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FINANCIAL ILLITERACY, MOTIVATIONS AND BARRIERS TO SAVING AND INVESTING BY SPANISH HOUSEHOLDS*

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I. INTRODUCTION

Attaining a basic knowledge about financial terms and concepts is a prerequisite for individuals and families to be able to make good decisions about managing their financial resources. Financial decisions such as saving, investing, borrowing and risk-management require a basic understanding regarding the effects of inflation on the value of money over time, the effects of interest rates and their relationship to the cost of loans, and the effects of compound interest on the real value of savings and investments (S&P, 2014). If financial literacy in these areas is lacking, this greatly increases the difficulty of choosing the correct financial strategy, thus placing the economic stability and security of one's family at risk, which is of particular concern given the relatively unstable current macroeconomic environment. Additionally, financial illiteracy also constrains individuals from actively participating in the overall economy, thus negatively impacting not only themselves but also the general economy (e.g., Lusardi and Tufano, 2015; Lusardi and de Bassa Scheresberg, 2013; Stango and Zinman, 2009).

Bearing this in mind, it is absolutely crucial that individuals are well-informed regarding healthy saving and investing behaviors. First, developing healthy saving and investing behaviors can help pave the way toward a variety of important outcomes, including the financial stability required to maintain ideal standards of living, increased preparedness for unexpected changes in both local and global financial climates, and the diversification of risk (Abreu and Mendes, 2010). Indeed, the global economic and financial crisis that emerged in 2008 served as a powerful reminder of the necessity to promote healthy saving and investing behaviors as a protection mechanism against consequences such as the loss

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of employment, falling real-estate prices, uncertainty regarding public pension plans, and so forth. Second, developing healthy saving and investing behaviors may be especially important to individuals approaching middle age, and even more so to those nearing retirement given the challenging social and economic climate in which increased human longevity rates place an ever-increasing strain on public pension plans (Behrman *et al.*, 2012; Lusardi and Mitchell, 2014). Third, according to the *Spanish Financial Education Plan (2013-2017)*, correct management and distribution of the financial resources of both individuals and families has become an increasingly complex task, thus requiring more advanced skills and competencies compared with prior generations. Therefore, in order to successfully navigate these increasingly complex conditions, individuals must develop healthy saving and investment behaviors that not only reflect a basic level of financial literacy but also a sufficient understanding of the portfolio of financial products available in the marketplace.

Unfortunately, despite the growing importance of this issue, detailed information regarding the financial literacy of the Spanish population is relatively sparse. Beyond the *Financial Survey of Families report (Encuesta Financiera a las Familias or EFF)* first generated by the Bank of Spain in 2002, and then every three years thereafter, we are not aware of additional tools to regularly monitor the saving and investing behaviors of the Spanish population. Thus, we decided to undertake a project designed to answer a number of key questions regarding the financial literacy of the Spanish population. At the broadest level, the goal of this project was to ascertain the financial literacy of the Spanish population and how it affects saving and investment behaviors. More specifically, our goal was to unpack the relationship between various demographic characteristics and financial literacy in terms of how the interplay between these factors influences saving and investment behavior related to currently available investment products.

This structure of this chapter is comprised of four sections: The first section begins with a discussion of the methodology used to conduct this study followed by a description of sample characteristics. Section two is devoted to analyzing the antecedents of saving and investment across different segments of the Spanish population. Special attention is given to evaluating financial literacy among the Spanish population regarding basic concepts and investment products available in the financial markets. Section three focuses on analyzing individuals' motivations for saving and investing, as well as exploring the different obstacles they face in the pursuit of this goal. The fourth section summarizes the key findings of this report. In this final section, we conclude with a discussion that focuses on the various tactics that can be employed to improve the financial literacy of Spanish households and thus contribute to the development of healthy saving and investing behaviors.

II. PART 1: METHODOLOGY AND DEMOGRAPHIC CHARACTERISTICS

In an effort to obtain a representative sample of the Spanish population along the dimensions of gender, age, socioeconomic status, and place of residence,¹ participants in our study were drawn from a segment of the Spanish population with internet access. The rationale for this decision was based on recent data from the *Estudio General de Medios* survey related to the Asociación para la Investigación de Medios de Comunicación (AIMC, 2016), which indicated that 71.9% of the Spanish population had access to the internet as of November, 2016. Data collection was conducted by Netquest and took place in February 2017. Netquest is an online market research firm that uses active recruitment (by invitation only) in order to build a database of participants that ensure representative sampling and reliable profiles. A total of 1,538 completed surveys were obtained.

To collect the required information, we conducted an online survey that was organized into two blocks. First, participants provided responses to questions that required information on various demographic characteristics such as gender, age, level of education, employment status, gross family income, real-estate ownership, and so forth. Next, a battery of questions was administered that evaluated participants' general financial literacy as well as their knowledge about specific financial products. For example, four questions were drawn from Standard & Poor's rating services Global Financial Literacy Survey (conducted by Gallup in 2014), that asked participants to correctly identify outcomes associated with inflation, simple and compound interest rate, and risk diversification. After completing the survey, participants were debriefed regarding the purpose of the study and provided with a small gift in exchange for their time.

Once data collection had finished, we then categorized the information according to four different profiles: (1) Investor: anyone who bought or held any financial products in the last two years from those listed in Table 1 (46% of sample). (2) Depositors: individuals or families who keep their savings invested in long term deposits and do not have any of the products listed in Table 1 (11% of sample). (3) Saver/Non-investor: anyone who chose to save a portion of their income but chose not to invest in either long-term deposits or the products listed in Table 1 (27% of sample). (4) Non-saver: anyone who chose not to save a portion of their income (17% of sample). Importantly, because investors can also hold long-term bank deposits, creating a depositors subcategory allowed us to identify individuals who may be interested in investing but for a variety

¹ Our sample is highly comparable with the Spanish population along the dimensions of gender, age (between 20 and 65 years of age), and socio-economic status, although for this dimension our data indicated a slightly higher proportion of internet access among high socio-economic status individuals. Socio-economic levels have been established following the guidelines from Spanish Association of Market & Opinion Research Companies, 2015. For each geographic area, our sample also meets the proportional criteria in accordance with Nielsen panel areas (Northeast, Catalonia and Balearic, Levante, etc.).

TABLE 1
INVESTMENT PRODUCTS CONSIDERED IN OUR SURVEY
Investment Funds (i.e., Monetary, Fixed Income, Equity, Mixed/Global, Guaranteed)
Pension Plan or Funds
Savings Insurance Policies (i.e., Income, SISP, LTISP, IPP, Unit Linked)
Variable Capital Investment Companies
Bonds (i.e., Treasury Bills, Promissory Notes, Bonds, Securities)
Public Listed Shares
Preference Shares
Exchange Trade Funds
Hedge Funds
Property Investment Funds
Mortgage Securitization Funds
Venture Capital Funds

of reasons may not feel sufficiently comfortable. Thus, depositors reflect those individuals whose investment preferences are limited to relatively low-yield deposits through their financial institution. In summary, 709 individuals were categorized as “Investors”, 164 as “Depositors” (amounting to 873 investors in a broad sense), 410 as “Saver/Non-investor” and 255 as “Non-savers”.

1. Sample Demographic Characteristics

Within the four categories of investor profiles, a closer look at the demographic characteristics of our sample revealed the following information: Of the 1,538 participants who took part in our study, 747 (48.5%) were males and 791 (51.5%) were females. A closer examination of the gender distribution according to investor-profile indicated that within the broad Investor category (57% of the sample), 55% were males and 45% were females. Extrapolating these figures to the entire sample revealed that of the 747 males, 480 (64%) were investors, whereas of the 791 females, only 393 (50%) were investors.

Overall education levels in our sample are above the Spanish national average. Specifically, according to statistics from the Instituto Nacional de Estadística (INE, 2015), 35% of the Spanish population have a bachelor degree or higher, whereas 45% of our sample have at least a bachelor’s degree. When level of education is broken down according to investor profile, the data reveals a positive correlation between having a university degree and the decision to save and/or invest one’s finances. For example, whereas only 27% of Non-savers reported having a university degree, this increased to 43% for Savers/Non-investors, 46% for Depositors, and 53% for Investors.

Concerning employment status, 50% of our sample, are currently employed, 22% are retired, 17% are unemployed and 11% are either students or dedicated to household activities. These data indicate that the unemployment rate in our sample (17%) is slightly lower than the unemployment rate among the general Spanish population –18.6%– (INE, 2016). Examining unemployment rates according to investor profile revealed that unemployment rates are lower among both Investors (12%) and Depositors (16%) compared with those in the Savers/Non-investors (21%) and Non-savers (27%) groups.

Regarding family wealth, the data revealed that 37% of families in our sample have an annual Gross Family Income (GFI) below 20,000 euros. This figure is a modest improvement relative to the Spanish national average, which as of 2013 indicated that 50% of Spanish families declared an annual GFI below 22,700 euros (Banco de España, 2014).² Comparing family income across investor profiles, the data revealed a positive correlation between the decision to save and/or invest one's finances and family wealth as reflected by Gross Family Income. For example, whereas only 11% of Non-savers reported a GFI above 34,999 euros, this figure increased to 17% for Savers/Non-investors, 33% for Depositors, and 44% for Investors. Perhaps not surprisingly, this pattern reversed when examining GFI reported below 20,000 euros. That is, whereas 67% of Non-savers reported a GFI below 20,000 euros, this figure decreased to 45% for Savers/Non-investors, 36% for Depositors, and 22% for Investors. A similar pattern emerges when looking at household financial wealth: the greater the household financial wealth, the more active (from non-saver to investor) the individual profile. Although certainly an oversimplification of the data, at the most broad level, these patterns suggest that efforts to actively invest one's financial resources are linked to higher levels of income. Of course, the ability and/or motivation to actively invest financial resources depends on a variety of factors, including an income that allows for a positive saving/expense ratio, the absence of health/medical issues, an investment plan, adequate self-control, etc.

Our data revealed that 70% of Spanish families reported owning real-estate, compared with 80.4% of Spanish families who reporting owning real-estate in the most recent *EFF survey* (2014). A comparison of real-estate investments across investor profiles revealed that real-estate ownership was reported by 85% of Investors, 76% of Depositors, 53% of Savers/Non-investors, and 50% of Non-savers. These data indicate that the decision to invest in real-estate is

² Our calculation of family wealth was based on Gross Family Income (GFI) as reflected by both salary and non-salary income (the indicators used in the *Family Finance Survey*, *EFF* elaborated by the Bank of Spain). Although our sample may have a higher income level relative to the Spanish national average, this may not be the case for two reasons. First, our data is not fully comparable with the *EFF* (2014) data because different points of reference were used regarding income levels. Second, 26% of families did not respond to this question, which could falsely inflate the average income in our sample.

not unique to any segment of investor profile in our study. Relatedly, we also asked our sample about the loans, mortgages and other financial products they have borrowed because the outstanding debt is likely to harm their investing capacity. Nearly half of our sample currently holds debt, and this occurs across all investor profiles.

We also obtained information about the distribution of business ownership within our sample. In line with the data from the most recent *EFF* (2014) study, 11% of our sample reported owning a business of some form. However, a closer look at our data revealed differences in the distribution of business owners according to investor profile. For example, business ownership among Investors (15%) is noticeably higher than either of the remaining three categories, in which business ownership ranges from 6% to 8%. In addition, the business size also differs between Investors and the remaining three categories. More specifically, whereas 5% of individuals within the Investor category report owning business with more than 50 employees, no individuals in the remaining three categories make this claim. Although business ownership likely has an impact on individuals' investment opportunities, we did not ask further questions in order to probe the nature of this relationship. Importantly, our data suggest that any effect this relationship may have on saving and investing behavior is constrained to a relatively small proportion of our sample and thus is unlikely to affect the broader conclusions of this study.

In summary, our sample is characterized by higher education and income levels than the Spanish national average, similar unemployment rate and business ownership levels, and a lower rate of property ownership relative to the national average. Moreover, these data indicate a relationship between the investor profile and a variety of different outcomes. More specifically, as investment behaviors become more active and intentional (*i.e.*, from Non-saver to Investor), a corresponding increase is observed in both Gross Family Income and Household Financial Wealth. However, because higher levels of education are also related to more active levels of investment, it is unclear to what extent the relationship between investor profile and financial outcomes are driven by level of education.

III. PART 2: ANTECEDENTS OF SAVING AND INVESTMENT

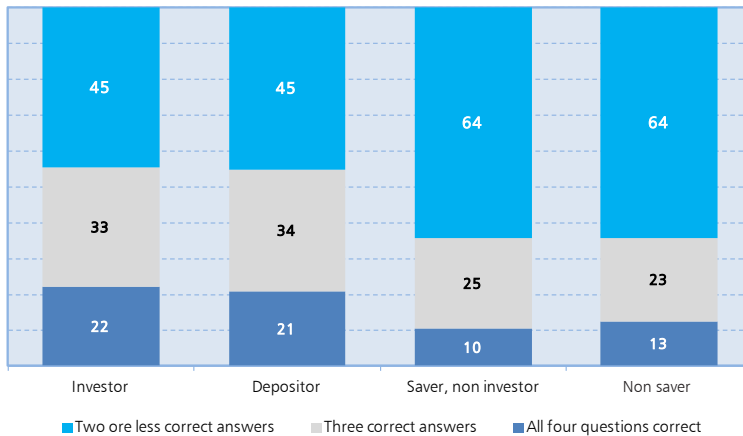
1. Basic Financial Literacy in Spain

With the goal of measuring the financial literacy of our sample, we asked four basic questions that required participants to correctly identify outcomes

GRAPH 1

FINANCIAL LITERACY TEST RESULTS

(Percentage)



associated with inflation, simple and compound interest rate, and risk diversification. These questions were selected from Standard & Poor's rating services *Global Financial Literacy Survey* (S&P's Rating Services, 2014). As per the S&P survey, financial literacy is demonstrated by correctly answering three of four questions. Based on this criteria, 46.8% of our sample passed this test, with only 17.3% correctly answering all four questions and 29.5% correctly answering three questions. These results suggest that a majority of the Spanish population is likely unprepared to make appropriate financial decisions related to saving, investing and borrowing.

A closer examination of the distribution of correct responses according to investor-profile provides useful information. As can be seen in Graph 1, only 55% of Investors correctly answered three or more questions in the financial literacy test. Interestingly, this figure was identical for Depositors. This finding was somewhat surprising because our expectation was that Investors should have an above average level of financial knowledge for two reasons: (1) when investing, they gain experience and thus accumulate knowledge through the process of learning by doing (Seru, Shumway and Stoffman, 2010), and (2) the inherent risk of losing one's investment, as well as the opportunity to grow one's investment, should enhance motivation to accumulate knowledge in order to increase the likelihood that one's investment will be successful. However, these results suggest that Investors may not be more knowledgeable about basic financial concepts than individuals who indicate a preference for

storing their money in relatively low-yield deposits. Whatever the case may be, the fact that a large percentage (45%) of Investors failed the financial literacy test and were unable to make good investment decisions is rather concerning. Not surprisingly, failure rates increased substantially when considering the performance of individuals within both Saver/Non-investor and Non-saver categories. In both cases, the percentage of incorrect responses rose to 64%. However, these otherwise disappointing figures could also be framed more positively to suggest an opportunity for growth, because both Depositors and Saver/Non-investors demonstrate a saving capacity that could be shifted into an investing capacity once they acquire sufficient capabilities and knowledge about financial concepts. Therefore, financial institutions should carefully consider the fact that individuals who may have the capacity to invest may be choosing not to access the investment market due to their lack of financial literacy.

An additional reason that may help to explain why Investors, and to some extent Depositors, fared more poorly than anticipated on the financial literacy test is the possibility that these individuals may overestimate their financial literacy. Indeed, the data presented in Graph 2 provide information suggestive of this possibility. For example, consider the percentage of incorrect responses (*i.e.*, Answering Incorrectly) between the Investor/Depositor group and the Saver/Non-investor, Non-Saver group against the percentage of responses between these two groups in which participants indicated uncertainty regarding the correct response (*i.e.*, Does Not Know). That is, Savers/Non-investors and Non-savers appear more willing to admit not having the correct response

GRAPH 2

FINANCIAL LITERACY TEST RESULTS

(Percentage of respondents)

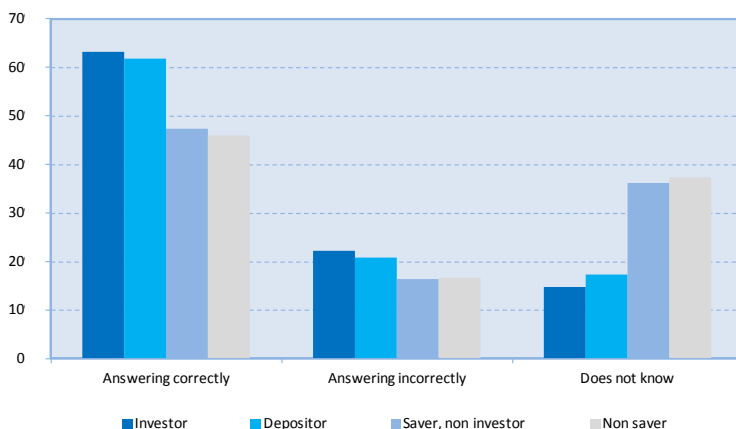


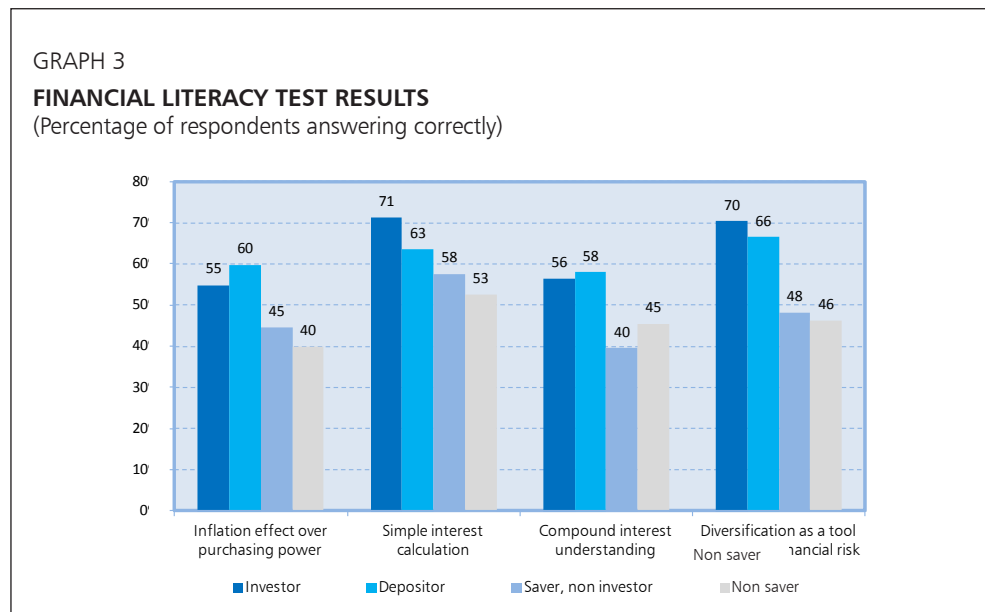
TABLE 2

FINANCIAL LITERACY TEST RESULTS
(Percentage of respondents, per question)

	<i>Correctly answered</i>	<i>Incorrectly answered</i>	<i>Don't know</i>
1. Inflation effect over purchasing power	50	26	24
2. Simple interest calculation	64	15	22
3. Compound interest understanding	50	28	22
4. Diversification as a tool to diminish financial risk	60	10	30

rather than guessing and risking an incorrect response. In contrast, Investors/Depositors appear to (falsely) believe they know the correct response rather than acknowledge the possibility that they do not know the correct response. Investor overconfidence in amount of knowledge can be especially problematic because this may reduce motivation to seek out opportunities to increase their financial literacy through training and interactions with professional advisors, etc., in turn leading to negative outcomes that could otherwise be avoided.

Of the four basic financial concepts included in our survey, the least understood are inflation and compound interest. Table 2 reveals that only 50% of participants correctly identified the effect of inflation on the purchasing power of money. This result is similar to the S&P (2014) survey at a global level, but lower than the level reached in developed countries (60%). The same pattern occurs for compound interest, where the results of our survey are slightly better than those of the S&P global study (less than 50%). In contrast, financial literacy scores were highest when evaluating participants' knowledge regarding simple interest and the portfolio diversification effect on investment risk (64% and 60% correct answers, respectively). These results are better than the S&P global survey, revealing a significant gap of 25 percentage points regarding knowledge about risk diversification. More details about specific financial literacy issues according to each category of investor can be found in Graph 3. For example, across all four concepts, the data clearly indicate that Investors and Depositors are more knowledgeable than Saver/Non-investors, and Non-savers. Additionally, these data suggest that a comparatively high percentage of depositors (66%) recognize the benefits of risk diversification. This may be a driving force that financial institutions could attempt to capitalize on in order to motivate this group to expand its portfolio to financial products available in the market beyond conventional deposits. Importantly, this provides further evidence to suggest that financial institutions should consider investing



more resources toward increasing the financial literacy of depositors in order to promote a variety of positive outcomes.

2. Perceived Knowledge of Currently Available Products

In order to investigate the extent to which the Spanish population is financially literate regarding the most important investment products currently available, we included several questions designed to test participants' perceived knowledge on each specific product (see Table 3). Our data indicated that the only product on which participants' perceived knowledge approached passing levels was Pension Plans/Funds (with a mean value of 4.6 out of 10). More specifically, when asked about the characteristics of a Pension Plan or Fund, of those who reported understanding this product (approximately 75% of the sample), 80% indicated that it was low risk, 71% suggested that it has a favorable effect on taxes, 88% said that it has medium to low liquidity, and 44% believe that it comes with a moderate yield rate. Because these outcomes accurately describe a typical Pension Plan or Fund, it appears as though this product is relatively well understood by a large majority of individuals. Unfortunately, the perceived knowledge about the remaining investment products (ranging between 2.4 –3.5/10) was especially poor.

Particularly noteworthy was the general perceived ignorance regarding Savings Insurance Policies; especially considering that these products have

TABLE 3

UNDERSTANDING OF INVESTMENT PRODUCTS

	<i>Ranging from 1 to 10</i>
Pension Plan or Fund	4.6
Investment Fund	3.5
Public Listed Shares	3.5
Bonds	3.5
Preference Shares	2.9
Property Investment Fund	2.8
Savings insurance policy	2.7
Venture Capital Fund	2.6
Variable Capital Investment Companies	2.6
Exchange Trade Funds	2.5
Securitization funds	2.5
Hedge Funds	2.4
Average	3.0

Note: Understanding per investment type asset: (1 = No understanding; 10 = Very high understanding).

specifically been designed for the financial protection of average consumers rather than sophisticated investors. We believe one potential explanation for this result is that consumers may be overwhelmed by excessive insurance product variety, with different characteristics (with varied tax effects), and with unclear product branding that make it very difficult for the general population to understand the various functions of these insurance products and their similarities/differences. One strategy that may help to increase interest in and understanding of these products is by providing consumers with simplified and standardized Savings Insurance Policies.

A further result worth mentioning is the very low level of self-reported understanding regarding Exchange Trade Funds (2.5/10), which are useful tools to diversify investment portfolios, and an intermediate option compared to publicly listed shares and investment funds, because their prices are listed in the markets as individual shares, but they consist of baskets of shares, as mutual funds. Hedge Funds were the least understood financial product (2.4/10), as expected, given that their focus and use is predominantly geared towards experienced investors with large investment portfolios and a sound financial background.

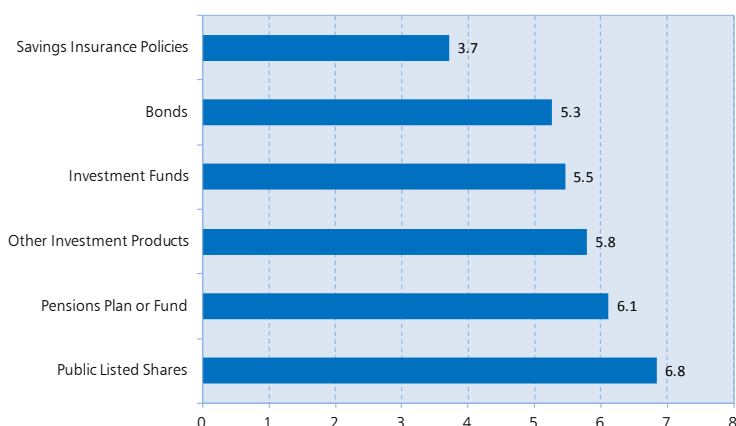
Examining the degree to which these investment products are understood according to investor profile yields a similar picture (see Table 4). Beginning with Investors, the results indicate that only Pension Plans/Funds were sufficiently understood to generate a score above the mid-point of the scale (5.8/10). Self-

	<i>Investor</i>	<i>Depositor</i>	<i>Saver, non investor</i>	<i>Non saver</i>
Pensions Fund or Plan	5.8	4.1	3.5	3.3
Investment Funds	4.5	3.2	2.6	2.5
Public Listed Shares	4.4	3.3	2.7	2.5
Bonds	4.2	3.5	2.8	2.6
Preference Shares	3.4	2.7	2.5	2.2
Property Investment Funds	3.3	2.7	2.4	2.2
Savings Insurance Policies	3.2	2.7	2.3	2.1
Venture Capital Funds	3.1	2.5	2.3	2.0
Variable Capital Investment Companies	3.0	2.4	2.3	2.1
Exchange Trade Funds	2.9	2.3	2.2	2.0
Mortgage Securitization Funds	2.8	2.4	2.2	2.0
Hedge Funds	2.8	2.3	2.2	2.0
Average	3.6	2.8	2.5	2.3

reported understanding of the remaining 11 products ranged from 2.8–4.5/10. The remarkably low scores, particularly for Investors, are both a surprise and a concern. Likewise, it is also concerning that Depositors report such a low level of understanding (ranging between 2.3–4.1/10) regarding this broad array of financial products. At the same time, these data also suggest that the relatively passive financial role preferred by Depositors may be due at least in part to their overall lack of understanding regarding the financial products currently available on the market. Finally, Savers/Non-investors report a very low understanding of all financial products (ranging between 2.2–3.5/10), so it is not surprising that, although they have saving capacity, they do not take a step forward and make investments. Taken together, it is clear that both Investors as well as Depositors could benefit if financial institutions would employ a variety of communication strategies designed to target these groups in order to increase their understanding of the many investment products currently available.

As a general rule, anyone investing in a particular financial product should have a minimum level of understanding about the product. For this reason, we have taken a closer look at what investors know about the products they have acquired (see Graph 4). As one might expect, Investors perceive themselves as having a relatively high level of understanding regarding the financial products they have in their portfolios. For example, across six categories of financial products, average self-ratings of understanding were 5.53/10. A closer examination revealed that Publicly Listed Shares (6.8/10) and Pension Funds

GRAPH 4

INVESTMENT PRODUCTS UNDERSTANDING FROM ACTIVE INVESTORS
 (1 min - 10 max)


(6.1/10) received the highest self-ratings of understanding. In contrast, Savings Insurance Policies were least well understood (3.7/10). Although self-ratings of understanding can provide some useful insights regarding the perceived level of comprehension, because these measures are subjective, it is reasonable to assume that they may contain a certain degree of bias. Thus, it is possible that self-ratings of understanding may not accurately represent the true level of comprehension among Investors.

IV. PART 3: WHY DO INVESTORS SAVE AND INVEST AND WHAT OBSTACLES DO THEY FACE?

Almost one quarter of the participants in this study has not saved in the last two years, and an additional 20% does not know how much they have saved. Moreover, of those who know the amount they have saved, most have only set aside a relatively small amount. For example, 58% of respondents indicated that they have saved less than 10% of their Gross Family Income. When individuals do contribute toward savings, the most common approach is monthly contributions. Other forms of contributions, including quarterly, annual and non-regular, are somewhat more infrequent approaches to saving within Spanish households.

1. Reasons for Saving

Our data suggest that the two most important reasons people save are to be prepared for potential future contingencies and to supplement their public pension. One reason that preparing for future contingencies and supplementing one's pension may be ranked so highly is the comparatively severe consequences that followed the financial downturn that took place between 2008 and 2015. Another reason that may help explain why supplementing one's public pension is rated so highly could stem from concerns regarding the sufficiency of the public pension system given the increased financial strain as a result of population longevity (Gratton and Scott, 2017). Additional reasons perceived as important motivators to save include setting aside money for the education of one's children, supporting both children and grandchildren, and vacations. At the other end of the spectrum, goals perceived as comparatively unimportant reasons to save include the purchase of real-estate, vehicles, and durable goods. Interestingly, in the case of real-estate acquisition, 25% of respondents assigned the minimum value of 1 when indicating the perceived importance of saving money in order to accomplish this goal.

A closer examination of reasons for saving according to investor-profile reveals a similar pattern. As can be seen in Table 5, both Investors and Depositors rate preparing for potential future contingencies as their primary goal. While supplementing public pensions follows closely as the second most important reason for saving, Investors rank this goal as markedly higher than Depositors (7.5 vs. 6.6). For both Investors and Depositors, child nurturing,

	<i>Investor</i>	<i>Depositor</i>	<i>Saver, non investor</i>	<i>Non saver</i>
Facing potential contingencies (health issues, accidents...)	8.0	8.0	7.6	7.5
Complement future public pension	7.5	6.6	6.1	6.3
Childrens education	6.4	6.1	6.1	6.3
Children and grandchildren support expenses	6.2	6.3	5.9	6.4
Vacations	6.1	6.5	6.1	5.3
Debts cancellation	5.9	5.8	6.0	7.1
Legacy for inheritants	5.9	5.3	5.3	5.3
Self education	5.3	5.5	5.8	5.4
Durable goods purchase	5.3	5.8	5.5	4.9
Housing acquisition	5.1	5.1	5.4	4.9
Vehicles purchase	4.9	5.3	5.0	4.5

education, and vacations follow as the next most important reasons for saving. Interestingly, whereas Depositors indicate that saving for vacations is a goal whose importance is nearly on par with supplementing public pensions (6.5 vs 6.6), Investors rank this goal noticeably lower in their hierarchy of priorities (6.1 vs. 7.5). Similar to the pattern that emerged in our aggregate data, real-estate acquisition, vehicles, and durable goods were ranked as the least important reasons to save for both Investors and Depositors. Indeed, this was also the case for Savers/non-investors, and Non-savers. Although the primary reason for saving indicated by these segments of the population was also to prepare for future contingencies, Savers/non-investors accorded equal priority to supplementing public pensions, children's education, and vacations, whereas Non-savers prized debt cancellation as their second priority.

2. Reasons for Investing

Given that the majority of our sample, 43%, report not having financial investments at all (including deposits), we believe that understanding the key drivers of investment is critically important to our analysis. At the aggregate level, the data indicated that the most important reason for investing was the need to supplement one's pension plan (6.1/10). Other important reasons for investing are to obtain higher yields (6.1/10), to diversify and reduce risks (5.7/10), and to pay lower taxes (5.6/10). Intuitively, investing for purposes of paying lower taxes makes sense. Indeed, one reason that most of the Spanish population

TABLE 6
TOP REASON TO INVEST ACCORDING TO INVESTOR PROFILE

	<i>Investor</i>	<i>Depositor</i>	<i>Saver, non investor</i>	<i>Non saver</i>
Complement future public pension	7.1	5.8	5.3	5.0
Gaining higher yield	6.9	6.2	5.4	5.0
Progressively make the investment net worth grow	6.3	5.7	5.0	4.7
Risk diversification and reduction	6.2	5.4	4.9	4.5
Pay less taxes	6.2	5.2	5.2	5.1
Savings diversification	6.1	5.3	4.8	4.4
Financial wealth creation and enlargement	5.9	5.3	4.9	4.4
Financial wealth legacy for sons and grandsons	5.5	5.1	4.7	4.4
Having experienced positively acting as investor	5.1	4.5	4.1	3.6
Positive investing experience from friends, colleagues and family	4.6	4.5	4.1	3.6
Be willing to learn about finances and investments	4.6	4.4	4.0	3.5
Accumulating funds for future housing acquisition	4.6	4.4	4.8	4.4

has invested in Pension Plans or Funds may be due to their favorable taxation treatment. In contrast, reasons for investing viewed as least important include: creating a legacy for descendants (5.1/10), real-estate acquisition (4.6/10), positive investing experiences (4.5/10), and learning more about markets and finances (4.2/10).

An inspection of the reasons for investing according to investor-profile revealed that for all groups, Supplementing Public Pensions and Increasing Returns are at the top of the list. Interestingly, Investors rate all reasons to invest as more important than individuals within the remaining three groups. This difference in importance is particularly apparent in the case of Supplementing Public Pensions (7.1 vs. 5.0–5.8/10) and Increasing Returns (6.9 vs. 5.0–6.2/10). Not surprisingly, long-term financial planning is a high priority for Investors, which is consistent with selecting financial products other than long-term deposits.

3. Barriers to Investment

We were especially interested in determining which factors may restrain people from investing, so included a list of potential reasons in our questionnaire. Results are displayed in Table 7. The most compelling reasons families do not invest include: (1) financial scandals and corruption cases (7.3/10), (2) the crisis scenario and its consequences (7.2/10), (3) perception of financial investments as a high risk activity (7.1/10), (4) perception of financial institutions as a high

MAIN BARRIERS TO INVEST ACCORDING TO INVESTOR PROFILE				
	<i>Investor</i>	<i>Depositor</i>	<i>Saver, non investor</i>	<i>Non saver</i>
Investments perceived as of high risk	7.6	7.2	6.7	6.4
Financial scandals and corruption	7.5	7.6	7.0	7.0
Economic crisis scenario	7.4	7.2	6.9	6.9
Untrust in financial agents	7.3	7.2	6.5	6.4
Lack of product understanding	7.1	7.0	6.6	6.5
Political volatility	6.9	7.0	6.3	6.2
Financial illiteracy	6.8	7.0	6.7	6.7
Financial information incomprehension	6.7	6.9	6.5	6.3
Negative audits	6.6	6.3	5.9	5.6
Lack of time for financial analysis	6.2	6.2	6	5.5
Bad experiences from own investor	6.2	5.9	5.3	5.2
Bad experiences around investor	6.1	6.1	5.7	5.7

risk industry (6.9/10) and, (5) lack of sufficient financial background and skills (6.9/10). In contrast, negative past experiences of friends (5.9/10) and negative past experiences in one's own investing (5.8/10) were both rated as comparatively less impactful obstacles to investing.

We also examined the extent to which these factors were perceived as barriers to investment according to each segment of investor profile. Item-rankings across each group were highly similar, thus suggesting a consensus regarding which factors are perceived as important barriers towards investing and which factors are perceived as relatively unimportant. However, despite the similarity in item-rankings, Investors and Depositors clearly indicated a higher degree of concern regarding the top five barriers to investment compared with Savers/Non-investors, and Non-savers. These differences were particularly apparent when considering the average perception of investments as a high risk activity (7.4 vs. 6.5), and perceptions of financial institutions as a high risk industry (7.3 vs. 6.5). Interestingly, average perceptions of financial literacy as a barrier to investment were highly similar between the two groups (6.9 vs. 6.7), although the position of this reason in the ranking of barriers was rather different in both segments of the sample. Specifically, whereas only two factors were perceived as greater barriers to investment by Savers/Non-investors, and Non-savers (thus indicating that financial literacy is an important barrier), six factors were perceived as greater barriers by Investors/Depositors (thus indicating that financial literacy is a relatively modest barrier). That is, because Investors and Depositors may feel reasonably confident in their financial literacy, their amount of knowledge may be perceived as only a relatively modest barrier to investment. In contrast, because Savers/Non-investors and Non-savers may lack confidence in their financial literacy, their deficit in knowledge may be perceived as a relatively important barrier to investment. This result is consistent with the figures shown in Graph 2, (explained in Part 2 of this chapter) related to the incorrect percentage of responses given by both segments of populations to the basis financial literacy questions. Investors / Depositors appeared to falsely believe they know the correct answer rather than acknowledge they do not know the answer, more often than Savers-Not Investors and Non Savers.

Taken together, these data underscore the importance of financial education as a necessary step to improve the financial skills and behaviors of families and individuals. An important step toward achieving this goal would require both public and private financial institutions to prioritize education about finances in order to promote investment as a means to protect the lifetime wealth of families. This would yield a number of direct benefits for society, particularly for those individuals who have the saving capacity but whose investment activities are limited due to their lack of financial knowledge. A more widespread strategy for clearly and unbiasedly communicating available investment options should

also be a priority. As more and, above all, better information reaches the different layers of population, this could result in a shift in attitudes toward both saving and investing. For example, more Depositors may be willing to move from solely investing in long term deposits to having more diversified portfolios, thus potentially achieving higher long-term returns.

V. PART 4: CONCLUSIONS

1. Summary of Key Findings

Our analysis indicates that Spanish society suffers from a widespread lack of understanding regarding both basic financial concepts and financial products and investments. Our data suggests that 53% of individuals do not have a basic level of financial literacy. Even more alarming, although investors possess a higher level of financial literacy than non-investors, 45% of investors lack the minimum required financial knowledge to invest. Furthermore, individuals signal financial corruption scandals, severe economic crisis, and a general sense of distrust in financial entities and products as additional important barriers that inhibit investments. Across all segments of the population, the most relevant drivers of saving are facing adverse economic contingencies, supplementing public pensions and educating children. The factors fueling investing are supplementing pensions, increasing returns and diversifying risks.

2. Tactics to Improve Financial Literacy

These data can improve our understanding of some of the most important drivers that influence the attitude of Spanish families towards saving and investing, while also highlighting interesting aspects about Spanish investors' profile. These results are useful for Spanish financial institutions because they can help inform the design and implementation of strategies geared toward increasing public understanding of financial products and investing, as well as helping to develop healthy saving and investment practices within the Spanish population. Several tactics that may help achieve this goal include: (1) promoting financial education and competency with the "just in time" strategy, thus providing the right training at the right time (*i.e.*, at the moment individuals make financial decisions); (2) making simpler products with regard to their tax effects and unify their characteristics (we underline the need to review the savings insurance product line); (3) greater transparency and clearer information about financial product specifications by the agents responsible for their commercialization, and (4) reinforcing the recommendations included in

the project *Plan de Educación Financiera* (initiated in 2008), including promoting awareness of the webpage www.finanzasparatodos.es. Although providing more information to the public is important, our belief is that enhancing the quality of information (e.g., more structured, more relevant, better calibrated to consumer needs, etc.), would better meet population needs. Webpages of public and private institutions should follow these rules, and the distribution channels should provide better and clearer information. The enforcement of MIFID II and the new Insurance Distribution Directive should encourage progress on these issues.

3. Concluding Remarks

The data provided by this study are an important source of information for both public and private institutions toward the planning and development of strategies not only to increase financial literacy within the Spanish population, but also to promote healthy saving and investing behaviors. These strategies should address the key factors that drive investment, whether tangible (financial literacy) or non-tangible (perceptions and attitudes) while also encouraging trust in the financial system. Moreover, these data can help nurture public campaigns to better educate the population regarding the most appropriate financial products, particularly as it applies to selecting the right savings strategy when facing retirement. Identifying the strategy best suited for each individual is especially important when one considers that public pension plans are unable to indefinitely bear the tremendous financial pressure caused by an increasingly aging population.

We understand that enhancing the financial literacy of families and properly communicating information about the different financial products available in the market will not be sufficient to increase investment levels if these initiatives are not combined with parallel processes within the financial intermediaries and institutions that bring more transparency and integrity into the system. The latter should offer more appropriate protection for investors and, equally important, demand accountability when financial agents engage in misinformation, corruption, abuse or fraud. Achieving these goals will require changes in the processes, structures, and procedures used by financial entities, in conjunction with communication campaigns to restore their reputation. Admitting past errors, implementing new actions to avoid the repetition of past behavior, and transmitting the core values of institutions should all be imperative messages included in a communication strategy. In parallel, another strategic action would be to design campaigns to improve public awareness of the necessity to invest as a crucial tool to supplement future pensions and, in general, achieve financial well-being.

Our goal is to conduct this study on a periodic basis with the aim of creating an important tool to more effectively monitor the financial literacy of different segments within the Spanish population. Our hope is that both public and private institutions will use this information in order to increase the financial literacy of the average Spanish saver and investor, and in turn promote healthy saving and investing behaviors.

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