared	0.12	0.16	0.18	0.1	0.13

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

APPENDIX 10

FINANCIAL EDUCATION INDEX COMPONENTS REGRESSIONS BY COUNTRY WITH GENDER INTERACTIONS

	-2	-3	-4
	budget	exact_budget	used_budget
Urban	0.326939 [4.26]**	0.36169 [3.56]**	0.345827 [4.51]**
Gender	-0.038055 [0.36]	-0.052387 [0.38]	-0.055023 [0.52]
woman_headoffamily	0.326206 [2.96]**	0.31465 [2.22]*	0.330192 [2.99]**
Age	0.004569 [0.35]	-0.00974 [0.59]	0.002824 [0.22]
Age2	0.000021 [0.15]	0.000141 [0.78]	0.000029 [0.20]
Single	-0.042372 [0.49]	-0.097125 [0.90]	-0.09414 [1.09]
n_children	-0.008515 [1.28]	-0.043058 [1.68]+	-0.006683 [1.02]
Education	0.101932 [2.79]**	0.043113 [1.60]	0.105648 [2.93]**
formal_employmentft	0.138495 [1.52]	-0.077002 [0.70]	0.070464 [0.78]
Income	0.19744 [5.09]**	0.053602 [1.30]	0.192611 [5.03]**
regular_income	0.489169 [6.61]**	0.400973 [3.95]**	0.512068 [6.92]**
Savings	0.439441 [5.46]**	0.353136 [3.36]**	0.401223 [5.01]**

	-2	-3	-4
	budget	exact_budget	used_budget
formal_savings	0.344607 [3.59]**	0.007404 [0.07]	0.332105 [3.51]**
Transfer	-0.10539 [1.31]	-0.013237 [0.13]	-0.084001 [1.05]
Observations	4,340	4,340	4,340

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	-5	-6	-7	-8	-9	-10	-11	-12
	cond_paycapa	cond_paysontime	cond_risk	cond_finmon	cond_lgoals	cond_liveday1	cond_prefspend1	cond_moneytospend1
Urban	0.039798 [0.52]	-0.03993 [0.57]	-0.188923 [2.96]**	-0.007228 [0.10]	-0.095182 [1.38]	-0.009939 [0.15]	-0.051723 [0.79]	0.190476 [3.04]**
Gender	0.194097 [1.78]+	0.02729 [0.27]	-0.465938 [5.03]**	-0.187441 [1.90]+	-0.047458 [0.49]	0.025737 [0.28]	0.227821 [2.48]*	0.189236 [2.02]*
woman_headoffamily	-0.003269 [0.03]	0.060623 [0.59]	0.203514 [2.10]*	0.258862 [2.55]*	0.175193 [1.74]+	0.046386 [0.49]	-0.044496 [0.46]	-0.151027 [1.55]
Age	0.007478 [0.57]	-0.01391 [1.15]	0.004344 [0.36]	0.048331 [3.80]**	0.024584 [2.00]*	0.028392 [2.41]*	0.000113 [0.01]	0.002248 [0.19]
Age2	0.000024 [0.17]	0.000237 [1.78]+	-0.000169 [1.25]	-0.000465 [3.31]**	-0.000418 [3.04]**	-0.000361 [2.78]**	-0.000038 [0.31]	-0.000049 [0.38]
Single	-0.217379 [2.54]*	-0.27402 [3.56]**	0.102537 [1.40]	-0.092982 [1.16]	-0.14239 [1.86]+	-0.146976 [2.05]*	-0.228984 [3.17]**	-0.049317 [0.70]

	-5	-6	-7	-8	-9	-10	-11	-12
	cond_ paycapa	cond_ paysontime	cond_risk	cond_ finmon	cond_ltgoals	cond_ liveday1	cond_ prefspend1	cond_ moneytospend1
n_children	0.005493 [0.51]	0.00853 [1.12]	0.011127 [1.34]	-0.001021 [0.30]	0.009919 [0.87]	-0.00054 [0.09]	0.001794 [0.26]	0.006039 [1.77]+
Education	0.071852 [1.98]*	0.077486 [4.76]**	0.03216 [2.78]**	0.108622 [6.66]**	0.064883 [4.18]**	0.038259 [2.12]*	0.040857 [1.75]+	0.007174 [0.62]
formal_ employmentft	-0.048097 [0.53]	0.072198 [0.88]	0.054328 [0.74]	0.117296 [1.40]	0.136096 [1.76]+	0.005544 [0.07]	-0.064214 [0.83]	0.064888 [0.86]
Income	0.034572 [0.89]	-0.0024 [0.07]	0.051721 [1.74]+	0.026905 [0.82]	-0.011006 [0.35]	0.032498 [1.07]	0.063262 [2.01]*	0.050528 [1.76]+
regular_income	0.022458 [0.30]	0.155093 [2.27]*	0.141264 [2.21]*	0.087984 [1.27]	0.343887 [5.20]**	0.042853 [0.67]	0.050568 [0.79]	-0.202511 [3.30]**
Savings	0.184502 [2.23]*	0.315607 [4.25]**	0.264628 [3.81]**	0.269493 [3.59]**	0.403624 [5.53]**	0.088865 [1.29]	0.191316 [2.72]**	0.096386 [1.40]
formal_savings	0.040341 [0.41]	0.258344 [3.00]**	0.046794 [0.60]	0.310946 [3.77]**	0.320916 [3.99]**	0.111286 [1.40]	0.15568 [1.89]+	0.044109 [0.58]
Transfer	-0.009955 [0.12]	0.094119 [1.30]	0.056392 [0.84]	-0.001307 [0.02]	0.101591 [1.41]	-0.097497 [1.44]	-0.056039 [0.83]	-0.160977 [2.50]*
Observations	4,317	4,277	4,225	4,177	4,199	4,322	4,307	4,284

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	-13	-14	-15	-16	-17	-18	-19	-20
	cond_ division	cond_ inflation	cond_ interest	cond_ interest_s	cond_ interest_c	cond_riskret	cond_ inflation2	cond_ diversification
urban	0.04816 [0.54]	0.042526 [0.56]	0.099001 [0.89]	0.214275 [2.11]*	-0.017695 [0.23]	-0.018499 [0.19]	0.302109 [3.31]**	-0.091056 [1.19]
Gender	-0.504158 [4.06]**	0.037681 [0.37]	-0.082619 [0.52]	-0.431449 [3.09]**	-0.166541 [1.56]	0.073654 [0.53]	0.032638 [0.24]	0.006595 [0.06]
woman_ headoffamily	0.205967 [1.64]	-0.253449 [2.40]*	-0.032672 [0.20]	0.165768 [1.12]	-0.045973 [0.41]	-0.01718 [0.12]	-0.179771 [1.30]	-0.029374 [0.27]
Age	0.045736 [2.99]**	0.028862 [2.27]*	-0.014249 [0.77]	0.039468 [2.21]*	0.013352 [1.01]	-0.002952 [0.18]	0.048535 [3.10]**	0.02461 [1.90]+
Age2	-0.000459 [2.77]**	-0.00028 [1.98]*	0.000053 [0.27]	-0.000483 [2.35]*	-0.000171 [1.17]	-0.00002 [0.12]	-0.000449 [2.67]**	-0.000258 [1.82]+
Single	-0.006193 [0.06]	-0.048967 [0.59]	-0.078519 [0.63]	0.095521 [0.89]	-0.056604 [0.67]	-0.03004 [0.28]	-0.091289 [0.87]	-0.1355 [1.62]
n_children	0.049765 [1.71]+	0.005088 [0.67]	-0.011125 [1.23]	-0.010118 [0.81]	-0.006838 [0.87]	0.026086 [1.71]+	0.005594 [0.40]	0.004823 [0.54]
Education	0.232 [9.40]**	0.06485 [1.34]	0.128006 [4.63]**	0.097814 [1.36]	0.016955 [0.95]	0.070716 [2.94]**	0.105676 [4.63]**	0.05461 [3.14]**
formal_ employmentft	-0.037818 [0.32]	0.197649 [2.32]*	0.067201 [0.46]	0.140747 [1.35]	0.045559 [0.52]	-0.032777 [0.28]	-0.014418 [0.13]	0.022111 [0.25]
Income	0.192013 [4.18]**	0.071868 [1.73]+	0.096377 [1.86]+	0.221343 [3.91]**	0.141537 [4.13]**	0.047777 [1.07]	0.092161 [2.17]*	0.030907 [0.90]
regular_ income	0.134993 [1.51]	0.070663 [0.93]	0.369775 [3.45]**	0.106045 [1.05]	0.148228 [1.97]*	0.11544 [1.22]	0.289056 [3.24]**	0.120929 [1.63]

	-13	-14	-15	-16	-17	-18	-19	-20
	cond_ division	cond_ inflation	cond_ interest	cond_ interest_s	cond_ interest_c	cond_riskret	cond_ inflation2	cond_ diversification
Savings	0.029094 [0.30]	-0.17891 [2.27]*	-0.064484 [0.55]	-0.026941 [0.25]	0.200942 [2.46]*	-0.26333 [2.56]*	-0.0763 [0.77]	-0.029079 [0.36]
formal_ savings	0.132765 [1.10]	-0.017124 [0.18]	0.047606 [0.34]	0.466465 [4.01]**	0.000249 [0.00]	0.20901 [1.80]+	0.025007 [0.22]	0.038876 [0.42]
Transfer	-0.118391 [1.23]	-0.167589 [2.09]*	0.022495 [0.19]	-0.26235 [2.47]*	0.140888 [1.79]+	-0.077499 [0.77]	0.016929 [0.17]	-0.040535 [0.51]
Observations	4,340	4,340	4,340	4,340	4,340	4,340	4,340	4,340

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	-21	-22	-23	-24
	inchg_money_u	budget	exact_budget	used_budget
urban	-0.16193 [1.70]+	0.326085 [4.25]**	0.360324 [3.55]**	0.344735 [4.50]**
Gender	-0.425005 [4.22]**	0.214959 [2.80]**	0.212606 [2.29]*	0.200059 [2.62]**
woman_singlemother	0.400965 [2.65]**	-0.072694 [0.49]	-0.14776 [0.79]	-0.066961 [0.45]
Age	0.186976 [12.77]**	0.009559 [0.74]	-0.005277 [0.32]	0.007822 [0.61]
Age2	-0.001741 [10.64]**	-0.000027 [0.18]	0.0001 [0.55]	-0.000019 [0.13]

	-21	-22	-23	-24
	inchg_money_u	budget	exact_budget	used_budget
Single	-1.461026 [13.82]**	-0.043655 [0.43]	-0.075223 [0.60]	-0.097868 [0.97]
n_children	-0.002768 [0.30]	-0.008091 [1.21]	-0.040755 [1.64]	-0.006275 [0.96]
Education	0.008233 [0.68]	0.102038 [2.79]**	0.043551 [1.60]	0.10572 [2.94]**
formal_employmentft	0.534901 [4.54]**	0.150846 [1.66]+	-0.061614 [0.56]	0.082767 [0.92]
Income	-0.148188 [3.64]**	0.192676 [4.97]**	0.049341 [1.20]	0.187878 [4.91]**
regular_income	0.010115 [0.11]	0.485109 [6.56]**	0.398332 [3.94]**	0.508015 [6.87]**
Savings	0.082777 [0.83]	0.437613 [5.45]**	0.352083 [3.35]**	0.399413 [4.99]**
formal_savings	0.3117 [2.85]**	0.350983 [3.65]**	0.013627 [0.12]	0.33869 [3.58]**
Transfer	-0.164766 [1.69]+	-0.104786 [1.29]	-0.012129 [0.12]	-0.083808 [1.04]
Observations	4,340	4,340	4,340	4,340

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	-25	-26	-27	-28	-29	-30	-31	-32
	cond_ paycapa	cond_ paysontime	cond_ risk	cond_ finmon	cond_ ltgoals	cond_ liveday1	cond_ prefspend1	cond_ moneytospend1
urban	0.039683 [0.52]	-0.040181 [0.58]	-0.191039 [2.99]**	-0.007819 [0.11]	-0.093655 [1.36]	-0.011321 [0.17]	-0.0516 [0.79]	0.189552 [3.02]**
Gender	0.16787 [2.22]*	0.065837 [0.95]	-0.347431 [5.22]**	-0.030326 [0.44]	0.07815 [1.17]	0.014331 [0.22]	0.174499 [2.68]**	0.050443 [0.79]
woman_ singlemother	0.106059 [0.72]	0.027465 [0.20]	0.14109 [1.12]	0.144153 [1.08]	0.012152 [0.09]	0.212526 [1.69]+	0.096861 [0.76]	0.124978 [1.03]
Age	0.007044 [0.55]	-0.013117 [1.09]	0.007361 [0.62]	0.051767 [4.11]**	0.027192 [2.24]*	0.028387 [2.43]*	-0.000854 [0.08]	-0.000382 [0.03]
Age2	0.000028 [0.20]	0.000229 [1.73]+	-0.000199 [1.48]	-0.000499 [3.57]**	-0.000443 [3.26]**	-0.000362 [2.81]**	-0.000029 [0.24]	-0.000025 [0.19]
Single	-0.251323 [2.58]**	-0.287897 [3.16]**	0.039941 [0.47]	-0.162955 [1.74]+	-0.160097 [1.82]+	-0.220401 [2.67]**	-0.257568 [3.06]**	-0.079215 [0.96]
n_children	0.004981 [0.47]	0.008437 [1.11]	0.010697 [1.31]	-0.00128 [0.38]	0.00981 [0.86]	-0.001357 [0.22]	0.001305 [0.18]	0.005458 [1.57]
Education	0.071345 [1.96]*	0.077463 [4.76]**	0.032151 [2.81]**	0.10785 [6.62]**	0.064884 [4.18]**	0.037836 [2.15]*	0.040439 [1.74]+	0.006945 [0.61]
formal_ employmentft	-0.053718 [0.59]	0.072169 [0.88]	0.050626 [0.69]	0.114694 [1.37]	0.139506 [1.80]+	-0.004206 [0.05]	-0.070167 [0.90]	0.053976 [0.72]
Income	0.035109 [0.91]	-0.003009 [0.09]	0.049595 [1.67]+	0.024036 [0.74]	-0.013662 [0.43]	0.033321 [1.10]	0.064327 [2.05]*	0.05314 [1.86]+
regular_ income	0.023316 [0.31]	0.154511 [2.26]*	0.139398 [2.18]*	0.082957 [1.21]	0.341647 [5.17]**	0.043711 [0.69]	0.051746 [0.81]	-0.199773 [3.26]**

	-25	-26	-27	-28	-29	-30	-31	-32
	cond_ paycapa	cond_ paysontime	cond_ risk	cond_ finmon	cond_ ltgoals	cond_ liveday1	cond_ prefspend1	cond_ moneytospend1
Savings	0.184931 [2.23]*	0.315686 [4.25]**	0.264634 [3.80]**	0.269562 [3.59]**	0.401806 [5.51]**	0.088221 [1.28]	0.191324 [2.72]**	0.096108 [1.40]
formal_savings	0.041757 [0.43]	0.260103 [3.02]**	0.053984 [0.69]	0.318589 [3.86]**	0.325733 [4.06]**	0.115356 [1.45]	0.155673 [1.89]+	0.042981 [0.56]
Transfer	-0.014235 [0.18]	0.091918 [1.27]	0.048411 [0.72]	-0.011794 [0.16]	0.098579 [1.36]	-0.107294 [1.58]	-0.060145 [0.89]	-0.164814 [2.55]*
Observations	4,317	4,277	4,225	4,177	4,199	4,322	4,307	4,284

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	-33	-34	-35	-36	-37	-38	-39	-40
	cond_ division	cond_ inflation	cond_ interest	cond_ interest_s	cond_ interest_c	cond_ riskret	cond_ inflation2	cond_ diversification
urban	0.04617 [0.51]	0.041205 [0.54]	0.097698 [0.87]	0.210527 [2.07]*	-0.01642 [0.21]	-0.017862 [0.19]	0.301639 [3.31]**	-0.091286 [1.19]
Gender	-0.421571 [4.51]**	-0.223967 [3.08]**	-0.144309 [1.32]	-0.396125 [4.23]**	-0.169385 [2.24]*	0.086079 [0.89]	-0.127189 [1.36]	-0.026845 [0.35]
woman_ singlemother	0.326674 [1.75]+	0.355376 [2.49]*	0.19546 [0.88]	0.386751 [2.14]*	-0.146672 [1.00]	-0.123622 [0.65]	0.123143 [0.70]	0.054462 [0.37]
Age	0.047901 [3.16]**	0.024073 [1.92]+	-0.015502 [0.84]	0.040861 [2.31]*	0.013093 [1.00]	-0.002723 [0.17]	0.045355 [2.93]**	0.023996 [1.87]+

	-33	-34	-35	-36	-37	-38	-39	-40
	cond_ division	cond_ inflation	cond_ interest	cond_ interest_s	cond_ interest_c	cond_ riskret	cond_ inflation2	cond_ diversification
Age2	-0.000484 [2.94]**	-0.000236 [1.69]+	0.000065 [0.33]	-0.000501 [2.45]*	-0.000168 [1.16]	-0.000022 [0.12]	-0.000419 [2.51]*	-0.000252 [1.79]+
Single	-0.146674 [1.15]	-0.148386 [1.56]	-0.143754 [0.98]	-0.036799 [0.31]	-0.005835 [0.06]	0.013517 [0.11]	-0.119608 [0.99]	-0.151617 [1.55]
n_children	0.039869 [1.61]	0.003707 [0.49]	-0.011672 [1.30]	-0.011193 [0.83]	-0.006315 [0.82]	0.027892 [1.68]+	0.004813 [0.35]	0.004584 [0.51]
Education	0.229532 [9.33]**	0.063208 [1.31]	0.127052 [4.60]**	0.096247 [1.34]	0.016997 [0.94]	0.071507 [2.97]**	0.105259 [4.62]**	0.054369 [3.12]**
formal_employmentft	-0.04968 [0.42]	0.17321 [2.02]*	0.056764 [0.39]	0.12459 [1.19]	0.051984 [0.59]	-0.026869 [0.23]	-0.02502 [0.22]	0.018583 [0.21]
Income	0.190965 [4.17]**	0.076564 [1.84]+	0.097707 [1.88]+	0.222424 [3.91]**	0.141666 [4.14]**	0.047285 [1.06]	0.094617 [2.22]*	0.031491 [0.91]
regular_income	0.134978 [1.51]	0.075146 [0.99]	0.372045 [3.48]**	0.105591 [1.05]	0.147854 [1.96]*	0.114882 [1.21]	0.2914 [3.26]**	0.121568 [1.64]
Savings	0.030424 [0.31]	-0.178279 [2.26]*	-0.063902 [0.54]	-0.028065 [0.26]	0.20101 [2.46]*	-0.263666 [2.56]*	-0.077034 [0.77]	-0.029016 [0.36]
formal_savings	0.140148 [1.16]	-0.018019 [0.19]	0.049207 [0.35]	0.478122 [4.11]**	-0.002813 [0.03]	0.207186 [1.78]+	0.02296 [0.21]	0.039035 [0.43]
Transfer	-0.129307 [1.35]	-0.180459 [2.23]*	0.01348 [0.11]	-0.280761 [2.62]**	0.147101 [1.86]+	-0.072723 [0.72]	0.012596 [0.13]	-0.042681 [0.54]
Observations	4,340	4,340	4,340	4,340	4,340	4,340	4,340	4,340

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	-41	-42	-43	-44
	inchg_money_u	budget	exact_budget	used_budget
urban	-0.157776 [1.66]+	0.324154 [4.22]**	0.357964 [3.52]**	0.342829 [4.48]**
Gender	-0.370358 [3.47]**	0.133155 [1.53]	0.140875 [1.34]	0.119972 [1.39]
woman_transfer	0.203735 [1.20]	0.178126 [1.28]	0.12144 [0.69]	0.178321 [1.28]
Age	0.187944 [12.86]**	0.00927 [0.72]	-0.005641 [0.34]	0.007548 [0.58]
Age2	-0.001749 [10.73]**	-0.000024 [0.17]	0.000102 [0.57]	-0.000016 [0.12]
Single	-1.314849 [15.24]**	-0.070608 [0.82]	-0.127619 [1.19]	-0.122862 [1.43]
n_children	-0.000953 [0.10]	-0.008114 [1.20]	-0.044055 [1.66]+	-0.006283 [0.94]
Education	0.008804 [0.71]	0.102135 [2.80]**	0.043614 [1.62]	0.105876 [2.95]**
formal_employmentft	0.555927 [4.76]**	0.144028 [1.59]	-0.071149 [0.64]	0.076161 [0.85]
Income	-0.150875 [3.71]**	0.192513 [4.97]**	0.049427 [1.20]	0.187685 [4.91]**
regular_income	0.009993 [0.11]	0.48737 [6.59]**	0.400306 [3.95]**	0.510243 [6.90]**
Savings	0.079087 [0.79]	0.436921 [5.44]**	0.351899 [3.35]**	0.398797 [4.98]**

	-41	-42	-43	-44
	inchg_money_u	budget	exact_budget	used_budget
formal_savings	0.306162 [2.81]**	0.352775 [3.68]**	0.01491 [0.13]	0.340281 [3.60]**
Transfer	-0.252683 [1.94]+	-0.200558 [1.85]+	-0.082378 [0.59]	-0.179471 [1.66]+
Observations	4,340	4,340	4,340	4,340

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	-45	-46	-47	-48	-49	-50	-51	-52
	cond_paycapa	cond_paysontime	cond_risk	cond_finmon	cond_ltgoals	cond_liveday1	cond_prefspend1	cond_moneytospend1
urban	0.038748 [0.51]	-0.039857 [0.57]	-0.189765 [2.96]**	-0.008135 [0.11]	-0.094558 [1.37]	-0.009665 [0.15]	-0.051068 [0.78]	0.191795 [3.06]**
Gender	0.145535 [1.70]+	0.077362 [0.99]	-0.299429 [4.12]**	-0.040178 [0.52]	0.053981 [0.73]	0.081793 [1.12]	0.212669 [2.85]**	0.12256 [1.71]+
woman_transfer	0.117942 [0.85]	-0.014995 [0.12]	-0.048415 [0.40]	0.111828 [0.87]	0.074581 [0.60]	-0.059355 [0.51]	-0.046986 [0.39]	-0.123209 [1.05]
Age	0.007429 [0.58]	-0.013032 [1.09]	0.007676 [0.64]	0.052189 [4.15]**	0.02719 [2.24]*	0.029137 [2.50]*	-0.000473 [0.04]	0.000129 [0.01]
Age2	0.000025 [0.18]	0.000229 [1.73]+	-0.000201 [1.50]	-0.000502 [3.60]**	-0.000443 [3.26]**	-0.000369 [2.86]**	-0.000033 [0.26]	-0.000029 [0.23]
Single	-0.218493 [2.57]*	-0.278349 [3.63]**	0.087947 [1.20]	-0.115688 [1.45]	-0.156993 [2.07]*	-0.149348 [2.09]*	-0.224682 [3.11]**	-0.034915 [0.50]

	-45	-46	-47	-48	-49	-50	-51	-52
	cond_ paycapa	cond_ paysontime	cond_risk	cond_ finmon	cond_ ltgoals	cond_ liveday1	cond_ prefspend1	cond_ moneytospend1
n_children	0.00571 [0.53]	0.00855 [1.12]	0.011199 [1.34]	-0.000811 [0.24]	0.009911 [0.87]	-0.000555 [0.09]	0.001727 [0.25]	0.005734 [1.69]+
Education	0.072154 [1.99]*	0.07757 [4.77]**	0.032421 [2.80]**	0.109023 [6.70]**	0.0652 [4.20]**	0.038203 [2.12]*	0.040663 [1.74]+	0.006534 [0.57]
formal_ employmentft	-0.050492 [0.55]	0.073773 [0.90]	0.058587 [0.80]	0.119879 [1.44]	0.139113 [1.80]+	0.007584 [0.10]	-0.064426 [0.83]	0.061903 [0.82]
Income	0.03419 [0.88]	-0.003118 [0.10]	0.049143 [1.66]+	0.022764 [0.70]	-0.014081 [0.44]	0.032005 [1.05]	0.063907 [2.03]*	0.053068 [1.86]+
regular_income	0.023108 [0.31]	0.154244 [2.26]*	0.139052 [2.18]*	0.083231 [1.21]	0.342181 [5.18]**	0.042107 [0.66]	0.050919 [0.79]	-0.201819 [3.29]**
Savings	0.183874 [2.22]*	0.315799 [4.25]**	0.264914 [3.81]**	0.268508 [3.58]**	0.401723 [5.51]**	0.089243 [1.30]	0.191718 [2.73]**	0.097666 [1.42]
formal_savings	0.040862 [0.42]	0.259693 [3.01]**	0.050956 [0.65]	0.316508 [3.84]**	0.325336 [4.05]**	0.111952 [1.41]	0.154181 [1.88]+	0.040219 [0.53]
Transfer	-0.067714 [0.65]	0.100909 [1.01]	0.079479 [0.87]	-0.06369 [0.63]	0.060561 [0.61]	-0.067607 [0.76]	-0.031839 [0.35]	-0.096349 [1.08]
Observations	4,317	4,277	4,225	4,177	4,199	4,322	4,307	4,284

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

	-53	-54	-55	-56	-57	-58	-59	-60
	cond_ division	cond_ inflation	cond_ interest	cond_ interest_s	cond_ interest_c	cond_ riskret	cond_ inflation2	cond_ diversification
urban	0.046621 [0.52]	0.04482 [0.59]	0.098279 [0.88]	0.210778 [2.07]*	-0.016072 [0.21]	-0.019749 [0.21]	0.304055 [3.34]**	-0.089133 [1.16]
Gender	-0.399678 [3.60]**	-0.107545 [1.31]	-0.133038 [1.01]	-0.394243 [3.81]**	-0.148841 [1.74]+	0.011162 [0.10]	-0.0339 [0.31]	0.053664 [0.62]
woman_ transfer	0.110675 [0.65]	-0.110903 [0.83]	0.064629 [0.32]	0.257387 [1.48]	-0.139921 [1.01]	0.117766 [0.67]	-0.16648 [0.98]	-0.181422 [1.31]
Age	0.048936 [3.24]**	0.025226 [2.01]*	-0.014731 [0.80]	0.041443 [2.34]*	0.012817 [0.98]	-0.003268 [0.20]	0.045888 [2.97]**	0.02431 [1.89]+
Age2	-0.00049 [2.98]**	-0.000246 [1.75]+	0.000058 [0.29]	-0.000502 [2.45]*	-0.000166 [1.15]	-0.000017 [0.10]	-0.000424 [2.55]*	-0.000255 [1.81]+
Single	-0.026539 [0.25]	-0.027684 [0.33]	-0.077709 [0.63]	0.079759 [0.74]	-0.051047 [0.61]	-0.030666 [0.28]	-0.074037 [0.71]	-0.130531 [1.57]
n_children	0.048373 [1.71]+	0.004761 [0.62]	-0.011111 [1.23]	-0.009703 [0.78]	-0.007039 [0.90]	0.026479 [1.72]+	0.005243 [0.37]	0.004584 [0.51]
Education	0.231742 [9.41]**	0.064269 [1.33]	0.128125 [4.64]**	0.098573 [1.37]	0.016609 [0.93]	0.071018 [2.96]**	0.105605 [4.63]**	0.054141 [3.11]**
formal_ employmentft	-0.034064 [0.29]	0.193105 [2.26]*	0.065316 [0.45]	0.138818 [1.33]	0.046951 [0.54]	-0.035408 [0.31]	-0.015131 [0.13]	0.024694 [0.27]
Income	0.189132 [4.13]**	0.074989 [1.80]+	0.096538 [1.86]+	0.219435 [3.87]**	0.142367 [4.16]**	0.047644 [1.07]	0.094362 [2.21]*	0.031707 [0.92]
regular_income	0.133402 [1.49]	0.071451 [0.94]	0.370634 [3.46]**	0.105292 [1.04]	0.147461 [1.96]+	0.116552 [1.23]	0.289244 [3.24]**	0.11964 [1.61]

	-53	-54	-55	-56	-57	-58	-59	-60
	cond_ division	cond_ inflation	cond_ interest	cond_ interest_s	cond_ interest_c	cond_riskret	cond_ inflation2	cond_ diversification
Savings	0.029465 [0.31]	-0.177996 [2.26]*	-0.064946 [0.55]	-0.026835 [0.25]	0.201416 [2.47]*	-0.263877 [2.56]*	-0.076125 [0.76]	-0.02824 [0.35]
formal_savings	0.137598 [1.14]	-0.023338 [0.25]	0.047165 [0.34]	0.470269 [4.05]**	-0.001048 [0.01]	0.208927 [1.80]+	0.020357 [0.18]	0.038084 [0.41]
Transfer	-0.182042 [1.33]	-0.108133 [1.01]	-0.01315 [0.08]	-0.383145 [2.81]**	0.211384 [1.99]*	-0.137746 [1.01]	0.108548 [0.81]	0.054498 [0.50]
Observations	4,340	4,340	4,340	4,340	4,340	4,340	4,340	4,340

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.

APPENDIX 11

NO REPLY PERCENTAGES REGRESSIONS PER COUNTRY

	All	Peru	Bolivia	Colombia	Ecuador
urban	-0.009775 [2.02]*	0.003802 [0.29]	0.001208 [0.14]	-0.027476 [2.81]**	-0.015369 [2.33]*
Gender	0.025043 [5.99]**	0.046313 [4.22]**	0.012124 [1.52]	0.031262 [4.23]**	0.011401 [1.87]+
Age	-0.001017 [1.21]	-0.000775 [0.32]	0.003165 [2.01]*	-0.005493 [3.79]**	-0.000518 [0.43]
Age2	0.000017 [1.83]+	0.000016 [0.59]	-0.000027 [1.55]	0.000064 [3.89]**	0.000006 [0.44]
Single	-0.007521 [1.51]	-0.004052 [0.28]	-0.003278 [0.33]	-0.00823 [1.02]	-0.003015 [0.41]
n_children	0.000259 [0.48]	0.000735 [1.02]	0.000218 [0.42]	-0.00066 [2.66]**	-0.000478 [0.19]
Education	-0.004562 [2.41]*	-0.019479 [5.79]**	-0.008556 [4.61]**	-0.001668 [1.95]+	-0.00622 [4.31]**
formal_employmentft	-0.003037 [0.66]	0.002368 [0.19]	-0.014172 [1.47]	-0.009407 [1.06]	0.005243 [0.77]
Income	-0.009028 [4.00]**	-0.00395 [0.64]	-0.008226 [2.05]*	-0.006591 [2.02]*	-0.010149 [3.15]**
regular_income	-0.026531 [5.60]**	-0.033057 [2.94]**	-0.047857 [4.68]**	-0.010439 [1.21]	-0.006256 [1.01]
Savings	-0.023001 [4.46]**	-0.034363 [2.65]**	-0.031799 [2.96]**	-0.020554 [2.50]*	-0.008903 [1.06]
formal_savings	-0.011291 [2.21]*	-0.005891 [0.43]	-0.030554 [3.45]**	0.00047 [0.05]	0.003921 [0.47]

	All	Peru	Bolivia	Colombia	Ecuador
Transfer	0.004739 [0.93]	-0.023969 [1.63]	0.004626 [0.58]	0.0243 [2.78]**	0.009238 [1.09]
Observations	4,340	980	1,135	1,094	1,131
R-squared	0.14	0.17	0.17	0.11	0.07

Note: All regressions estimated with a constant Robust T Statistics, in brackets +: * significant at 10%; *: significant at 5%, **: significant at 10%.