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Financial History Workshop

Improving Savings Culture

A Lifetime of Financial Education

Madrid, 5th October 2017

FUNCAS Social and Economic Studies, 4

ESBG

WORLD SAVINGS BANKS INSTITUTE

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Improving Savings Culture
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Foreword

Improving savings culture: A lifetime of financial education

From left to right: Chris de Noose, managing director of the WSBI-ESBG; Gloria Caballero, deputy director of Financial Education of the Department of Institutional Relations and Strategy at the CNMV (Spanish National Securities Market Commission); Fernando Tejada, head of the Bank of Spain's Market Conduct and Claims Department and José María Méndez, CEO of CECA.

In the backdrop of Financial Education Day, CECA, in collaboration with the European Savings and Retail Banking Group (ESBG), held an international conference in 2017, titled: Improving Savings Culture: A Lifetime of Financial Education.

The event included the collaboration of the Study Group on Savings and Retail Banks History. This is one of the committees reporting to the ESBG and made up of academics and financial sector representatives from various European countries, whose experience has been fundamental to gathering the studies presented in this publication.

The CEO of CECA, José María Méndez, was responsible for giving the opening speech, in which he highlighted the importance of financial education for all members of the association, stating that "increasing financial culture and fomenting saving is in the DNA of credit institutions

of the sector. It was the basis upon which many of them were founded, and it is an aspect on which we continue to work intensively".

The sector's commitment to financial culture takes shape in over 500 actions that are undertaken on an annual basis by CECA member banks and savings banks, reaching one and a half million beneficiaries.

In 2018, promotion of financial education by the sector will receive a boost thanks to the FUNCAS Stimulating Financial Education programme: an initiative announced by CECA's CEO at this forum. This project, with an allocation of three million euros, promotes the development of programmes to improve financial education throughout the country.

Additionally, since 2008, CECA and its member companies have participated in the National Financial Education Plan, signing a framework agreement for collaboration with the CNMV (Spanish Securities and Exchange Commission) and the Bank of Spain. This agreement covers the Spanish Financial Education Network, a forum for the exchange of knowledge and best practices in the area, and whose website can be found at www.rededucacionfinanciera.es.

Participation of the Financial Education Plan backers

The event included the participation of Fernando Tejada, head of the Bank of Spain's Market Conduct and Claims Department and Gloria Caballero, deputy director of Financial Education of the Department of Institutional Relations and Strategy at the CNMV, as representatives and backers of the Financial Education Plan in Spain.

Fernando Tejada stressed CECA's major involvement in Financial Education, as its partners, the savings banks, have been present in rural areas from the very beginning.

He deemed the initiative of holding a conference in which talks are lead by the researchers and academics as something highly positive, since history is one of the best scenarios from which to gain an understanding of the evolution of financial education from its roots.

Tejada added that the goal of financial culture is, basically, to develop behavioural skills and habits aimed at saving, whereby a person has a long-term view of their life cycle, enabling them to live from their working life's yield.

Similarly, he highlighted the importance of national financial education plans and, above all, the involvement of collaborators in order to be able to carry them out. Along these lines, he underlined the role of banking associations, such as CECA, as key cog in the financial education wheel, together with other sectors of the likes of consumers, pensioners, the tertiary sector and education.

Lastly, he deemed trust in the relations of customers with financial institutions as something greatly relevant, explaining the need to work towards recovering their trust since the economic crisis.

Gloria Caballero focused her talk on the importance of education in all walks of life. Similarly, she drew attention to the website www.finanzasparatodos.es, run by the CNMV and the Bank of Spain. Here, in addition to plans, is a collection of files related to financial education in the family, as well as, for example, the Game Bank, which interactively transmits economic-financial knowledge.

From left to right: Mónica Malo, director of Communications and External Relations at CECA; Robert Muschalla, of the Ruhr-Universität Bochum; Thomas Ruoss, an educational historian and scientist from the University of Zurich and Yolanda Blasco, associate professor of Economic History from the University of Barcelona.

To finalise the proceedings, Gloria Caballero gave an interesting view of how society's level of financial education can be measured, not only through the PISA assessment intended for adolescents. To do so, she highlighted a survey of financial skills taken in over 30 OECD countries, which is being carried out as part of the Statistics Plan in the case of Spain. Once the report is completed, it will represent a highly valuable source of information to detect shortcomings and, therefore, focus on the future actions and programs that are most in need.

The closing ceremony included the participation of Chris de Noose, managing director of the WSBI-ESBG, who contemplated the contribution made

by education to financial inclusion. In this way, he emphasised the contribution made in this regard by the members of the World Savings and Retail Banking Institute, given that its capillary action provides a scope throughout all territories.

PHOTO 1: Attendees during the Financial History Workshop, held at CECA's headquarters. PHOTO 2: From left to right: Fernando Tejada, head of the Bank of Spain's Market Conduct and Claims Department; José María Méndez, CEO of CECA and Gloria Caballero, deputy director of Financial Education of the Department of Institutional Relations and Strategy at the CNMV. PHOTO 3: Chris de Noose, managing director of the WSBI-ESBG, during his talk.

Mónica Malo, director of the Communications and External Relations department at CECA, moderated the following three panels that would represent the core of the conference and on which this publication has been structured.

The first panel revolved around financial inclusion in the sector of young people, in which various studies were presented that addressed the nineteenth and twentieth centuries. The second debate tackled the importance of savings throughout a person's life cycle. The final session included an assessment of the current level of financial education and its correlation to financial inclusion.

All these subjects were presented through five outstanding research works which, due to their informative nature, we wanted to publish in this book. We trust that this compendium of texts, which provide an historic view of the assessment of financial education, upholds the acknowledgement of financial culture for the economic well-being of society.

PANEL 1

Financial Education of Young People

CHILDREN, SAVINGS BANKS AND POLITICS. THE SAVINGS MOVEMENT IN THE LAST THIRD OF THE NINETEENTH CENTURY*

Sandra Maß

The decision not to spend all available cash but to put a sum aside for the future was of existential significance for the majority of people in the nineteenth century.[1] Uncertain employment conditions, unforeseeable illness and death meant that taking financial precautions was essential for the lower classes, however minor the sums in question were. However, for the upper middle classes pecuniary reserves were frequently used to start or expand capital reserves for further investment. In the second half of the nineteenth century the public entreaties directed at citizens of many European countries to privately save were firmly entrenched in the values systems of the middle and working classes (Garon, 2012; Winkel, 2000; Walter, 1992 and Münch, 1988). Local and national savings movements were proactive in Belgium, France, Great Britain, in the German states, the Habsburg Empire, Switzerland, Russia and in Italy and their message was directed at individuals as well as associations and state institutions. Local savings movements were frequently supported by clerics and teachers (Leinweber, 1879). Independence from the state, a defence against socialist ideas and the concept of helping people to help themselves were high on the agenda; of middle-class charitable organisations in particular. These ideals were propagated through pedagogic publications, parenting guides and in schools (Donzelot, 1979).

The discourse surrounding the nurturing of frugality became a transnational phenomenon, shaped by two major processes of change. The first of these transformations was the politicisation of what had been a virtuous middle-class ideal. The education historian Christa Berg claims that frugality underwent a process of 'privatisation' during the nineteenth century, which stripped it off its socio-economic function. Although, Berg still ascribed thriftiness with a 'stabilising intention […] in the sense of "orderliness/efficiency"', this was predominantly related to 'domestic happiness' (Berg, 1991 and 1993a). I would like to stress two additional factors, which I believe illustrate instead the politicisation of private financial economy. Firstly, in discussions on social issues frugality was viewed as a means to combat political unrest. Secondly it was hoped that private financial thriftiness would strengthen the national economy and would result in competitive advantages over other nations and cultures.

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*Translated by Nicola Watson (Georg-Eckert-Institute for International Textbook Research, Braunschweig).

[1] For a more detailled account on the history of monetary education, see Maß (2018).

The second shift involved the semantic frame of frugality. The end of the nineteenth century saw the first tentative discussions of procedures viewed as capitalistic. The use of words such as 'capitalists' and 'capitalism' in connection with children and young people generated a new frame of reference within which to place financial education. The prophets of frugality argued simply that only those who saved money could build capital and subsequently invest it for profit: 'Save and become capitalists' was the concise reply of the German economist Wilhelm Stieda in 1878 on the question of school savings schemes (Stieda, 1878). This connection between saving and capitalism, which sounds rather awkward to modern ears, was widely accepted at that time. The relationship was clearly and critically clarified by Karl Marx: He characterised saving and self-denial as a 'capitalist cardinal virtues' in that they prevented workers from eating and drinking as they wished, thus compounding their alienation (Marx, 2004).

Marx considered frugality to be an impediment to pleasure and culture and presented it as a precondition of alienation. Was Marx right? Had thriftiness shifted from a being middle-class virtue to become a component part of a capitalist life-style and turned small children saving their money into mini-capitalists? Was monetary education ultimately an education in how to become a capitalist, as suspected by critics of capitalism? In the following I will describe the systems of school savings banks, discuss the contemporary criticism from 1870 surrounding their institutionalisation and then analyse the establishment of school savings banks as a political phenomenon. My argument being that school savings banks cannot be understood simply as a capitalist phenomenon.

I. THE SYSTEM OF SCHOOL SAVINGS BANKS

Nineteenth-century educational guides underlined the responsibility placed on the family environment to educate children in good economic management. At the same time other educational institutions increasingly featured in the public debate. Primary schools in particular were to be instrumental in educating children on the right way to handle money.[2] If the task of schools was to be perceived as rearing 'good and morally virtuous citizens', in the words of school savings banks supporter and senior civil servant Leo Wilhelmi, then it was there that frugality must be encouraged (Wilhelmi, 1877). The proposal to introduce school savings banks proved contentious and public reaction was frequently polemic. Indeed, the school savings bank as an institution elicited publicity from diverse professional and national arenas and from both men and women. It

[2] On the history of school-savings banks: Maß, 2009; Berg, 1993b; Müller, 1993; Bergisch-Gladbach, 1999 and Nordwürttemberg, 1998.

created a form of European savings tourism and the subsequent concentration of publications in the form of brochures, books, newspaper articles and speeches surrounding 'The conflict over school savings banks' resulted in a verbal exchange of blows between supporters and opponents in the relevant pedagogic journals (Die Schulsparkassen, 1882; Georges, 1884).

The sudden eruption of the debate and the polemic surrounding it in the 1870s suggest that there had been no prior education in schools on frugality. However, education in schools on practices of thrift was not new (Habsucht, 1840). There were numerous examples of didactic materials that taught frugality and numeracy: textbooks and readers, word problems and collections of proverbs all taught pupils to exercise care with objects, food and of course money. The monetary equivalence of things and commodities was learned and practised, and written exercises in arithmetic were placed in a monetary context (see *e.g.,* Schmidt, 1993). Additionally, Great Britain, Belgium and France had experimented much earlier with savings associations and savings banks for children. It was therefore not a new idea that was being discussed in the 1870s, but its proponents now envisaged the introduction of savings banks in all primary schools. The system had spread to almost all western and central European countries (including Russia) by the end of the nineteenth century and also reached the USA and Japan (see, Garon, 2012: 153-155). It became firmly established in subsequent years. In Glasgow school savings banks were introduced in 1877 and within a year fourteen such banks had opened.[3] Post office savings schemes in British schools also increased dramatically up until the turn of the century. In Germany the cause of school savings banks was taken up by the protestant minister Ernst Senckel. He founded the Verein zur Beförderung der Jugendsparkassen in Deutschland (Association for the Promotion of Youth Savings Banks in Germany) in Glogau in 1880.[4] The association consisted predominantly of teachers, mayors, savings banks employees and clerics (see Trende, 1993: 378).

The individual models of school savings schemes varied between states: school savings banks could either be autonomous or under the control of a local savings bank, working in close cooperation with them but also for them. However, the intense institutional support provided in some areas by the Deutsche Sparkassenverband (German Association of Savings Banks) was not universally reflected (Seidel, 1908: 661). The basic structure consisted of pupils

[3] Duncan, 2009: 31. Due to Ross the initiative ended soon and started again only after 1900.

[4] Senkel, 1878; ibid., Ueber die Erziehung der Jugend zur Sparsamkeit. Vortrag gehalten am 15. December 1882 im Bürgersaale des Rathhauses zu Magdeburg zum Besten des Erziehungsvereins für den Kreis, Magdeburg 1883; ibid., Die Einrichtungen der deutschen Schul- und Jugendsparkassen, deren Rechtsverhältnisse, Statuten, Buchführung und Formulare, nebst Anhang: Zwölfter Bericht des Deutschen Vereins für Jugendsparkassen über die Jahre 1891 und 1892, Frankfurt am Main 1893.

handing to their teachers, on certain days of the week, small sums of money that they had received as presents, pocket money and for work. The teacher entered the sums in a special cash ledger. The pupils were responsible for looking after their receipts. When the amount saved reached a specific sum, the teacher transferred the money to the local savings bank and an interest-bearing account was opened in the name of the child. The savings book remained in the possession of the teacher in order to prevent the pupils being able to withdraw the money. The explicit permission of the parents was required before any balance could be cashed (see Wilhelmi, 1877: 5-7).

II. CRITICISM OF FOREIGN MATERIAL IN SCHOOLS

School savings banks became popular in Germany rather later than in many European countries. The delay was caused by the stark criticism directed at the institutionalisation of financial education. Resistance to school savings banks came predominantly from teachers. In 1878 the Berliner Bezirksverband des Deutschen Lehrervereins (Berlin District Association of the German Teaching Union) and the *Leipziger Lehrertag* (Leipzig Teachers' Conference) flatly rejected their introduction.[5] The Berlin teachers published a ten-point plan, which stated that there was neither time nor any pedagogic necessity for the introduction of school savings banks. The banks would exacerbate class differences, introduce materialism to the school and could lead to pupils' moral decline.[6] The Vienna teaching union *Volksschule* and the 1875 assembly of the Lower Austrian teacher's conference rejected school savings banks in Austria-Hungary. They argued that children lacked an adequately developed sense of the future.[7]

Opponents of school savings banks accepted that 'fostering a sense of frugality' should be learnt in school and that frugality was a 'valuable economic quality' which had proved itself 'an effective means of preventing self-indulgence, wastefulness, laggardness and its unhappy consequences' (Schroer, 1882: 9). However they did not view school savings banks as an appropriate means of learning frugality (see ibid.: 10). The key aspect of their criticism lay

[5] The debate could become quite emotional: Fricke, 1882a; ibid., 1882b: 133. Ibid., 1881: 21-24, 85f, 89f, 93-95, 97f. Also the readers sent letters to the journals *Allgemeine Schulzeitung für das gesamte Unterrichtswesen*, 1878. See also: Müller, 1993: 130; Trende, 1993: 376.

[6] Quot, in: Leinweber, 1879: 22.

[7] "Hat denn aber das Kind im schulpflichtigen Alter ein Verständnis für die Sorge um die Zukunft, ja selbst um die Gegenwart? In der echt kindlichen Natur hat der Gedanke an die Zukunft und das Streben, diese durch Ansammlung von Schätzen möglichst günstig zu gestalten, gar keinen Raum, denn das Kind weiß nicht einmal, wessen es in der Gegenwart bedarf," *Schulsparkassen,* 1876, 7: 51f, 51.

in the premature introduction of money into what should be considered a carefree phase of childhood, and that it would lead to materialism supplanting civil liberties in schools. (Fricke, 1881: 93) School savings banks would raise pupils to be 'unchildlike children'.[8]

In the critics' view putting money in the hands of children would mark the end of childhood and would prematurely instigate the accounting and calculating required in adulthood. Closely bound with the Christian criticism of capitalism and money, opponents also strongly objected to the jurisdiction of the national economy over education issues and protested against launching a foreign material, namely money, into a previously economics-free zone. The supporters of school savings banks did not perceive any problems in these issues. They saw depositing money as a simple exercise in self-control, which, according to Agnes Lambert, would lead in the long-term to a familiarisation with habits conducive to leading a decent and orderly life (Lambert, 1886: 4f). The Austrian headmaster, Leinweber, polemicised against his more intractable colleagues saying 'it was finally time that the repeated references to humanitarian ideals in the teaching world made space for the sober considerations of achievable educational goals'.[9] School savings banks were thus subsequently introduced in the German empire at the end of the nineteenth century.

III. SOCIAL QUESTIONS SURROUNDING FRUGALITY

The institutionalisation of school savings banks actually became politicised in a very different sense to that construed its opponents: as a result of debates about 'the social question'. This had been an issue since the 1870s due to fears of uprisings, such as in Paris in 1871, and the bitter experiences of economic crises which were devastating European states at that time (Ritter, 1983: 9). The delayed expenditure that saving allowed and the presence of a monetary reserve in school were presented as possible solutions to the conflicts between rich and poor and also between the left and right of the political spectrum.[10] Saving, said its supporters, was a political act that would contribute to reducing social inequality in the country, combatting the poverty of the workers and eliminating political turmoil. If children were educated early in their lives on the benefits of frugality, then political tension over 'the social question' would be

[8] *Allgemeine Schulzeitung für das Gesamte Unterrichtswesen,* 1880.

[9] Leinweber, 1879: 21.

[10] Vgl. Auffenberg (1889: 1): "Und daß das Sparen von Wichtigkeit und tief eingreifender Wirkung im socialen Leben ist, darüber sind alle, welche über die sociale Frage schreiben, einig und soll in diesem Werkchen dem gewöhnlichen Manne klar gemacht werden."

relieved. The advocates of savings banks implied political evidence suggesting that class relations were not responsible for the misery of the poor and the workers; rather it was due to individual failures in money management. Poverty could generally be attributed to 'personal mistakes' according to Carl Foerster, the author of a book on good money management written in 1885 (Foerster, 1885: 8). He recommended abstemiousness and good budgeting even for the poorest day labourers (ibid.: 9), and appeared in that sense to be directly echoing Marxist sentiments.

Criticism of the lower classes' financial management was directed explicitly against the social democracy movement. The German cleric, Auffenberg, adjudged that the social democrats had little interest in private property or saving because they wanted to divide ownership of land and property. He succinctly summarised his argument by saying 'those who save are not social democrats or anarchists'.[11] The working classes would, however, escape from their dangerous 'taverns' and associated agitation if they took to heart the (middle class) values of domestic financial economy and family unity.[12] Savings exponents saw favourable perspectives for a solution to the 'worker question' if workers could be deprived of their taverns and could practise careful management of their money, then, asserted Carina Schröter *'the propertied classes* did not revolt, because they feared for their *property'* (Schröter, 1877: 37).

Part of the political motivation behind the petitions to introduce saving to elementary education was the desire to nip any potential social unrest in the bud. Middle-class reformers and economists believed that saved private capital would serve as a bulwark against revolutionary aspirations.[13] However this assessment was not universally shared. The German economist Wilhelm Stieda for example, confirmed that while there had indeed been a general increase in institutional saving in Europe both with regards to the number of accounts and the amounts saved, he regarded the calming impact upon social democracy to be an overestimation of the effects of frugality for which there was no empirical corroboration.[14]

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[11] Auffenberg, 1889: 12. "Wer gut spart, ist kein Socialdemocrat. […] Wir wollen aber zugeben, daß nicht gerade alle von der schlimmsten Sorte sind. " Ibid.: 15. Similar: "Es ist gewiß nicht zufällig, daß unter den Arbeitern, welche 1848 in der französischen Revolution gefallen sind, kein Einziger sich befand, der ein Sparkassenbuch besaß! Und sicher wird man auch heutzutage weder bei den vaterlandslosen sozialdemokratischen Führern, noch bei den Verführten, Kunden unserer Sparkassen finden." Kuntze, 1882: 6.

[12] Wilhelmi, 1877: 18.

[13] Wilhelmi, 1877: 3.

[14] Stieda, 1878: 144.

IV. NATIONAL ECONOMY, NATION AND CIVILISATION

Such objections did not make an impression on the advocates of European school savings banks because they were not just directing their energies at individual children. Moreover, they were widening their perspectives to include society as a whole. They aimed to influence parents and workers in order that the nation and its economy may profit from the introduction of institutionalised practices of thrift. The secretary of the chamber of commerce in Kiel, Hansen, wrote of the 'reforming mission for the life of our nation' (Hansen, 1876: 467), in an article in the bourgeois journal Arbeiterfreund, (Worker's Companion) and claimed it was a mission for teachers, who in the late nineteenth century were ascribed more expertise in such matters as parents; in particular mothers (see Ratkowsky, 1875: 12). According to the Viennese librarian Ratkowsky, teachers were in a position to combine the economic gains and the benefits for the common good with individual saving (ibid., p. 13). The diffusion of frugality, even to the lower classes would not only avert political unrest, but would work towards the greater good. Eugène Cuissart, who was later elected to the French assembly, described to the Society of Political Economists in Lyon in 1880 how workers saving money would contribute actively to civilisation and to progress. They would have an impact on public morals as well as national prosperity.[15] Cuissart was not alone; many of his contemporaries shared the belief that the dissemination of thrifty financial practices could be an important criterion for, and indicator of, the cultural development of a nation. 'Thrift began with civilization'[16] are the opening words to the book *Thrift,* by Smiles: 'It is the savings of individuals which compose the wealth – in other words, the well-being – of every nation. […] So that every thrifty person may be regarded as a public benefactor and every thriftless person as a public enemy' (ibid., p. 2).

Industriousness and thriftiness were viewed as the pillars of national and cultural progress by the proponents of school savings banks. Thriftiness emphasises industriousness and creates, according to Hansen, 'the correct spirit of association' the 'true, elevated public spirit' and finally an improved 'state and political system'.[17] According to Oskar Kuntze, the Lord Mayor of Plauen, in his work on the benefits of savings banks, thrift is not only a commendable virtue but also a moral value. Saving has positive effects upon 'whole peoples

[15] Cuissart (1980: 4): "C'est ce qu'on appelle de l'éducation, moyen infaillible d'améliorer, la situation matérielle, intellectuelle et morale des citoyens, c'est-à-dire de la nation." Ibid.: 5.

[16] Smiles (1997: 1). See also: "We have said that thrift began with civilization: we might almost have said that thrift produced civilization. Thrift produces capital; and capital is the conserved result of labour. The capitalist is merely a man who does not spend all that is earned by work." Ibid.: 8.

[17] Hansen, *Schul- und Kindersparkassen,* p. 451. See also: Ratkowsky, 1875: 27: "Nur die Erziehung des ganzen Volkes zur Sparsamkeit kann den Wohlstand desselben begründen und erhalten, und nur auf dieser soliden wirthschaftlichen Grundlage kann die Cultur desselben fortschreiten." See also: Smitt (1881:1).

and periods, for the general good, for our cultural development'.[18] Lord Mayor Kuntze even ascribed civic virtues a strategic advantage in international disputes. In conflicts between civilised peoples, the victors could only be the people 'who cultivated and practised the virtues of orderliness, industriousness, moderation, self-control, economy and frugality'. For these virtues increased 'national capital' and the strength of the nation.[19] Animals and 'coarse peoples' were, in contrast, only concerned with the present, stated Kuntze, and had no concept of the advantages provided by a forward-looking accumulation of property.[20] Kuntze was expressing an opinion common in economic theory at that time. Certain economic behaviour was connected to the awareness of the temporal dimension. The German economist Wilhelm Roscher stressed that children were not capable of thriftiness as they had no concept of time, 'Capital is the consequence of the past, where present indulgences are sacrificed for the sake of the future. Childish and laggardly mindsets, where one simply lives for the moment, are contrary to its development' (Roscher, 1871: 88). The ability to distinguish between past, present and future was a central requirement of the capacity to save.[21] This differentiated not only children from adults but also the so-called savages from reputedly civilised peoples. The education of a child was presented as a miniature version of the development of modern culture from wilderness to civilisation (Pinhorn, 1891: 30f).

In this view, frugality acted as the drive behind the civilised development of European peoples. Advocates of education on good financial management believed that a comprehension of the prospect of the immediate future enabled humankind to develop from groups of naked savages into modern civilisations and economies. They considered that continued improvement lay in the hands of (frugal) children. Children should come into contact with money at an early age, in order to learn independently how to save and to appreciate it as sensible, forward-looking conduct. The school savings banks represented a comprehensive approach to institutionalising this attitude.

School savings banks were political on three levels: Firstly, school savings banks were discussed in connection with problems of social inequality and were styled by many as the weapon against socialism. Secondly, its proponents believed the economically and nationally significant saving measures by children

[18] Kuntze, 1882: 5

[19] Ibid., p. 6. Others increasingly stressed the importance of consumption for the national economy: Herkner (1896: 1-22); Domela-Niewnhuis (1889).

[20] Kuntze, 1882: 7f. Smiles used a similar expression: "The savage is the greatest of spendthrifts, for he has no forethought, no to-morrow. The pre-historic man saved nothing." Smiles, 1997: 2.

[21] "To forecast the needs of to-morrow, denying oneself to-day, so as to be prepared to meet the future demand, is no easy matter, and requires both knowledge and foresight, but he that has learned to discipline himself is the freeman." Brown (1899).

would represent a national advantage in the competition between nations. They simultaneously characterised the ability to save as an indication of European civilisation. And finally state-sponsored school savings were predicated upon monetary self-regulation. The institution was directly connected with the discourse of moderation contained in parenting guides. The basic premise was to encourage an advanced and economically prosperous nation, in which individuals were independent of state paternalism in the form of social welfare and where their freedom to make decisions was not constricted by debt and scarcity. Such citizens would be supportive of the state and would have a vested interest in the maintenance of order. In contrast to parenting guides, which advocated the control of pecuniary habits through individual investments, school savings banks were an administrative attempt by government to combine welfare, economically necessary austerity measures and the discipline of potential trouble-makers. Taking these different governmental levels into account, it would not be appropriate to reduce school savings banks to capitalist institutions. It rather served the encompassing individual and collective governance of citizens by also integrating welfare elements, economic success and prospective claims into the comparison of nations.

BIBLIOGRAPHY

Art. Habsucht (1849), *Universal-Lexicon der Erziehungs and Unterrichtslehre für ältere und jüngere christliche Volksschullehrer,* Augsburg: 588-590.

A. S. (1878), "Ueber Schulsparkassen," *Allgemeine Schulzeitung für das Gesamte Unterrichtswesen,* 55, 29: 225f.

Auffenberg, J. (1889), *Des kleinen Mannes Sparpfennig. Oder sparst du was, so hast du was*, Paderborn.

Berg, Ch. (1991), "Rat geben. Ein Dilemma pädagogischer Praxis und Wirkungsgeschichte," *Zeitschrift für Pädagogik,* 37: 709-733.

— (1993a), "Die Fabrikation des zuverlässigen Menschen. Der Spargedanke in der Ratgeber-Literatur, 1850-1914," *Zeitschrift für bayrische Sparkassengeschichte,* 7: 69-98.

— (1993b), "Spare, lerne, leiste was, dann hast du, kannst du, wirst du was! Konkretisierung und Realisierung der Sparerziehung in Jugend- und Schulsparkassen," *Zeitschrift für bayrische Sparkassengeschichte,* 7: 99-125.

Brown, M. W. (1899), *The Development of Thrift,* New York.

Cuissart, E. M. Ph. (1880), *Les Caisses d'epargne scolaires* (9. January 1880), Lyon.

DIE SCHULSPARKASSEN (1882), *Allgemeine Deutsche Lehrerzeitung,* 34: 59-62.

DOMELA-NIEWNHUIS, A. J. (1889), *Das Sparen, ein ökonomischer und socialer Grundsatz,* Halle.

DONZELOT, J. (1979), *Die Ordnung der Familie,* Frankfurt a. M.

DUNCAN N. R. (2009), "Penny Banks in Glasgow 1850-1914," *Financial History Review,* 9: 21-39.

EINIGE BEDENKEN GEGEN DIE SCHULSPARKASSEN (1880), *Allgemeine Schulzeitung für das Gesamte Unterrichtswesen,* Organ des Vereins für Wissenschaftliche Pädagogik 57, 11: 84-85.

FOERSTER, C. (1885), *Die Kunst des Sparens,* Köln.

FRICKE, H. (1881), "Ueber Schulsparkassen," *Pädagogische Reform,* 5.

— (1882a), "Reform Nr. 182 betreffend Schulsparkassen," *Pädagogische Reform.*

— (1882b), *Hamburger Lehrmittelausstellung* 6.

GARON, S. (2012), *Beyond Our Means. Why America spends while the World saves,* Princeton/ Oxford.

GEORGES (1884), Was ist von der Schulsparkasse zu halten?, *Deutsche Blätter für den Erziehenden Unterrricht,* 11: 133-136.

HANSEN, CH. (1876), "Die Kinder- und Schulsparkassen", *Der Arbeiterfreund. Zeitschrift des Central-Vereins für das Wohl der arbeitenden Klassen,* 14.

HERKNER, H. (1896), "Über Sparsamkeit und Luxus vom Standpunkte der nationalen Kultur- und Socialpolitik," *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im deutschen Reich,* hrsg. v. Gustav Schmoller, 20. Jahrgang, Leipzig.

KUNTZE, O. (1882), *Das Sparen und die Sparkassen. Mittheilungen und Anregungen zur Weiterentwicklung des Sparkassenwesens,* Plauen.

LAMBERT, A. (1886), *A School Bank Manual for the Use of Managers and Teachers of Public Elementary Schools,* London.

LEINWEBER, A. (1879), *Vier Beiträge zur Frage der Schulsparkassen,* Pädagogische Abhandlungen.

MARX, K. (2004), "Ökonomisch-philosophische Manuskripte (1844)," in: *Karl Marx and Friedrich Engels,* Studienausgabe in fünf Bänden (Band 2), hrsg. v. Iring Fetscher, Berlin.

Maß, S. (2009), "Mäßigung der Leidenschaften. Kinder und monetäre Lebensführung im 19. Jahrhundert," in: Jens Elberfeld and Markus Otto (eds.), *Das schöne Selbst. Zur Genealogie des modernen Subjekts zwischen Ethik und Ästhetik,* Bielefeld: 55-81.

— (2018), *Kinderstube des Kapitalismus? Monetäre Erziehung im 18. und 19. Jahrhundert,* Berlin/Boston 2018 [Publications of the German Historical Institute London, vol. 75].

Müller, W. (1993), "Die Schulsparkassenbewegung 1870-1916. Sozialreformerische Impulse und institutionelle Verankerung. Mit einem Ausblick auf die Entwicklung bis 1988," *Zeitschrift für bayrische Sparkassengeschichte* 7: 127-155.

Münch, P. (1998), "Parsimonia Summum est vestigal – sparen ist ein ryche gült. Sparsamkeit als Haus-, Frauen-, und Bürgertugend," in: Hans-Jürgen Braun (ed.), *Ethische Perspektiven. Wandel der Tugenden,* Zürich: 169-187.

Pinhorn, A. (1891), Spending and Saving. A Primer to Thrift and Guide to Friendly Societies, London.

Ratkowsky, M. G. (1875), *Schulsparcassen mit Benutzung von Sparmarken.* Wien.

Ritter, G. A. (1983), *Sozialversicherung in Deutschland und England. Entstehung und Grundzüge im Vergleich,* München.

Roscher, W. (1871), *Grundlagen der Nationalökonomie. Ein Hand- und Lesebuch für Geschäftsmänner und Studierende,* Stuttgart.

Schmidt, S. (1993), *Rechenbücher für den Unterricht in der Elementarschule vom Ende des 18. Jahrhunderts bis zum Kaiserreich in Auszügen,* Köln.

Schroer, H. (1882), *Wider die Schulsparkassen,* Wittenberg.

Schröter, C. (1877), *Die Schulsparcassen vom Standpunkte der Pädagogik und National-Ökonomie,* Budapest.

Schulmuseum Bergisch-Gladbach (ed.) (2009), *Das wünsch ich mir drum spare ich! Geschichte des Schulsparens,* Bergisch-Gladbach.

Schulsparkassen (1876), *Allgemeine Deutsche Lehrerzeitung,* 28.

Sedler, I. (ed.) (1997), *Wer den Pfennig nicht ehrt. Schulsparen und Spardosen,* Kornwestheim.

Seidel (1908), "Schul- und Jugendsparkassen und andere private Spareinrichtungen, insbesondere die Fabriksparkassen," *Zeitschrift für die gesamte Staatswissenschaft:* 665-712.

Senckel, E. (1878), *Die Schulsparkassen. Eine Denkschrift,* Berlin.

Smiles, S. (1997), *Thrift* (1875), London.

Smitt, W. (1881), *Die Schulsparkasse,* Vortrag gehalten in der Gemeinnützigen Gesellschaft zu Leipzig, Leipzig.

Stieda, W. (1878), "Zur Schulsparkassen-Frage," *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirthschaft im deutschen Reich 2,* Leipzig: 143-151.

Trende, A. (1993), *Geschichte der deutschen Sparkassen bis zum Anfang des 20. Jahrhunderts (1975),* Stuttgart.

Walter, H. (1992), "Der volkswirtschaftliche Sparprozeß bei Nationalökonomen wie Smith, Malthus, Ricardo und Hermann," in: Manfred Pix and Hans Pohl (eds.), *Invention – Innovation – Diffusion. Die Entwicklung des Spar- und Sparkassengedankens in Europa* (VSWG Beihefte 103), Stuttgart: 45-60.

Wilhelmi, L. (1877), *Die Schul-Sparkasse und ihre Verbreitung,* Leipzig.

Winkel, H. (2000), "Sparen in der Dogmengeschichte", *Zeitschrift für bayrische Sparkassengeschichte,* 14: 47-59.

FINANCIAL EDUCATION AT SCHOOL: CHALLENGE AND OPPORTUNITY

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I. INTRODUCTION

The transformations that have occurred in recent decades through the spread of globalisation have reached all spheres of life. Financial services have become more sophisticated thanks to technological advances, among other reasons.[1] However, the sophistication of financial products has not led to clarity and transparency. Information does not flow symmetrically among agents, and these information asymmetries (Akerlof, 1970) spark conflicts among the different agents participating in the markets, to the detriment of society in general but especially its most vulnerable members.[2] Access to information on the financial world has an initial entry barrier: it is essential to grasp certain concepts and understand the differences among financial products in order to be capable of taking decisions and planning actions throughout one's lifetime. Financial inclusion has been posited as one of the challenges of the society of the future (Lo Prete, 2013; Sherrard, 2010).

The economic and financial world is a space of sociability where human behaviours are expressed (Shiller, 2012). The financial crisis which got underway after the fall of Lehman Brothers has sparked many questions: Why do financial crises happen time and time again? Are banks harmful businesses for society or are they necessary for the economy to work smoothly? Have the growth rates from the past 200 years come to an end or are we simply facing a temporary setback? Can states use regulation to limit the effects of the human behaviours that fuel financial crises? Behaviours that can hardly be called exemplary were

[1] The incorporation of Artificial Intelligence and Automatic Learning into finances force us to reflect, even more intensely, if possible, on the preparation needed for the near future. The European Parliament has addressed the issue of robotics in a recent report (see, European Parliament Committee on Legal Affairs, 2017).

[2] The recent study by De Haan and Sturm (2017) shows the relationship between financial development, financial liberalisation and the recurrence of banking crises, and how these factors affect unequal income in a country. They also measure whether institutional quality conditioned the impact of liberalisation and found that it did not.

revealed in the world of finances, prompting rejection from a large swath of the population. Governments, analysts and public and private institutions sent out messages warning about the need to reflect and act in the face of the new situations that were emerging. After all, a little over 100 years ago, most money was coin, and yet today we hardly even use bills anymore, which were a notable innovation in their day (Blasco-Martel and Sudrià-Triay, 2016). Today we go around with cards and transactions in our bank accounts, plus new currencies (crypto-currencies) are emerging. On the other hand, the pensions which became widespread in the early 20th century (before that, there had been different forms of cooperatives based on savings and mutual support) are currently somewhat at risk, since there is a debate as to whether the states will be able to meet their commitments in the not-too-distant future in view of the demographic changes. Thus, new questions are being added to the ones that emerged during the crisis: Will states actually be able to pay future pensions or are difficulties arising because of the ageing of the population? Has the purpose of central banks disappeared? What personal responsibility do we have in the economic future of our societies?

With the goal of responding to this new reality, different international bodies point to society's need to become financially literate. The OECD indicates that competency in financial matters is a basic skill which the citizens of tomorrow need. The conceptualisation of this terminology suggests multiple nuances. Financial education, financial literacy, financial knowledge, financial inclusion… these are just some of the terms which are used. Some researchers distinguish between financial education and financial literacy (Hung, Parker and Yoong, 2009). While financial literacy is defined as a skill which is acquired, financial education is defined as a process that improves society's understanding of financial products.[3] The purpose is for investors and consumers to be capable of taking decisions and responsibly evaluating the risks they could be facing, which allows them to improve their welfare.

Even though there are critical positions on financial education (Willis, 2011 and O'Connell, 2007), the world in which we live seems to indicate that broad training in aspects related to finance is needed, and will increasingly be needed, in order to improve citizens' quality of life, since it will have repercussions on social welfare. In this sense, the importance of public institutions' taking on the responsibility of financially training the population is ineluctable. This is how we should interpret the recommendations of the European Commission (COM

[3] This is the definition provided by the OECD (2005). The Financial Literacy Expert Group of PISA 2012 (INEE, 2013) stated that: "financial competency refers to knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply this knowledge and understanding to take effective decisions in different financial concepts, to improve individuals' and society's financial wellbeing, and to allow one to participate in economic life", (p. 12). See Bay, Catasús and Johed (2014) on the role that financial education can play in the development of the concept of financialisation.

2007-808) when it asks governments to take responsibility for this issue. Based on these recommendations, lifelong training is suggested.

The concern over the development of financial knowledge is also expressed in the PISA 2012 Report, which contained a specific section on this topic (OECD, 2013a: 147–175). In this case, its goal was to determine to what extent 15-year-olds are capable of applying their knowledge of this subject in practice. To ascertain this, the questions it included, all of which were applied, referred to the 4 major areas that have been defined as core in the different financial education programmes:

1. Money and transactions, which encompasses aspects of personal economy and the distinction between money and credit, savings and investment, as well as basic knowledge of instruments like credit cards, etc.

2. Planning and management, the area which works with the short and long term and stimulates habits related to the ability to make and manage plans.

3. Risk and diversification, which introduces the concept of risk and develops the ability to manage it.

4. Financial projections which includes basic knowledge of the financial world (contracts, interest rates, inflation, etc.).

Spain bore in mind the European recommendations via the Financial Education Plans[4] developed by the Banco de España and the National Stock Market Commission (abbreviated CNMV). In turn, in 2014 the decree implementing the Organic Law on Improving Educational Quality (abbreviated LOMCE), which established the basic primary school curriculum (Royal Decree 126/2014 dated 28 February 2014), stipulated that financial education be included in the primary school curriculum in the social sciences area. This was a

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[4] The Financial Education Plan in Spain was launched jointly in 2008 by Banco de España (BE) and the National Stock Market Commission (abbreviated CNMV). The overarching objective of the 2008-2012 Financial Education Plan was to "improve the financial culture of the populace so that citizens are prepared to deal with the new financial context with sufficient confidence" (CNMV and BE, 2008: 19). On the 4th of June 2013, the BE and the CNMV renewed the Financial Education Plan for 2013-2017. The new Plan recognises that during the period 2008-2012, contact had intensified with public and private bodies which were designing materials and implementing experiments in financial education. It also acknowledges that this widespread availability of "materials, tools and projects may not be very effective if they are not properly disseminated" (CNMV and BE, 2008: 20). To do so, they suggest carrying out a process of identifying projects in order to work together, avoid duplication and exchange experiences, as well as to develop a code of conduct. Today the 2013-2017 plan is about to conclude and some evaluations of the project have already been conducted (Hospido, Villanueva and Zamarro, 2015).

new development since the process of including financial education in primary school was fairly well developed in some countries and different studies had been conducted,[5] but in Spain the process had only been launched in secondary school. However, the law was approved without bearing in mind the need to train the trainers, that is, current and future primary school teachers.[6] This neglect will unquestionably generate difficulties in the immediate future. On the other hand, in the report that contains the competency levels of adults (OECD, 2013b: 29, 75), the OECD stated that Spain ranks among the lowest in reading comprehension and mathematical concepts. In terms of competencies, reading comprehension, numeracy and citizen competency are basic to the development of financial education.[7]

In PISA 2015, financial competency was assessed for the second time with the participation of 15 countries (OECD, 2017), including 10 countries belonging to the OECD (Australia, Belgium, Canada, Chile, Slovakia, Spain, the United States, Italy, the Netherlands and Poland) and 5 countries that do not belong to it (Brazil, China, the Russian Federation, Lithuania and Peru). Spain's score (469) was significantly under the mean of all the participating countries (481) and was ranked tenth (MECD, 2017). Twenty-five percent of Spanish students did not pass the tests. They understand the purpose of an invoice, for example, but they do not know how to take decisions on how to allocate or manage daily spending in a rational way. In this case, just as in 2012, the results are closely related to those obtained on the mathematical and reading competency, where Spanish students earn scores somewhat lower than in financial education.

It is difficult to introduce financial education into curricula without improving the competencies involved. The first steps to bear in mind when developing contents that can be included in primary school financial education curricula should be first, the need to train future teachers via a joint effort with the Faculties of Education Sciences, and secondly, the need to ascertain the shortcomings (in terms of financial education) that students show when

[5] See for Scotland: Granville and Primrose (2009). For the United Kingdom: Parliamentary (2011). Australia: Australian Government (2014). In the report by the Spanish Ministry of Education on financial competency in Spain in the PISA 2015 tests, some countries (Slovakia, China and Brazil, among others) are rushing to include financial education contents in primary school curricula (MECD, 2017: 14-15).

[6] One study that addresses the need to train teachers in financial education is Eades *et al.,* 2013.

[7] Mathematical skills are essential to sound financial education, as directly stated by some authors: "... we consider financial literacy as a particular form of human capital accumulation and recognize the potential role of mathematical ability early in life in determining future trajectories of financial literacy. We posit that the initial stock of financial literacy is strongly related to mathematical skills acquired at the onset of the life-cycle" (Jappelli and Padula, 2013: 2790). In this sense, we should question whether future teachers should not take mathematics during their baccalaureate. Regarding citizen competency, the PISA tests showed that students have a very low ability to relate financial concepts to aspects of their everyday lives, which may be a consequence of the values inherent in a kind of economic education in compulsory education which is largely divorced from citizens' reality (Pagès, 2005; Santisteban, 2008).

they begin adulthood, and to also engage in dialogue with teachers to design possible strategies to solve them.

The first objective of this study is to undertake an initial examination of financial knowledge and ideas on financial education through a survey conducted with university students. First, the main research approaches on aspects addressed in economic and financial education are established. Then the data and methodology are presented, and finally, we share the preliminary results of our study. This paper closes with a brief section on conclusions, in which we reflect on the financial education information that should be included in the primary school curriculum.

II. MAIN RESEARCH APPROACHES ON FINANCIAL EDUCATION

To identify the different research approaches on education and financial literacy topics, we can follow the classification posited in the study by Schuchardt *et al.* (2009), which distinguishes four main areas. The first one applies *behaviour theory.* From this perspective, economic and psychological factors that affect consumers' behaviour in financial matters and how scientific theories of behaviour motivate changes are analysed. There is a noteworthy study by Hilgert and Hogarth (2003) which explores the connection between knowledge and behaviour in four specific situations: a) cash-flow management, b) requests for credit, c) the option of saving and d) the option of making an investment. When discussing financial knowledge, this study stresses the importance of distinguishing between financial information and financial education. Financial education is a broader concept defined as the combination of having information, acquiring skills and being particularly motivated to make desired changes in attitude/behaviour.

The second area addresses the *consumer's economic socialisation.* This encompasses how individuals improve their economic status as they gain knowledge on consumer topics and financial skills. In this sense, it is essential to fully grasp the role played by each of the main agents in economic socialisation, including the family, who are the first to influence children, according to Rettig (1985), as well as school friends, the school and the media as well.[8]

The third area is *financial education, which evaluates the programmes offered.* The majority of studies are based on assessing the impact of the financial education taught in programmes targeted at specific groups, such as youths, and some of the most representative studies are McCormick (2009), Lusardi,

[8] In this regard, see chapters 14 and 15 of *the Handbook of Financial Literacy* (Aprea *et al.*, 2016).

Mitchell and Curto (2010) and Bassa Scheresberg (2013). It also examines employees and pensioners (Lusardi and Mitchell, 2011a).[9] Finally, there is an area which *evaluates financial risks.* This area of research advocates bearing in mind the level of risk tolerance or aversion when individual decisions are taken. Cordell (2002) and Hanna, Waller and Finke (2008) stress evaluating risk tolerance from a vantage point that improves the quality of the planning and satisfaction of the person taking the decisions.

In Spain, the studies that exist to date can be grouped into two main research approaches. The first is those that examine *economic knowledge as a dimension of citizen education or include reflections on the educational framework.* Generally speaking, these studies are by experts in social science education, in which financial education is part of economic education and economic education is part of education for citizenship (Pagès, 2005; Pagès and González Monfort, 2010; Santisteban, 2008 and 2013). Likewise, general reflections on economic and social aspects and their repercussions on education can be found in studies such as Burbules and Torres (2001). In this sense, Pagès (2005: 2) claims that: "the purpose of compulsory education should not consist in teaching economics or teaching history per se but helping students become aware, responsible citizens by providing them with ideological, theoretical and methodological instruments created by the social disciplines which will allow them to better understand society and its problems and to be part of the solution". Likewise, Santisteban (2008) focuses on the fact that not only should there be knowledge of certain specific economic concepts, but that it should come with a critical analysis of the causes and consequences in daily practice in order to foster the ability to evaluate any information before accepting it.

From another perspective, the focus is on *quantitative analyses* based on the results of PISA 2012 and 2015, as well as one some of the training programmes by the BE and CNMV delivered in schools. A good compilation of them can be found in the Revista de Educación and the INEE.[10] Based on the PISA tests, a series of contributions were added that analyse different aspects, including: how the determinants of students' academic performance on financial matters are associated with their cultural and social capital; the connection between performance on the mathematical and reading competencies and financial knowledge; the robustness of the correlation between different sociodemographic factors and the results of a test on financial knowledge,

[9] The number of studies that evaluate financial education has gone up dramatically; they include Hung, Parker and Yoong (2009), Kindle (2010) and Atkinson and Messy (2012). Huston (2010) includes a literature review from the USA.

[10] Here are the studies analysing the PISA data related to financial education: https://www.mecd.gob.es/inee/bases-datos/evaluaciones-internacionales/pisa.html

including whether the kind of school (public versus government-subsidised) influences financial competencies through its effects on mathematical knowledge. The statistical or econometric component plays a crucial role in all of these studies, and most of the researchers come from the field of Economics.

Thus, the impression gotten from the analyses performed to date is that there is a lack of dialogue between economics experts and education experts. On the one hand, there is a series of reflections on how the economic world affects or should affect education, how it should be taught, etc., while on the other, there is a battery of econometric studies whose purpose is to cross data. However, no clear questions emerge on the educational implementation of economic and financial concepts. Nonetheless, they are all keenly interested in spotlighting the gap, and efforts in this vein must increase, perhaps with greater connectedness. To this end, it may be worthwhile to reflect on the connection between the two research paradigms (Yilmaz, 2013).

Given this state of affairs, our study is based on a realisation and a set of hypotheses. The realisation is that there are no benchmark studies in Spain whose purpose is to ascertain the initial level of primary school teachers and the population in general, thus ignoring one of the principles underpinning the EU report recommending the implementation of high-quality national financial education plans (COM 2007-808). Principle number 2 indicates that financial education programmes should be meticulously geared to meet citizens' specific needs. In order to achieve this objective, previous studies must be performed to ascertain citizens' level of financial awareness in order to detect what particular problems must be addressed. Based on this finding, we posit the following hypotheses:

- The influx of contents related to financial education in the primary school curriculum is sparking reluctance and mistrust among teachers, who believe that this is a neoliberal proposal on the contents of economic education.

- Financial education contents have been introduced into the primary and secondary school curricula without sufficient consensus, discussion and analysis by the different educational and economic stakeholders.

- Future teachers (both primary and secondary) have received no training related to financial education. Their knowledge is based on their personal experiences and is the product of their own social representations, which have seldom been checked against reliable information and contents.

- There are no teaching proposals to implement contents on financial education in the primary school classroom. There are institutional initiatives,

both private and public,[11] and individual initiatives by teachers who share their experiences and innovations,[12] but they are not the product of educational research.

- There are teaching proposals to deal with financial education in secondary school (such as the ones developed by the Ministry of Economy and Competitiveness, the Banco de España, the National Stock Market Commission, the IEF and BBVA), but they are not the product of interdisciplinary work and dialogue between economics and education.

All of these working hypotheses incorporate the work that has been done in the past decade, while also revealing a lack of dialogue between the world of economics and the world of education, the latter being, after all, the discipline that has to add the contents to the curricula. One first step is to determine the most important gaps in financial education in primary and secondary teacher training. Therefore, in this study we are working with the following hypothesis:

- The majority of university students have heard about many concepts related to financial education (savings, planning, money, investment, etc.) but are hard-pressed to define or explain them or to cite examples of them. Their knowledge of the conceptual framework is very vague, diffuse and even contradictory. The students have acquired the foundation of their economic-financial education at school (mainly secondary) and in the family.

The fact that the Ministry of Education has added aspects of financial education to the primary school curriculum is clearly a step forward that offers both opportunities and challenges. In line with the questions outlined in Cabrera and Arenillas (2013), we should question whether the incorporation of financial education into the social sciences area of the primary school curriculum requires a series of continuities to be implemented. Thus, analysing the measures adopted, if any, planning studies that enable us to identify the level that should be implemented, offering working teachers appropriate training and fostering the inclusion of elements from economic and financial education into Bachelor's degree curricula are just some of the aspects on which there is no information, and they are thus the target of our study.

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[11] For example, see the BBVA website: http://www.valoresdefuturo.com/ y la web del Banco de España: http://www.finanzasparatodos.es/gepeese/es/ludoteca/index.html

[12] In this regard, see: https://josesande.com/2011/03/10/educacion-financiera-en-primaria/

III. THE DATA: FINANCIAL KNOWLEDGE OF UNIVERSITY STUDENTS IN BARCELONA. A CASE STUDY

Our research group[13] includes professors from the Faculty Education Sciences at the Universidad Autónoma de Barcelona (UAB) and the Faculty of Economics and Business at the Universidad de Barcelona (UB). In 2015, it designed a survey targeted at Catalan university students. The research has two objectives. The first is to ascertain the level of financial competencies the students had acquired in the different areas of knowledge established by OECD experts (money and transactions, planning and management, risk and diversification, financial projections). Three additional questions introduced in international surveys by Lusardi and Mitchell (2011b) were added to the specific questions. Several aspects related to finances and ethics were also introduced (Santisteban *et al.,* 2015). The second objective is to ascertain whether the students are aware of the purposes of financial education and the learning process it entails, and simultaneously whether they are capable of interpreting their own training process in this field.

The sample included 177 students.[14] The goal of focusing on university students reflects the desire to inquire into the foundation of financial education that the population has during their higher education. We are aware that this excludes the population that never reaches the university; however, the university population can provide us with a picture of what was learned about finances throughout compulsory education and baccalaureate. Identifying where the main shortcomings are should help us improve the incorporation of contents in primary education while also striving to grasp the requirements that university programmes targeted at future educators should fulfil. This is why we focused on university students, with the goal of testing the survey in order to ultimately extend it to a broader sample.

Our research revolves around a case study. Catalonia has seven in face-to-face and distance formats, public universities which accounted for 73.6% of all university students in academic year 2015-2016. There are also four private universities (which account for 10.6%) and one distance university which accounts for 15.8% of university students. The universities in Barcelona are the majority, accounting for 82% of all students working towards their Bachelor's degrees at Catalan public universities. The survey was conducted in the Bachelor's in Primary Education (abbreviated EDU) at the Universidad Autónoma de Barcelona (UAB) and the Bachelor's in Business Administration (BBA) and the

[13] GIEF: https://webgrec.ub.edu/websGR/GIEF0000_CAS.html

[14] The survey was also administered to a Master's course in teacher training in the social sciences in secondary school, the results of which were not included in this article.

TABLE 1

STUDENTS IN THE CATALAN PUBLIC SYSTEM

	Correctly answered Total number of students at public universities in Catalonia	*% UB*	*% UAB*
2011-12	103,160	32	21
2012-13	127,690	32	22
2013-14	141,550	31	22
2014-15	147,344	31	22
2015-16	148,823	30	22

Source: IDESCAT (the figures from the year of the study are shaded grey).

Bachelor's in Labour Relations (BLR) at the Universidad de Barcelona (UB). These universities together account for more than 50% of the students in the Catalan public university system, as shown in Table 1.

The degree programmes where the samples that allowed us to construct the case study were taken were chosen with the goal of representing students that had received some kind of economic training in secondary school (usually BBA and BLR), as well as representing students in Education. We decided to take the first-year students from BBA and BLR at the UB in order to test their knowledge when they enter the university. In the case of Primary Education students, we chose instead to study the latter years in the degree programme given that they provided us with a more mature view that would include knowledge that the students had gotten at the university. Both of these decisions fit the purpose of our study. In academic year 2014-2015, the BBA (Faculty of Economics and Business) had a total of 4,778 students, so our analysis represented 1.3% of the total (although if we estimate this figure over the total number of students in their first year, it is almost 5%). In the case of the Bachelor's in Labour Relations (within the Faculty of Law), 63 students responded, meaning that the sample accounted for 5% of the total (in relation to all the first-year students, it accounted for 17%). The Bachelor's in Primary Education at the UAB had a total of 1,159 students in all four years in academic year 2014-2015, which means that our sample accounted for 4.4% of the total, although if we only count students in the 3rd and 4th year, which we analysed, our sample accounts for 8.5% of the total (603).

These figures hinder us from generalising the conclusions, but they do allow us to reach our objective: to get information in order to conduct a study on a representative sample.

TABLE 2

SAMPLE OF THE STUDY

Degree	*Total survey*
Primary Education-3rd year	32
BBA 1	63
Primary Education-4th year	19
BLR 1	63
Total	177

The questionnaire contained questions related to the four aspects noted by the OECD experts mentioned above. Likewise, it was divided into two parts: one focused on economic questions and the other on educational questions. It worked with both open-ended and closed-ended questions. The closed-ended questions in the first part included the "big three" from the *Health and Retirement Study* (HRS) (2004), with a few modifications. The open-ended questions asked respondents to solve a financial or educational problem.

The first part of the questionnaire sought to get information on the students' knowledge of financial concepts like credit, investment, mortgage and inflation, as well as concepts like consumption and inequality. They were asked to describe how the price of things is determined and what kind of profits they would earn from certain investments, in this case based on an activity in which they had to choose between three possible responses about that profit.

The second part of the questionnaire on financial education in compulsory education asked them to assess the objectives of financial education based on 10 possible options, some of them more conceptual (knowing what money, credit cards, cheques, bank accounts, etc. are, and knowing the implications of using each of them), others about their knowledge of the procedures needed to take economic decisions (being capable of planning one's own economy in the long term in order to have enough money when needed) and other more cross-cutting questions on democratic citizenship education (being a responsible consumer who bears their own needs and the socio-environmental impact of their decisions in mind). In all of these questions, our goal was to address issues related to family finances, consumption, planning, autonomy to make financial decisions, the capacity to evaluate risks, the capacity for entrepreneurship and social factors.

Another set of questions revolved around what they had learned in primary school, their opinion on the recent inclusion of these contents in the

latest education law (LOMCE[15]) and what prominent financial news story they recalled from the past three months. Regarding the financial news, the most symptomatic results is that 40% could not identify any story, 15% cited cases of corruption and the rest mentioned different news stories related to the situation of Greece, the drop in oil prices and issues related to the platforms to defend people evicted because of their inability to pay their mortgages. The information that this question provides us should be situated within the context in which the survey was administered; a that time, public opinion was shaken up by cases of corruption associated with the improper use of "black cards" by some bank managers.

1. The Results

In the first part of the questionnaire, the purpose of the terminological definitions was to identify the aspects in which the university students concurred the most, as well as those that they were unsure of. This was planned as an open-ended question, and we sought to evaluate the responses using previously established criteria. The results related to the definitions are reflected in Table 3.

Even though criteria were developed to correct the definitions, ultimately we chose to consider some definitions that were incomplete, not very rigorous

TABLE 3

RESPONSES TO QUESTION 1

Term	*Definition accepted as correct*	*Correct*	
Money	Purposes of money (correct responses observed: *means of payment and counting unit.* Not store of value.	125	***71%***
Credit	*Asking the bank for money* (only 3 mentioned trust)	66	***37%***
Saving	*Setting aside* for the future (few distinguished the *difference betwen income and expenses*)	123	***69%***
Investment	*Profit* in the future (confusion with saving). The concept of *risk* appeared infrequently (3)	112	***63%***
Consumption	*Shopping and spending money* (confusion with the use of goods and services)	146	***82%***
Interest rate	They seldom equate interest with the *"price of money"* (just 10) although a few more got the idea (60)	70	***40%***
Inflation	*Price increases* (some identify causes)	118	***67%***

[15] Organic Law to Improve Educational Quality.

or immature as valid. However, the general nature of the responses led us to consider minimum thresholds and evaluate which aspects were forgotten or not recognised in order to identify them and be able to examine them in future studies.

Regarding money, the purpose of the question was to observe whether they identified the purposes that money serves. A second objective was to explore their knowledge of banks' role in creating money and the role of central banks. However, these elements did not appear, and the purpose that was identified the most was as a means of payment. Money was hardly ever identified as a store of value. Any definition that contained any of the purposes of money was considered valid. We should note in this section that a study conducted at the UB on financial knowledge among primary school students in Barcelona (Oliván López, 2015)[16] revealed that more than 20% of the students identified people as money. Specifically, 22% of the students believed that it was correct to answer that Justin Bieber and Cristiano Ronaldo represent money.

Regarding credit, our goal was to get them to mention the difference between loan and credit. However, most of them were unable to distinguish the two. The most common definition which we considered valid was asking the bank for money. The term *trust* seldom appeared (just 3 students).

Saving was one of the concepts that the students understood the best; they equated it with "setting aside money" for the future. Few stated that saving is the difference between income and spending, but they did mention the concept of the future.

With the question on investment we wanted the students to state that the purpose of investing is to get future profits and that this entails a risk. However, the concept of risk rarely appeared in the responses.

Consumption was another concept that the respondents defined clearly as a kind of spending. Some students confused it with the use of goods and services.

The interest rate was rarely associated with the price of money in the surveys (only 10 respondents). In the case of APR, a few students identified the acronym, but not many were able to define it correctly.

[16] The complete study may be viewed here: http://diposit.ub.edu/dspace/bitstream/2445/66707/1/TFG-ADE-Oliv%C3%A1n-Toni-juliol15.pdf and a summary here: http://blog.educalab.es/inee/2015/07/31/primera-aproximacion-a-los-conocimientos-financieros-en-la-educacion-primaria-analisis-y-evaluacion/

Inflation was recognised as an increase in the prices of goods and services. Some students identified over issuing currency or the depreciation of the currency as the causes of inflation.

The concept of mortgage and inequality, as well as answers to the question on how the prices of things are set, have not yet been analysed. In the concept of mortgage, we were looking for the idea of securing financing and debt. In the inequality question, we were looking for the idea of the concentration of wealth. And in the price-setting question, we were interested in knowing whether the students would mention supply and demand and whether at any point they would mention situations involving the increase in the money supply and its effect on prices.

The following questions included the three questions that Lusardi and Mitchell asked when administering surveys to broad swaths of the population (Lusardi and Mitchell, 2011b).

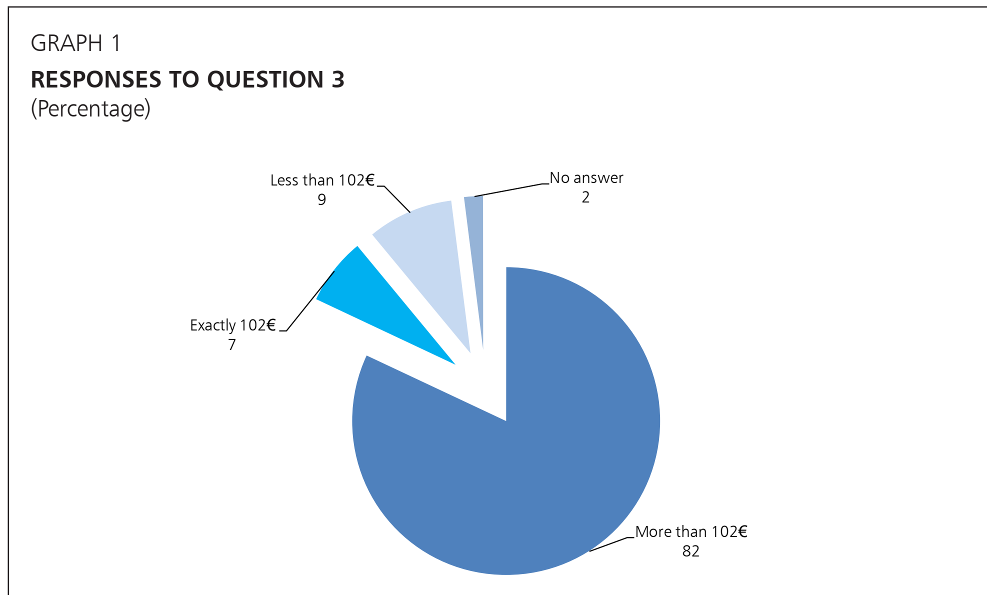
Question 3.- Imagine that you deposit 100 euros in a savings account and the annual interest rate is 2%. Within 5 years, how much money would you have in your account?

The results are shown on the graph; however, there were differences by degree programme. The number of correct answers in the different programmes was as follows: BBA: 89%, BLR: 75%, EDU (mean of both years): 82%.

GRAPH 1

RESPONSES TO QUESTION 3

(Percentage)



The figures force us to consider that the students begin their programmes with quite different training. The 14% gap between students in BBA and BLR shows this. However, it is not conclusive and the sample should be broadened before drawing definitive conclusions.

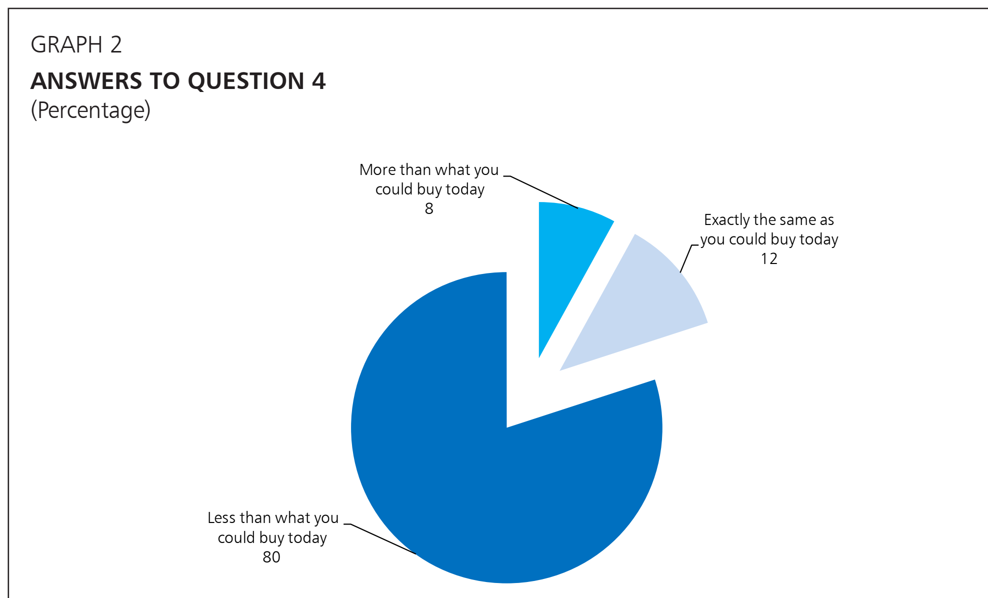
Question 4.- Imagine that the annual interest rate in your savings account is 1% and that inflation is 2% per year. Within one year, what could you buy with the money in your account?

With regard to the concept of inflation, the EDU students earned worse results than the other students. Seventy-two percent of EDU majors responded correctly, 80% of Labour Relation students and 86% of BBA students. This 14% difference between BBA and EDU is noteworthy because the EDU students are in their third and fourth years. We should ascertain whether the different baccalaureate tracks affect this kind of result.

GRAPH 2

ANSWERS TO QUESTION 4

(Percentage)



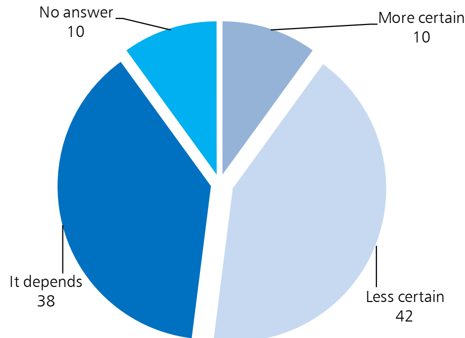
Question 5.- Imagine you buy one share in a company and one Treasury Bond, which you keep until it comes due. What do you think the profitability of your share would be compared to your Treasury Bond?

In the risk section, we wanted to include a fourth choice (it depends), even though we think the LESS CERTAIN choice is the best one. If we break it down by degree programmes, 32% of BBA, 39% of BLR and 45% of EDU

GRAPH 3

RESPONSES TO QUESTION 5

(Percentage)



students responded "it depends". The idea of introducing this fourth option stems from being able to perform other subsequent analyses; for the time being, we are only interested in highlighting the fact that the respondents that answered "it depends" the most were from the EDU degree. This could mean one of two things: a) they have a lower level of economic education and the "it depends" option is ambiguous; or b) they are more mature (they were in their 3rd and 4th year) than the BBA and BLR students and thought about the problems associated with government indebtedness, the risks of which were being discussed the news around the time the survey was administered. Future surveys should strive to clarify this question.

A total of 56% of students responded correctly to all three questions. According to the study by Mitchell and Lusardi (2015, p. Fig. 1), the average number of university students who answered all three questions correctly situate Spaniards below the Germans or Swiss, but not too far from the Dutch or US Americans.

Another of our interests was to identify what the population understands by finances and financial education. In relation to the concept of finances, three definitions were included. They were first Schiller's (Shiller, 2012: 28–29): "a science which allows certain goods or resources to be administered and the economic agreements needed to achieve a set of socially defined goals to be achieved"; secondly, the one from the field of economics: "the part of

TABLE 4

DEFINITION OF FINANCIAL EDUCATION

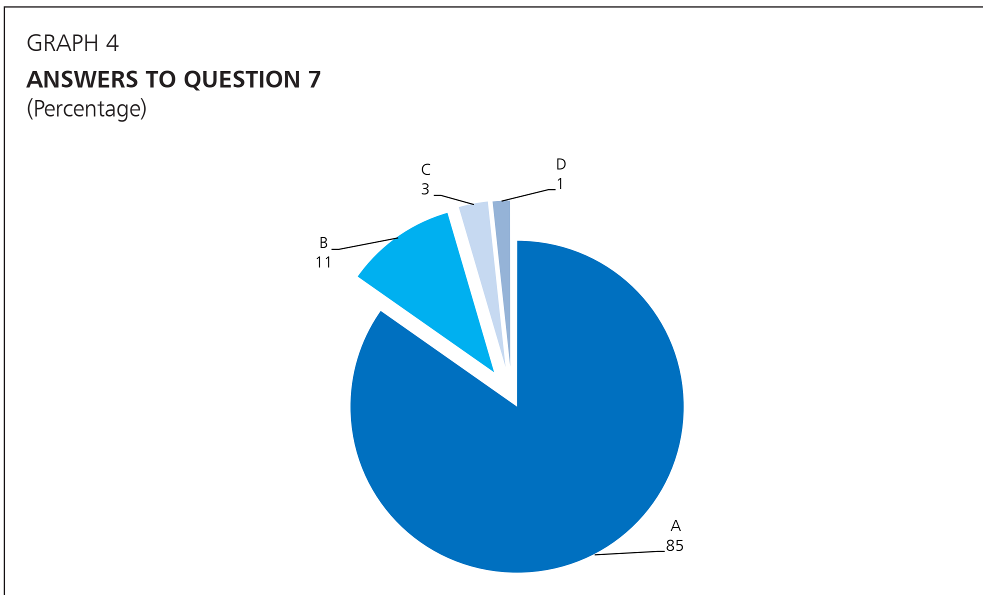
Term		*Definition accepted as correct*
OECD	A	*The process by which individuals gain a better understanding of financial concepts and products and develop the skills they need to take informed decisions, evaluate financial risks and opportunities, and improve their welfare.*
Literacy	B	*The capacity to use financial knowledge and skills to effectively manage the economic resources available to achieve welfare in life.*
Financial knowledge	C	*A specific form of knowledge, as well as the capacity to use it in practice. Sometimes it is assessed by the individual's perception of their own knowledge.*
Don't know / No answer	D	*No answer.*

economics which revolves around decisions in companies and individuals, as well as the State, on investing and obtaining financial resources, that is, financing. Therefore, it refers to the administration of financial resources, including securing and managing them"; and finally, we added the definition from the Dictionary of the Spanish Royal Academy, "Pertaining or relative to the public

GRAPH 4

ANSWERS TO QUESTION 7

(Percentage)



treasury, to bank and stock market matters or to large trading companies".[17] Most students chose the definition from the field of economics.

In the second part of the questionnaire, the students were asked about their concept of financial education.

To do so, we distinguished three definitions to offer in the survey: the one provided by the OECD, the definition of financial literacy and the definition of financial knowledge (question 7).

Most of the students preferred the OECD's definition. With regard to this definition, it is interesting to note that financial education is defined as a process associated with decision-making and people's welfare. We should further note that the options were presented without assigning them any authorship, current of thinking, or previous definition.

Likewise, the students were asked to sequence the objectives of financial education from most to least important. The sequence they came up with (see

TABLE 5

OBJECTIVES OF FINANCIAL EDUCATION ACCORDING TO THE STUDENTS

1	*To know what money, credit cards, cheques, bank accounts, etc. are, and to be aware of the implications of using them.*
2	To be capable of *planning* one's own economy in the long term in order to have resources, if needed.
3	To know and exercise our *economic rights.*
4	To be a *responsible consumer* who bears in mind their own needs and the socio-environmental impact of their decisions.
5	To have *autonomy* to take decisions on the family budget.
6	To know at all times whether it is better to *save or invest* with the goal of becoming economically autonomous.
7	To know how *banks* or other financial entities work and to be aware of the implications of working with them.
8	To know the banking mechanisms of credits in order to take on the risks if one has to *become indebted.*
9	To know how *salaries* lose or gain purchasing power.
10	To have the initiative to make investments and be *entrepreneurial*.

[17] The DRAE defines as financial: *Perteneciente o relativo a la Hacienda pública, a las cuestiones bancarias y bursátiles o a los grandes negocios mercantiles.*

GRAPH 5

ANSWERS TO QUESTION 9

(Percentage)

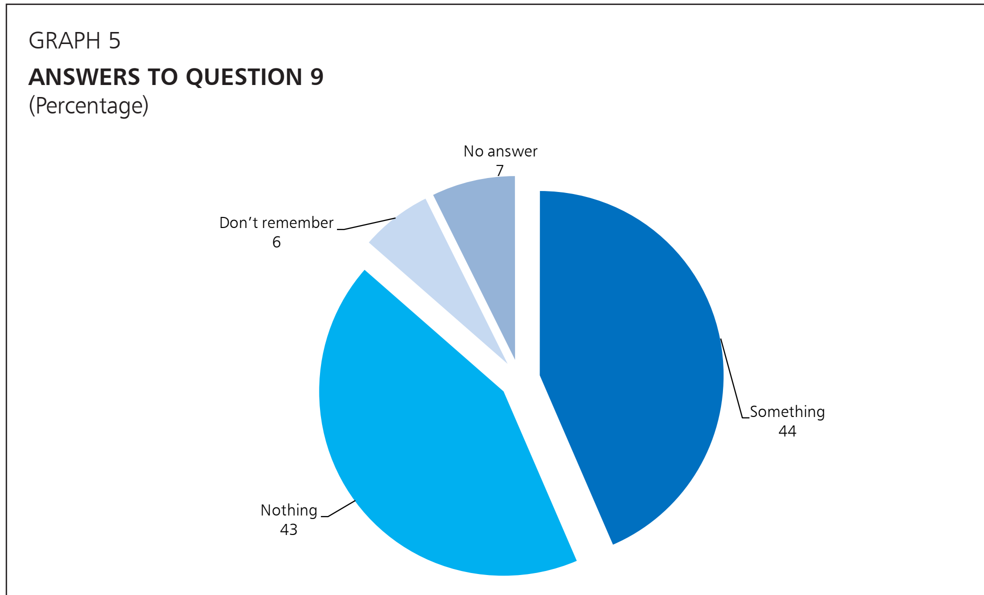


Table 5) indicates that there is some agreement with the provisions issued by the national and international bodies and that its main objectives should be to become familiar with monetary instruments, to be capable of planning, and to be autonomous and responsible economic agents. It is interesting to see the importance attached to knowledge and capacity so that stakeholders can exercise their economic rights.

We then asked where they had gotten their knowledge of finances. We wanted to know whether they had received any information related to the world of finances in primary school (question 9).

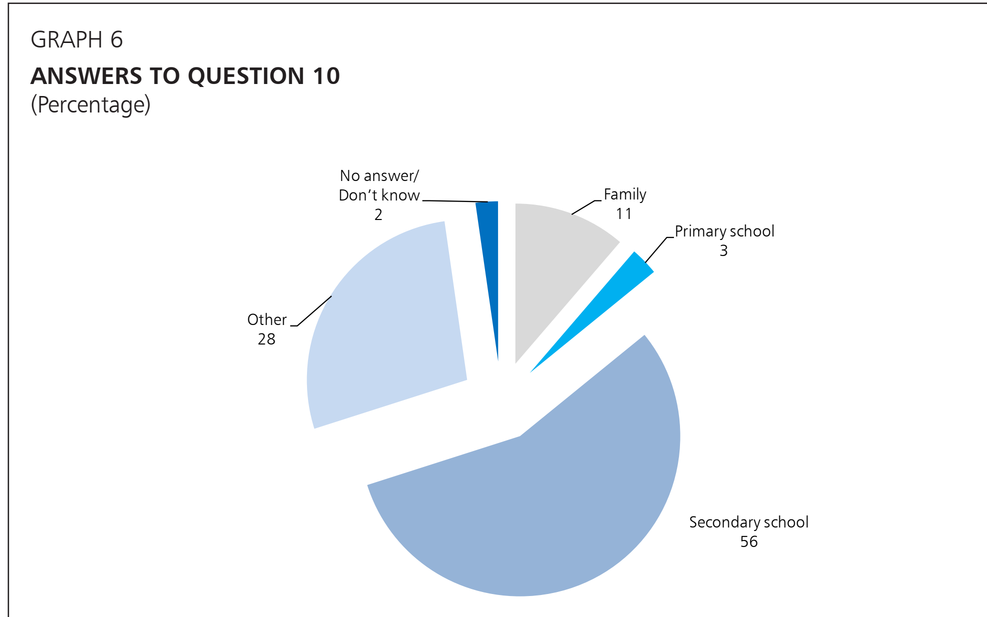
This was asked as an open-ended question with the goal of gathering information that would later enable us to fine-tune the question. Forty-four percent of the sample indicated that they had learned "something" in primary education. This "something" mainly encompassed aspects related to money, consumption and banking, and the respondents included mathematical knowledge within the concept of financial education. Forty-three percent claimed that they had never learned anything, while 6% said that did not remember learning anything. The remaining 7% did not answer the question. No differences were found among the different programmes or academic years.

In a more specific question, they were asked where they had gotten their knowledge of finances (question 10). The results show that 56% of them

GRAPH 6

ANSWERS TO QUESTION 10

(Percentage)



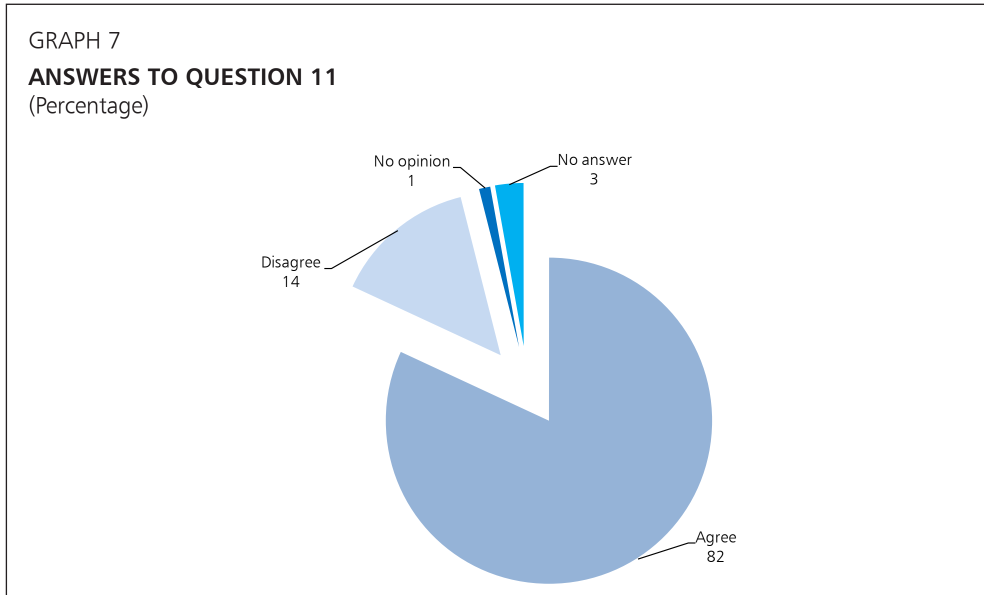
had gotten it during secondary school, specifically in baccalaureate. Most of those who stated that they had gotten their knowledge in baccalaureate were students in the BBA and BLR programmes who either came from a higher-level vocational programme or had studied economics in their baccalaureate. Most of the EDU students (over 50%) indicated that their knowledge came from their own sources (friends, family, the media and work were the most common answers). Twenty-eight percent stated that they learned it "on their own" from conversations with friends, the media, their own daily lives, work or studies. Conversations with family and lived experiences were mentioned by 11%, and only 3% stated that they learned it in primary school, which is logical given that it was not part of the school curriculum. Finally, 2% did not answer the question.

They were also asked their opinion on including financial education contents in the primary school curriculum (question 11). Eighty-two percent agreed with this and believed that including it would be very positive, since they think that by doing so students could learn basic contents on economics and finances; become aware of essential aspects like consumption, money and saving; understand the world in which we live; or simply begin to familiarise themselves with concepts that will be a part of their everyday lives. Fourteen percent do not agree with this proposal since they believe that primary school students are too young to understand financial concepts, and they suggest saving these contents for secondary school. It is worth noting that most of the

GRAPH 7

ANSWERS TO QUESTION 11

(Percentage)



students with this opinion (80%) are in the BBA and BLR degree programmes. Only 4% had no opinion or did not answer the question.

IV. CONCLUSIONS AND FUTURE RESEARCH

The following conclusions contain the most important findings of the case study we have presented. On the one hand, in the surveys administered, *money* was identified as a means of payment and/or a counting unit, but not as a store of value. The implications of this when working on *saving* should be analysed. Likewise, *interest rate* was not identified as the price of money, which compels us to wonder how the respondents understand *debt,* a concept that was not included in the survey administered (except in one of the objectives of financial education which was not very highly rated by the students; see Table 4); perhaps it should be included in future studies. Furthermore, the concept of *spending* does not seem very clear. *Investment* tends to be understood as *saving*. Even though the respondents seem to clearly understand that investment brings *profit,* it does not seem so clear that it also entails *risk*. In *credit,* the relationship between the debtor and creditor does not seem to be marked by *trust.* The concept of *trust* in the financial world is not found in the students' responses. Perhaps some mechanism can be established to monitor this concept in future studies.

Students seemed aware of the importance of *financial education* in their training for life. They appreciated the importance of knowing their *economic rights* or of being *responsible consumers* and supporting *sustainability*. A significant number of students acknowledge that their previous knowledge comes from *informal sources* (family, the media, friends or world) and that they did not have adequate financial education in primary school. Regarding the *inclusion of financial contents in primary school,* the EDU students are more in favour of it, although they associate it with *social justice values.* In contrast, the BBA and BLR students believe that primary school students are too young for this kind of content.

The majority of countries accept that a suitable democratic education for citizenship should be based on three major interrelated areas: political education, legal education and economic and financial education. Without one of these areas, compulsory education would not be training autonomous, responsible citizens. It seems clear that financial education should start in primary school, although we should use clear arguments to support why we want to teach certain economic contents, what form they should take and how they should be taught.

These conclusions should allow for broader research with the goal of establishing how to articulate the financial education contents that LOMCE states should be developed in the primary school curriculum. And perhaps even more importantly, they should also posit the need to include aspects related to financial education in the contents of university Education programmes. This factor is what will enable future teachers to acquire the competencies they need to offer students the training in economic-financial matters that prepares them to be responsible and autonomous in their financial decisions throughout their entire lifetime.

Over the course of these years, our group has worked to generate a space of research and reflection on trainer training: the teachers, advisors and educators who will be responsible for conveying financial contents and competencies. To achieve this, cooperation between the world of education and sectors of the economy devoted to finances is essential in order to address the topic from an interdisciplinary perspective. One of the opportunities offered by this essential cooperation is the possibility of implementing these contents with high expectations of quality. On the other hand, the content roadmap chosen throughout the different years of education should be coherent from the economic standpoint, while also accompanied by solid training in ethical and social values aimed at preserving the “common good”.

Cooperation can facilitate the training of education experts in economic contents. Cooperation among professionals in different fields can enable

this cooperation to extend to institutions and public administrations. The transversality of knowledge and human teams enriches any project. All of these aspects highlight the need to for experts in the different areas of economics, finances and education to work together continuously in order to introduce contents that foster the acquisition of the financial competencies that will be needed in the future.

BIBLIOGRAPHY

AKERLOF, G. A. (1970), "The Market for "Lemons": Quality Uncertainty and the Market Mechanism," *The Quarterly Journal of Economics,* 84: 488–500, doi:10.2307/1879431

APREA, C.; WUTTKE, E.; BREUER, K., *et al.* (2016), *International Handbook of Financial Literacy,* Singapore: Springer.

ATKINSON, A., and F.-A. MESSY (2012), *Measuring Financial Literacy,* OECD Publishing, doi:10.1787/5k9csfs90fr4-en

BASSA SCHERESBERG, C. DE (2013), "Financial Literacy and Financial Behavior among Young Adults: Evidence and Implications," *Numeracy,* Vol. 6, Iss.2, Art.5: 1–21, doi:10.5038/1936-4660.6.2.5

BAY, C.; CATASÚS, B., and G. JOHED (2014), "Situating financial literacy", *Critical Perspectives on Accounting,* 25: 36–45, doi:10.1016/j.cpa.2012.11.011

BLASCO-MARTEL, Y., and C. SUDRIÀ-TRIAY (2016), "The Banknote, a Momentous Innovation in Spain," in: BATIZ-LAZO, B., EFTHYMIOU, L. (Eds.), *The Book of Payments,* Palgrave Macmillan UK, London: 23–32, doi:10.1057/978-1-137-60231-2_3

BURBULES, N. C., and C. A. TORRES (2001), "Globalización y educación," *Revista de Educación:* 13–29.

CABRERA, M., and C. ARENILLAS LORENTE (2013), "Sobre la necesidad de educación financiera," in: LUCENA I BETRIU, M., REPULLO, R. (Eds.), *Ensayos Sobre Economía Y Politica Económica: Homenaje a Julio Segura,* Antoni Bosch: 433–448.

CORDELL, D. M. (2002), "Risk Tolerance in Two Dimensions," *Journal of Financial Planning,* 15: 1–30.

DE HAAN, J., and J.-E.STURM (2017), "Finance and income inequality: A review and new evidence" (in press), E*uropean Journal of Political Economy,* doi:10.1016/j.ejpoleco.2017.04.007

EADES, K.; FOX, J.; KEOWN, A., and M. STATEN (2013), The Role of Professors in Improving Financial Literacy Roundtable Sessions: Highlights from the 2012 Financial Management Association Annual Meeting, *Journal of Applied Finance,* Vol. 23, No. 1: 138-144.

EUROPEAN PARLIAMENT COMMITTEE ON LEGAL AFFAIRS (2017), *Draft Report with recommendations to the Commission on Civil Law Rules on Robotics,* January.

GOVERNMENT AUSTRALIAN (2014), *National Financial Literacy Strategy,* 2014–17.

GRANVILLE, S.; PRIMROSE, D., *et al.* (2009), *Evaluation of Financial Education Scottish Primary and Secondary Schools,* Scottish Government Social Research.

HANNA, S. D.; WALLER, W., and M. S. FINKE (2008), "The Concept of Risk Tolerance in Personal Financial Planning," *Journal of Personal Finance,* 7: 96–108, doi:10.2139/ssrn.1923409

HILGERT, M. A., and J. M. HOGARTH (2003), "Household Financial Management: The Connection between Knowledge and Behavior," *Federal Reserve Bulletin* July: 309–322.

HOSPIDO, L.; VILLANUEVA, E., and G. ZAMARRO (2015), Finance For All: The Impact Of Financial Literacy Training In Compulsory Secondary Education In Spain, *Working Papers,* Banco de España & Working Papers Homepage.

HUNG, A.; PARKER, A. M., and J. YOONG (2009), Defining and Measuring Financial Literacy, SSRN *Electronic Journal,* doi:10.2139/ssrn.1498674

HUSTON, S. J. (2010), "Measuring Financial Literacy," *Journal of Consumer Affairs,* 44: 296–316, doi:10.1111/j.1745-6606.2010.01170.x

JAPPELLI, T., and M. PADULA (2013), "Investment in financial literacy and saving decisions," *Journal of Banking & Finance,* 37: 2779–2792, doi:10.1016/j.jbankfin.2013.03.019

KINDLE, P. A. (2010), "Student Perceptions of Financial Literacy: Relevance to Practice," *Journal of Social Service Research,* 36: 470–481, doi:10.1080/01488376.2010.510951

LO PRETE, A. (2013), "Economic literacy, inequality, and financial development," *Economics Letters,* 118: 74–76, doi:10.1016/J.ECONLET.2012.09.029

LUSARDI, A., and O. S. MITCHELL (2011a), *Financial literacy and planning: implications for retirement wellbeing,* National Bureau of Economic Research, Cambridge, Mass.

— (2011b), "Financial literacy around the world: an overview Financial literacy around the world: an overview," *Journal of Pension Economics and Finance,* 10: 497–508, doi:10.1017/

LUSARDI, A.; MITCHELL, O. S., and V. CURTO (2010), "Financial Literacy among the Young," *Journal of Consumer Affairs,* 44: 358–380, doi:10.1111/j.1745-6606.2010.01173.x

MCCORMICK, M. H. (2009), "The Effectiveness of Youth Financial Education: A Review of the Literature," *Journal of Financial Counseling and Planning,* vol. 20, No. 1.

MECD (2017), *PISA 2015 Programa para la Evaluación Internacional de los Alumnos. Competencia Financiera Informe Español,* Madrid: MECD.

Mitchell, O. S., and A. Lusardi (2015), "Financial Literacy and Economic Outcomes: Evidence and Policy Implications," *The Journal of Retirement,* 3: 107–114, doi:10.3905/jor.2015.3.1.107

O'Connell, A. (2007), *Measuring the effectiveness of financial education,* Wellington, New Zealand: The Retirement. Commission.

OECD (2005), *Principles and Good Practices for Financial Awareness and Education,* Recommendation of the Council. http://www.oecd.org/finance/financial-education/35108560.pdf

— (2013a), *PISA 2012 Assessment and Analytical Framework: Mathematics, Reading, Science, Problem Solving and Financial Literacy,* OECD Publishing. http://dx.doi,org/10.1787/9789264190511-en

— (2013b), *OECD Skills Outlook 2013 First results from the survey of adult skills,* OECD Publishing, http://dx.doi.org/10.1787/9789264204256-en

— (2017), *PISA 2015 Results (Volume IV): Students' Financial Literacy,* Paris: OECD Publishing, http://www.oecd-ilibrary.org/education/pisa-2015-results-volume- iv_9789264270282-en

Oliván López, T. (2015), *Análisis y evaluación de los conocimientos financieros en la educación primaria: propuesta de mejora,* Universitat de Barcelona.

Pagès, J. (2005), "La educación económica de la ciudadanía," *Kikiriki, Cooperación Educativa,* 77: 43–47.

Pagès, J., and N. González Monfort (2010), "¿Por qué y qué enseñar sobre la crisis?," *Cuadernos de Pedagogía,* 450: 52–60.

Parliamentary (2011), Financial Education for Young People. Written evidence submitted to the of the All Party Parliamentary Group on Financial Education for Young People to inform the inquiry into Financial Education and the Curriculum.

Rettig, K. (1985), "Consumer socialization in the family," *Journal of Consumer Education,* 3: 1–7.

Santisteban, A. (2008), "La educación para la ciudadanía económica: comprender para actuar," *Iber. Didáctica de las Ciencias Sociales, Geografía e Historia,* 58: 16-25.

— (2013), "La alfabetización económica de la ciudadanía," *Uno: Revista de Didáctica de las Matematicas,* 62: 21–30.

Santisteban, A.; Blasco-Martel, Y.; Bosch-Príncep, M.; Pagès, J.; Gonzalez-Monfort, N., and T. Preixens (2015), "La educación financiera: un contenido hasta ahora invisible que ha irrumpido en el curriculo de ciencias sociales," in: Hernandez-Carretero, A.M., García-Ruiz, C., De la Montaña, L. (Eds.), *Una enseñanza de las ciencias sociales para el futuro: Recursos para trabajar la invisibilidad de personas, lugares y temáticas,* Universidad de Extremadura, Cáceres: 593–600.

Schuchardt, J.; Hanna, S. D.; Hira, T. K.; Lyons, A. C.; Palmer, L., and J. J. Xiao (2009), "Financial Literacy and Education Research Priorities," *Journal of Financial Counseling and Planning,* 20: 84–95.

Sherrard, M. (2010), Financial Capability: What is It, and How Can It Be Created? (No. 10–17), *CSD Working Papers.*

Shiller, R. J. (2012), *Las finanzas en una sociedad justa: dejemos de condenar el sistema financiero y, por el bien común, recuperémoslo,* Deusto, Barcelona.

Willis, L. E. (2011), "The financial education fallacy," *American Economic Review,* Vol.101, 3: 429–434, doi:10.1257/aer.101.3.429

Yilmaz, K. (2013), "Comparison of Quantitative and Qualitative Research Traditions: epistemological, theoretical, and methodological differences," *European Journal of Education,* 48: 311–325, doi:10.1111/ejed.12014

PANEL 2

Importance of a Lifetime Savings for Everyone

THE HISTORY OF FINANCIAL EDUCATION IN THE UK

Janette RUTTERFORD

I. INTRODUCTION

The aim of this paper is to explore the history of personal financial education for all, and to see whether the past can inform current approaches. The paper starts with the explosion of encouragement to save in the Victorian era, as epitomised by the self-help text on how and why to save by Samuel Smiles, by the setting up of savings institutions for the small saver, and by the inclusion of financial education in philanthropic decision making. It continues with the rise of investment rather than savings in the second half of the nineteenth century, as investment opportunities increased with the limited liability company and an ever-increasing range of local, national, colonial and foreign securities. World War I saw the emphasis change towards encouraging the small saver to buy government bonds, in particular, War Savings Certificates. The paper concludes with lessons which can be learned today, in particular with respect to structuring financial products to meet the specific requirements of the small saver.

II. THE RATIONALE FOR SAVING

According to Garon, Victorians treated thrift as a matter of national survival (Garon, 2012). A high level of saving was seen as not only 'personally desirable as a way for dealing with the risks of life and providing for dependents after death', but was also 'desirable for society as a whole' (Daunton, 2009). Savings, it was argued, could be turned into investments which led to factories and houses being built and so more work and a better quality of living for the poor. Samuel Smiles, whose book on self-help sold more than 250,000 copies between 1859 and 1904, extolled the virtues of industry and thrift, and emphasised the benefits of compound interest (Smiles, 1859).

As well as having personal and national economic benefits, savings were also eulogised as a means of preventing social unrest. The Conservatives, under Disraeli's leadership, proposed giving the vote to men with more than £60 in a savings bank account. 'Saving men are safe men'. Savings banks, which got going in the early nineteenth century were preferred by the élite to the friendly societies which had been set up from the late eighteenth century. This was because friendly societies, designed to provide some insurance against illness or accident, were self-governed and members often met in public houses.

They were also linked to trade unions. It was feared by the élite that social unrest might follow. Savings banks, on the other hand, were managed by the local élite, and invested their funds in Consols. Gladstone, a Liberal Prime Minister, promoted the establishment of the Post Office Savings Banks in the later nineteenth century. He also promoted savings in general; for example, he allowed tax benefits on life assurance policies, a form of long-term saving (Daunton, 2009).

There was confusion as to whose fault it was that the poor did not save enough. Some linked drinking with debt. 'Improvidence, like intemperance, is a characteristic of the English Nation'. This led to differentiation between the deserving and the undeserving poor, which underpinned the allocation of philanthropy. This approach could be adopted when assessing requests for charity – by awarding funds to the deserving poor, who would use the funds to escape poverty, and refusing requests from the undeserving, who would fritter the funds away. There was another incentive behind the encouragement of thrift, which was to reduce the number of people in the workhouse: workhouses were paid for by the wealthy in the form of local taxation.

Savings bank products were simple and easy to understand, essentially an account which paid a fixed 2.5% per annum tax free. There was a £250 limit on how much an individual could pay in, but the middle class opened multiple family accounts to get round these restrictions. That this happened is confirmed by a Board of Trade survey for the Post Office Savings Bank in 1856 which found that only 64% of customers were working class (House of Commons, 1857-1858). This was at a period when government bonds (Consols) were yielding less than 2.5%. This was one of the advantages to saving via savings banks. The interest rate was fixed, regardless of the yield on Consols which varied over time. Married women also benefitted from savings bank accounts. Work by Maltby and Perriton has shown how married women were able to have savings accounts in their own names, with the husband prevented from accessing these funds, well before the Married Women's Property Acts of 1870 and 1882 legally allowed for this (Maltby and Perriton, 2015).

Savings bank accounts were used in a number of ways. Maltby and Perriton have also shown that savings bank accounts in a sample of savings banks between 1850 and 1880 were used for different purposes: accumulating (+++), contingency (+ - + -), drawdown (+ - - -), and in and out (+ -) (Maltby and Perriton, 2015). Accumulating strategies were in line with the recommendations of Samuel Smiles to save small amounts regularly in order to take advantage of compound interest. Rainy day accounts were used to deal with emergencies and to avoid falling into debt. This was particularly important as savings banks were not linked to borrowing facilities, as was the case in

Ireland. The poor were limited in their access to credit. Building societies began operations only in the late nineteenth century and credit unions in England only in the twentieth century. Falling into debt meant high-interest 'pay day loans' or resorting to charity.

III. THE ROLE OF FINANCIAL EDUCATION IN PHILANTHROPY

The Charitable Organization Society (COS) was established in 1869, with the aim of reforming the operation of charitable giving. A paper of that year by Hill (one of its early members) entitled *The Importance of Aiding the Poor Without Almsgiving* (Hill, 1875) sums up its purpose of opposing what it saw as thoughtless indiscriminate generosity, likely to "debase a large mass of the people to the condition of a nursery, where the children … do nothing for themselves".[1] It stressed the need to be selective. A supporter of the COS explicitly described it as:

> *Your almsbroker: Like as ye consult him of the Stock Exchange, touching the best investments to be made in stocks and shares, even consult the committee of thy district as to where, when and how to give thy bounties. They will find ye safe and profitable investments and openings* (Charity Organisation Society, 1871).

The COS is thus seen as making financial investments *in* the poor – spending in order to generate a return – rather than *for* the poor. Anon's assumption was that this was a positive description of the work of a charity: it was desirable to measure charitable performance in terms of improved net income for the poor and in the money saved by the middle class. There is possibly a play on words in the reference to "profitable" investments. The adjective has two meanings: the investment may be seen both as lucrative, or as useful and beneficial. The COS supporter was encouraged to see a donation as a form of investment, and it was therefore crucial to evaluate the likely return. Was s/he supporting someone who would put the resources to good use? For this approach to work, recipients needed to understand such concepts as 'rate of return and profit' when being leased a sewing machine, for example.

Charity must, it was argued, intervene directly in financial behaviour – saving the cost to society of the poor and feckless, and creating new citizens who would behave more thriftily and carefully. The 1883 reports of the COS, for example, made it clear that benefactors evaluated the projects in which

[1] Bosanquet, H., *Social Work in London*, 1869-1913, first published in 1914, this edition Brighton: Harvester Press, 1973: 181, quoting Lord Shaftesbury 1883.

they took part and assessed the performance likely to be elicited from the beneficiaries. This performance included a number of elements. The recipients of charity were to receive a material benefit and this should have a lasting effect on their behaviour, by reducing bad habits and by instilling them with new virtues, which could be observed and confirmed by their benefactors. Financial education was a vital element in this approach.

The published annual reports of the branches of the COS include examples of cases assisted and of those turned down. The latter help to explain the assessment methods: applicants were rejected because they had adult children who should help them, because they were unreliable, having previously been given assistance and wasted it, or because they could not supply the required amount of information. The numbered case histories given in the reports describe a concern to help appropriately – a grant, a loan, a letter to a hospital, a chance of finding work. There were loans of mangles and sewing machines, but these had to be secured loans.[2] These were assessments of financial behaviour; for example, in Case 4899 when the behaviour of an applicant's husband was questioned: "The wife ... could not tell where he was working, whom he was working for, nor what his earnings were when he was at work".[3]

She failed the financial audit, and the family were not assisted. On the other hand, Case 9552 passed the test. He was a hawker who had been left penniless after a bout of illness. The COS committee decided that it would buy him a donkey and cart. He could then purchase these in instalments, provided that he joined and kept up subscriptions – savings – to a Friendly Society. He was deemed to have enough financial capability to do this.[4]

Support was an investment conditional on the potential recipient proving that s/he was financially reliable and capable. The criteria were strictly applied, and the published reports demonstrated this by giving statistics on the numbers processed. In 1883, the Chelsea committee turned down 175 out of 337 applications: from applicants in Westminster and Hanover Square, the rejects were 656 out of 976.[5] One critic of COS even put together a spoof proposal from Jesus of Nazareth, whose request for a loan to buy woodworking tools was refused by a COS committee.

Another term recurs in COS discourse: the concept of prudence. Thrift – financial prudence – was a major concern of Victorians and of COS. For

[2] Charity Organisation Society (1883), Reports of the Council and of the District Committees. Available at http://www.archive.org/stream/reportscouncila00englgoog#page/n6/mode/2up (accessed 26 August 2016).COS, 1883: Paddington Committee: 10.

[3] COS (1883), Bethnal Green Committee: 10.

[4] COS, 1883.

[5] Op. cit.

instance, the 1883 COS briefing on committee work stressed that was it one of the key duties of their volunteers to visit and counsel those who had been helped, who were "often without the commonest ideas of thrift in food, dress &c: [and] often incur ruinous expenditure, especially on such occasions as funerals".[6] Edward Benson White, later Archbishop of Canterbury, told a COS audience that "the principles of your relief are to promote and to assist thrift" (Benson, 1891).

IV. OCTAVIA HILL AND FINANCIAL SELF SUFFICIENCY

Hill, as well as for her involvement in COS, is well-known for her key role in housing reform in the nineteenth century. By 1877, she was responsible for some 3,500 tenants in property worth £30,000–£40,000, a value rising by 1882 to £60,000 (Walker, 2006). She did much to make philanthropic capitalism the most insistent housing philosophy of the 1870s and 1880s, with a long waiting list of wealthy individuals willing to lend money.

Hill from the outset stressed the importance of finance: this meant offering a safe return to supporters and also imposing financial discipline on tenants. She stressed in her writings the financial performance of the estate. For instance, her essay on "Cottage Property", first published in 1866, began with a detailed outline of the investment and return on one estate (Whelan, 1998: 45-46). Similarly, an 1869 essay rapidly introduces both the decrepit state of a property and the improved financial results she generates: "The pecuniary result has been very satisfactory. Five per cent interest has been paid on all the capital invested. A fund for the repayment of capital is accumulating" (Whelan, 1998: 55).

Hill also stresses that she has extended the role of financial management to the tenants themselves, with a view to "making the tenants careful about breakage and waste", she allows each property an annual sum for repairs, "and if it has not all been spent in restoring and replacing, the surplus is used for providing such additional appliances as the tenants themselves desire". This makes them avoid "the wanton damage common among tenants of their class", so that they will often do "little repairs of their own accord" (Whelan, 1998: 55).

For Hill, financialization was a crucial way of managing the behaviour of tenants. The repairs budget was a way of giving an incentive to be careful/save

[6] Op. cit.

money: if their behaviour generated a "surplus" they would be rewarded. Hill also believed that welfare would destroy the independence of individuals. She was against the provision of free school dinners and also against state pensions which, she argued, would destroy saving and thrift, and break up the sense of family responsibility.

V. A NATION OF SHAREHOLDERS

Evidence of the growing significance of shares in personal wealth from the 1870s can be seen from a detailed analysis of the value of personal estates assessed for death duties from the 1870s to the 1900s, together with aggregate figures from 1901 drawn from Inland Revenue returns of estate duty.[7] The figures support Michie's assessment that between 1850 and 1913, financial assets (albeit including mortgages, bank deposits, trade credit, and government and corporate debt as well as shares) rose from an estimated 39% to 64% of all assets owned by British people (Michie, 1999). The increasing significance of financial securities, which rose from about 27 per cent to 47 per cent by value between the 1870s and 1890s, matched the rapid growth in the value of issued capital traded on the London Stock Exchange.

The growing importance of financial securities within individual wealth portfolios, and the increasing numbers of persons who held shares as part of their personal estate, hint at a growing body of shareholders in the population at large. However, there is no agreement about the number of shareholders at any point in this period. Early rough estimates of the number of 'serious shareholders' in securities in the UK are 250,000 in 1870 and 1 million in 1914.[8] Clapham suggests that there were 900,000 railway and 300,000 bank shareholders by 1914 (Clapham, 1938). However, there were no contemporary estimates of shareholder numbers in the United Kingdom. Company directors did, though, note their significant shareholder numbers. J. P. Coats had 25,000 shareholders as early as 1896. At the first annual general meeting of Thomas J. Lipton Limited, the tea company, in 1888, the chairman announced that there had been an enormous number of applications for shares, "as evidenced by the fact that there are now 74,000 shareholders." He believed "that this was the largest number of shareholders of any British industrial company" (*Economist*, 1888). Hannah estimates that circa 1900 for the United Kingdom, in addition to large industrial and commercial companies, four British banks and 10 British railway companies already had more than 10,000 shareholders each (Hannah and Foreman-Peck, 2013: 543-564).

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[7] However, the Inland Revenue statistics exclude freehold property not sold at death. The data are market values.

[8] Cited in Michie, *The London and New York Stock Exchanges, 1850 to 1914*, note 67: 118.

The increase in the number of shareholders reflected several factors. First, there was the mere fact of demographic growth – the population of England and Wales increased by 10 million to 32 million between 1871 and 1901. Second, there was an improvement in the material standard of living and the availability of surplus capital for larger numbers of individuals. Until the inflationary pressures of the First World War, the retail price index hardly changed between 1870 and 1914 despite an overall increase in national income.[9] Third, from the later decades of the nineteenth century the decline in middle class family size – a feature that John Galsworthy in the Forsyte Saga rightly or wrongly linked to the falling rate of return on investments – meant that households had more income to invest across the life course.[10]

This increase is also consistent with what we know about supply side issues concerning the growth of opportunities to invest in shares. The early nineteenth-century Companies Acts facilitated company formation, and the introduction of general registration with limited liability through the Joint Stock Companies Act of 1855 made the possibility of investment in company shares less risky and hence more attractive. The dispersal of ownership, if not necessarily of control, was further encouraged by the Stock Exchange stipulation that, for securities to be quoted in the Official List, two-thirds had to be in public hands (Hannah and Foreman-Peck, 2013: 414-416). The wider dispersion of shareholding was also encouraged by the growing national integration of the securities market via the expansion of provincial stock exchanges, the introduction of the telegraph and later of the telephone, all of which were accompanied by large increases in the volume of securities traded (Michie, 1985). In addition, when limited liability was introduced into the banking system after the spectacular failure of the City of Glasgow Bank in 1878, the effect was to encourage a much wider set of mainly less wealthy investors in bank shares (Acheson and Turner, 2008; Turner, 2009). Shares became available in lower denominations and hence more accessible to less affluent investors: between 1856 and 1866 nominal values of around £10 per share were common but by 1900 a £1 nominal value was quite normal (Jefferys, 1938: 161). There were also important changes in the classes of shares that were offered. Preference shares and debenture stock, providing lower-risk alternatives to ordinary shares, were increasingly available. Between 1885 and 1895, Essex-Crosby estimated that the importance of preference shares nearly doubled – rising from 12.2 per cent to 22.4 per cent of total capital, a trend maintained to the beginning of the twentieth century (Essex-Crosby, 1938; Cottrell, 1980; Jefferys, 1938, Appendix E: 458). By 1900, the average capital structure for all companies listed in Burdett's Official Intelligence was only one half the riskier Ordinary Shares, the rest was in relatively low risk

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[9] See Cook and Stevenson, *The Longman Handbook of Modern British History,* 1714-1995, London: Addison Wesley Longman, 3rd ed.: 187.

[10] Galsworthy, J., *A Man of Property*, first published 1906, this edition,Wordsworth Ware: 293.

Preference Shares or Debentures (Jeffreys, 1938, Appendix E: 458). By 1926, an Economist survey of 18 large and medium-sized firms found that preference shares accounted for 40.6 per cent of paid up capital of those companies that had both ordinary and preference share capital (*Economist*, 1926). This change in the shares available arguably attracted more cautious types of investors, notably women, who might previously have been reluctant to venture into the financial markets.[11]

VI. FINANCIAL ADVICE

Newspapers were an early source of financial information. In the eighteenth century, Mrs Shackleton, in Colne, Lancashire, read both the London and Leeds papers and took notes from them on subjects as diverse as the utility of machinery and MPs' salaries (Vickery, 1998: 260). Newspapers provided share and bond prices and economic and political news of relevance to investments in overseas government bonds. The Hastings sisters, based in Huntingdon, used the newspapers to note when South Sea shares were falling in price and when they were not being traded prior to a dividend payment (Laurence, 2003). Lady Westmeath, commenting on her American investments in a letter to her banker, declared 'I am delighted at a paragraph I saw [in *The Times*] giving an account of a project to continue the United States bank with a charter from Pennsylvania …It appears to be such a creditable union that I am delighted with the investment and wish to remain in it under the new management'.[12]

In the early 19th century, specialist railway magazines such as *The Railway Register* provided lists of share prices and statistics on railway passenger revenues, as well as reporting the proceedings of annual general meetings. They made money through the publishing of prospectuses in their pages, and the less reputable took money in return for 'puffing' specific new issues (Armstrong, 1990). Later, company promoters communicated regularly with prospective investors: Chadwick, for example, produced a monthly investment circular from 1870 to 1875 "to furnish recent and accurate information respecting financial matters, and to obviate the necessity of an extensive correspondence on particular points of enquiry".[13] These were sources that were available to all, either at home or via libraries.

[11] Maltby and Rutterford, 2007. On attitudes to risk in relation to female investors see Rutterford and Maltby, 2006.

[12] Barings Archive, HC1.11.

[13] *Chadwick's Investment Circular*, 1870: 1.

Another source of advice was investment textbooks, which taught everything from how to write a cheque, to how to buy stocks and shares and how to analyse a balance sheet. A number of investment texts were aimed partially or entirely at women investors, arguing that they knew little about the subject and hence were at greater risk of fraud. These texts concentrated on simple explanations of how to write cheques, how to make investments in securities and how to correspond with brokers and bankers. For example, William Cotton in the preface to his 1898 *Everyone's Guide to Investment Matters*, wrote: "The work has been prepared chiefly for the use of women, a vast proportion of whom are brought up in utter ignorance of money matters in the simplest form". *Beeton's Guide* had a section entitled 'Investments for Women' which advised avoiding bearer shares, since these required safe storage, and instead investing in simple securities that offered the highest income commensurate with safety (Beeton, 1870). Other texts avoided the paternalistic approach, such as *The Guide to the Unprotected in Every-Day Matters relating to Property and Income*, by 'A Banker's Daughter', which ran to several editions in the 1860s to 1890s.

As well as the printed word, investors could turn to personal networks for investment advice. In the early years of joint stock companies, with unlimited liability and uncalled capital, lawyers were the primary investment advisers for the uninitiated: "No person is able to judge of the eligibility of investments generally without some knowledge of the law" (Ward, 1852). Bankers were also a source of welcome advice, with wealthy aristocrats seeking advice from N.M. Rothschild & Sons Limited, and Lady Westmeath and the wealthy Miss Elizabeth Caton corresponding with their banker, Joshua Bates of Barings. Lower down the social scale, the 'genteel' investor of the eighteenth and 19th centuries discussed their business affairs with professional men (Vickery, 1998). Trustees for trusts set up as marriage settlements or to provide an income for widows and orphans, also proffered investment advice or, in some cases, took their own decisions, regardless of the wishes of the beneficiary (Davidoff and Hall, 1998). Investors also took advice from family and friends, as evidenced by the Hastings sisters' correspondence thanking their friend, Mrs Jane Bonnell of London, for her advice on buying Irish insurance shares (Laurence, 2003: 3). Recent research has also shown that young people turn first to their families and friends for financial advice .

VII. WWI AND WAR SAVING CERTIFICATES

The next stage in the financial education of the small saver or investor was World War I, where much of the funds needed to pay for the war were raised in the form of government war loans or bonds. It was recognised that

the usual clientele for Consols would not be enough. Small savers would have to be encouraged to invest in new war loans, and educated as to how and why to do so.

However, there was no desire to attract small savers for the first new issue. The first British war loan offering 4% yield was explicitly directed at those who could afford at least £100. Lloyd George had rejected the idea of a lower minimum denomination:

> *'When you are raising money for the purpose of carrying on a war, you are not raising money for the purpose of benefiting investors, you are raising money for the purpose of carrying on war, and it does not help us at all if people will draw money from the Savings Bank, where we pay 2½ per cent., merely to have the satisfaction of paying them 4 per cent for exactly the same money'.* (Hansard, 1914a).

It was pointed out in debate in the House of Commons that in Germany the savings bank depositors were allowed to transfer balances to WL but his response was that:

> *'They were entitled to 5 per cent interest on their savings up to the sum of £200, and, therefore, the German Government would have made no loss in allowing them to invest their money in Government stock.'* (Hansard, 1914b).

By 1915, though, it was recognised that there were advantages to encouraging small investors to subscribe for WL (Strachan, 2004). Although this would lead to small savers withdrawing funds from savings bank accounts to buy WL at a higher interest rate, the view was that, post-War, the pain would be shared by investors whose bonds would fall in value. So, for War Loan 2, the minimum denomination was lowered to £5 and 'scrip vouchers' for as little as 5 shillings also put on sale (Hansard, 1915).

Due to the disappointing take-up of WL2 by the small investor, a War Savings Committee was set up in December 1915 by McKenna the Liberal Chancellor of the Exchequer, with the aim of identifying savings products for this clientele. Hedley Le Bas, of the Caxton Advertising Agency, was a committee member. The Committee identified three key elements which would make a savings product attractive to the small investor: protection of capital, the ability to withdraw savings at short notice, and the same yield as the "large investor" (Committee on War Loans for the Small Investor, 1916). In response to these criteria, the Committee devised War Savings Certificates (WSC), which

were issued continuously from February 1916 until the end of the war and beyond (Burton, 1999). The smallest WSC denomination available was 15s 6d (£0.775). For each WSC purchased, the investor would receive £1 in five years' time. This offered a compound yield of over 5per cent. Income tax was not payable provided the investor's income was less than £300, later changed to a maximum tax-free holding of £500 WSC per person (Wormell, 2002: 145). There was no possibility of a capital loss; money could be accessed early if need be, and WSC could be bought in instalments. 31 sixpenny (£0.025) stamps could be purchased and exchanged for WSCs from War Savings Associations, via employers, and from the Post Office – as well as from banks – at any time to suit the investor. The War Savings Committee pointed out that, with many women working in factories, in addition to receiving separation allowances while husbands were at the front, and boys, girls and elderly men, as well as women, now employed on a scale hitherto unknown, it was highly likely that households had surplus income compared with their earnings pre-war. WSC and stamps offered a way of encouraging saving this surplus income on a regular, weekly basis, thereby discouraging unnecessary consumption. Gibson comments that 'the main object' of WSCs was to attract working-class savers, but that it was 'well-known that a large part of the actual receipts', especially of the higher value certificates, was from more affluent people wanting to avoid Income Tax.[14]

The sale of war savings certificates and government bonds during the First World War boosted the 'savings' culture among the population and taught them how to think as investors. The sheer size of the finance needed had led to advertising and publicity being used on a hitherto unprecedented scale to access the savings of the entire population: men and women, girls and boys, young and old, rich and poor, workers and those at leisure, to save as much as they could in the national interest. In Britain, by 1919 there were over 40,000 war savings associations, in workplaces, schools and post offices with a weekly subscribing membership of over 7 million people. 140 million certificates were sold between 1916 and 1918. Women were specifically targeted, being asked to think of themselves as Joan of Arc and saving, rather than fighting, for their country (Rutterford and Sotiropoulos, 2017).

This need for finance did not stop in 1918. In Britain, the War Savings Committee's work was maintained to "teach and induce people to save who never saved before." Advertising campaigns played on patriotic fervour. By June 1929, a total of 908 million certificates, renamed National Savings Certificates,

[14] Gibson, 1921, being the result of investigations and materials collected by a committee of Section F of the British Association, co-ordinated and brought up to date for the committee London: Pitman: 151.

had been sold in Britain, representing a cash investment of £720 million.[15] In doing their patriotic duty, these new investors were viewed very differently from the previous hate figures – the "insatiable" British bondholders (Meeker, 1922; *Economist*, 1919). This term derived from the descriptions of rentiers, penalised fiscally in the 1909 so-called "People's Budget."

By WWII, the Committee on War Loans for small investors had morphed into the Committee on Small Savings and War Savings Certificates were replaced by National Savings Certificates and Defence Bonds. Exactly the same three principles were retained for their design – no depreciation of capital, ability to obtain funds at short notice, and interest no less than for large investors but the interest rate was lower. The issue price was 15s. but the £1 6d. value on maturity was after ten years and not five as in WWI. Bonuses were paid at intervals. The yield to maturity, if held for less than ten years, was much reduced and some certificates paid no interest for the first two years. However, if the capital were needed urgently, special application could be made to the Postmaster General, with some interest deducted but no deduction of capital. Similarly, Defence Bonds were issued at par 'for simplicity' and included no technical advantages which would not be understood by the small investor.

Government concerns which were the same as in WWI included comparing yields with non-government alternatives such as building societies and cooperative banks, the maximum holding allowed, and whether tax was payable or not. The role of thrift as an end in itself was still upheld, even when those with nothing were entitled to state benefits. As a 1944 Treasury memo observed: 'The object, and reward, of saving is to avoid or minimise dependence on others. This reward is not in any way lost, because, in the last resort, the community is prepared to stand between the person without resources and starvation' (Wormell, 2002).

Today, the product which most nearly follows the characteristics of the WSCs and NSCs is the Lifetime ISA or Lisa, which is a long-term savings product redeemable at age 60+ or earlier if it is to purchase a first home for less than £450,000. The age range to start a Lisa is 18-39 and the last date for investment is age 50. Each year a maximum of £4,000 can be invested, triggering a £1,000 contribution from the government. Lisas can be invested in cash or shares. The connection with WSCs and NSCs is clear: lump sum, no need to reclaim tax, long term but early withdrawal possible with penalties.

[15] Fraser, *Women and War Work,* 1918. Cited in Rutterford, J., and Maltby J., 'That wide-eyed sceptical curiosity that makes women so formidable," paper presented at the Social Science History Conference, Lisbon, 2009: 10.

VIII. CONCLUSION

This paper has traced the history of financial education and the considerations taken into account by both the private sector and government when aiming products at the small – possibly unsophisticated – saver.

Since the emphasis on thrift was initiated by Victorians who attempted to remedy the quite shocking differences between the rich and the poor by encouraging the poor to save in order to escape penury, there have been continuous attempts at financial education. One method was by giving advice: newspapers, brokers, bankers, solicitors all provided financial advice, as did family and friends. Many Victorian novels were based on the plot of a poor defenceless woman having taken poor advice from a man or having been defrauded by, say, a trustee. However, attempts at more long-lasting financial education were made by investment manuals, pamphlets and books which attempted to guide the novice investor as to how best to invest their savings. By World War I, London had the largest stock exchange in the world and an estimated 1 million or more UK investors were the largest cross-border investors in the world. Companies also attracted investors by offering relatively easy-to-understand financial securities which promised security, regularity of income and price volatility. Debenture stock and preference shares in denominations as low as £1 paid fixed interest regularly to provide an income. For example, Indian railway bonds, guaranteed by the Indian government, were so popular that there were 50,000 investors in them by 1870.

World War I changed the scale with government trying to attract small savings to fund the war effort. The government decided to design savings products to appeal particularly to the small investor, backed up by a huge marketing campaign. The need for thrift by small investors was threefold: to pay for the War, to encourage all sectors of the population to save, and to gather up spare cash which newly 'rich' working class households (from allowances paid to families whose men were at the Front or from working in munitions factories) might otherwise spend on consumer goods, thereby ratcheting up inflation. The Committee on War Loans for the Small Investor was set up in 1915 and organised the issue of War Savings Certificates in small denominations which met three key criteria: no capital depreciation; ability to get at funds if need be before maturity; and as good a return as the 'large capitalist' could earn. Such was its success that, in the inter war years and during WW2, National Savings Certificates were designed using the same criteria.

Today, in response to a record low savings ratio, the Conservative Government has returned to the same tactics to encourage thrift, introducing the Lisa and a range of other easy to understand products. However, such is

the complexity of the financial markets today, that more needs to be done both in terms of financial education and simplicity and transparency of financial products to help the small saver make the right decisions.

BIBLIOGRAPHY

ACHESON, G., and TURNER, J. D. (2008), "The death blow to limited liability in Victorian Britain: The City of Glasgow failure," *Explorations in Economic History,* 45: 235–53.

BEETON, S. O. (1870), *Beeton's Guide to the Stock Exchange and Money Market*, London: Ward, Lock and Tyler: 53.

BENSON, W. (1891), "The Science of Charity: An Address ... at the Annual Meeting of the London Charity Organisation Society," Available at http://www.jstor.org/stable/60223257 (accessed 11 November 2013).

BURTON, K. G. (1999), A *Penknife to a Mountain: the Early years of the National Savings Committee*, Loughton, Essex: National Savings: 199.

CHARITY ORGANISATION SOCIETY, COS (ANON) (1871), *Confessions of an Old Almsgiver, or 3 Cheers for the COS*, London: Wm. Hunt.

CLAPHAM, J. H. (1938), *An Economic History of Modern Britain, Machines and National Rivalries, 1887-1914*, Cambridge University Press: Cambridge.

COMMITTEE ON WAR LOANS FOR THE SMALL INVESTOR (1916), (Cd. 8146), *Interim Report,* 28 December 1915 and Report (Cd. 8179), 26 January.

COTTRELL, P. L. (1980), *Industrial Finance, 1830-1914*, London: Methuen: 86–88.

DAUNTON, M. (2009), "Afterword", in HENRY, N., and SCHMITT, C., *Victorian Investments: New Perspectives on Finance and Culture*, Bloomington, Indiana: Indiana University Press: 202.

DAVIDOFF, L., and HALL, C. (1998), *Family Fortunes: Men and Women of the English Middle Class, 1780-1850*, Chicago: University of Chical Press: 244.

ECONOMIST (1888), June 4: 847.

– (1919), July 12th: 42.

– (1926), 25 December: 1054.

ESSEX-CROSBY, A. (1938), "Joint stock companies in Great Britain 1890-193'", M.Comm thesis, University of London: 31.

GARON, S. (2012), *Beyond our Means: Why Americans spend while the World saves,* Princeton, New Jersey: Princeton University Press.

GIBSON, A. H. (1921), *British finance during and after the war, 1914-21*, Pitman: 151.

HANNAH, L., and FOREMAN-PECK, J. (2013), "Some consequences of the twentieth-century British 'divorce' of ownership from control," *Business History*, vol. 55(4): 543-64.

HANSARD (1914a), HC Deb 19 Nov., vol. 68: 624.

– (1914b), HC Deb 23 Nov., vol 68: 885.

– (1915), HC Debate 21 June, vol. 72: 949.

HILL, O. (1875), *Homes of the London Poor*, London: Macmillan.

HOUSE OF COMMONS (HoC), 1857–1858 (441) *Report from the Select Committee on Savings Banks; together with the proceedings of the committee, minutes of evidence, appendix, and index*.

JEFFERYS, J. B. (1938), "Trends in Business Organisation in Great Britain since 1856", PhD, University of London: 161.

LAURENCE, A. (2003), "Family fortunes and the strategies of kin in England, 1600-1750: the case of Lady Betty Hastings," *Paper presented at the Women, Family, Private Life and Sexuality Conference*, Belfast.

MALTBY, J., and PERRITON, L. (2015), "Working class households and savings in England, 1850-1880," *Enterprise & Society,* vol. 16(2): 413-445.

MALTBY, J., and RUTTERFORD, J. (2007), "The nesting instinct: women and investment risk in a historical context," *Accounting History*, 12: 305–327.

MEEKER, J. E. (1922), *The Work of the Stock Exchange*, New York: Ronald Press Company:118-119.

MICHIE, R. (1985), "The London Stock Exchange and the British securities market, 1850-1914," *Economic History Review,* 38: 74.

– (1999), *The London Stock Exchange: A History*, Oxford, OUP: 71.

RUTTERFORD., J., and MALTBY, J. (2006), "The widow, the clergyman and the reckless: women investors in England 1830-1914," *Feminist Economics*, 12: 111–138.

RUTTERFORD, J., and SOTIROPOULOS, D. (2017), "The rise of the small investor in the US and the UK, 1895 to 1970," *Enterprise & Society,* vol. 18(3): 485-535.

SMILES, S.(1859), *Self-help with illustrations of conduct and perseverance*, London: John Murray.

STRACHAN, H. (2004), *Financing the First World War*, Oxford: Oxford University Press:145.

TURNER, J. (2009), "Wider share ownership? Investors in English and Welsh bank shares in the nineteenth century," *Economic History Review*, 62, S1: 176–77.

Vickery, A. (1998), *The Gentleman's Daughter: Women's Lives in Georgian England*, New Haven, Connecticut: Yale University Press: 28.

Walker, S.P. (2006), 'Philanthropic women and accounting: Octavia Hill and the exercise of "quiet power and sympathy", *Accounting, Business and Financial History*, July: 168.

Ward, R. A. (1852), *A Treatise on Investments*, London: Effingham Wilson: 3.

Whelan, R. (1998), "The social housing debate", in *Octavia Hill and the Social Housing Debate: Essays and Letters by Octavia Hill*, Civitas.

Wormell, J. (2002), *The Management of the National Debt of the United Kingdom 1900-1932*, London: Routledge: 145.

FINANCIAL EDUCATION AS THE FOUNDATION FOR RESPONSIBLE FINANCIAL INCLUSION PROGRAMS*

María Antonieta PAZ

At the beginning of 2017, Mexico anticipated the return of thousands of undocumented Mexicans living in the United States. In preparation for their return, it became a priority to strengthen migrant programs, one of them being *Somos Mexicanos. Somos Mexicanos* was created in 2012 by the National Migration Institute and the Secretariat of Foreign Affairs and offers repatriates from the USA assistance such as legal, medical, psychological and food, among others. Financial assistance was not covered, however, and many repatriates expressed a need for financial products and services to help them bring their liquid assets to Mexico. As part of a national policy towards repatriates with a customer centric mission, Bansefi *(Banco del Ahorro Nacional y Servicios Financieros),* a development bank in Mexico, offered, through the leadership of its General Director, Virgilio Andrade Martínez, to be part of *Somos Mexicanos* in order to respond to such needs.

Several pillars of public policy on financial issues were considered to develop a migrant program. While developing a social program is an institutional challenge, so is ensuring its success in the long term. In the case of the migrant program, financial education was the tipping point for successful financial inclusion.

The migrant program took into consideration market failures, including information asymmetry, regulatory arbitrage, and other market development challenges during its growth and maturing process. This paper does not consider such issues as problems, but rather as challenges to be mitigated through financial education. To overcome such challenges, public policy must maintain checks and balances among stakeholders, including the federal government, whose ultimate responsibility is the development of a strong and stable financial market that may effectively deal with endogenous and exogenous factors that may deter financial inclusion.

* This paper is a product of its writer with contributions like pictures used with the authorization of Bansefi. The findings and considerations do not necessarily reflect the opinion of Bansefi or the Mexican government.

I. PILLARS FOR POLICY MAKERS

Financial inclusion, the final goal of stakeholders of formal financial markets, is the result of various tools that must be present in order to provide the necessary conditions to allow a person to reap the benefits of such markets: financial education; consumer protection; regulation; financial products and service offer; financial ecosystem, and operational flexibility. While these may be considered aspects of financial markets, this paper considers them as fundamental tools, as they help tune formal financial markets.

1. Consumer Protection

Consumer protection remains at the center of financial inclusion. If customers' rights are not protected, the bad experience of the customer will create barriers in their relationship with the formal financial sector. The information given to customers depends on the sophistication of the products or services to reduce information asymmetry among both parties. This is also complemented with the mitigation of customer abuses through high standards placed on customer service that include the resolution of mischarges, how to present complaints, and how to compare products, among other issues.

For the design of the migrant program, it was essential to understand their vulnerabilities and the importance to protect them as consumers. This protection guided the design of the customer service prerogatives, which include a more detailed commercial financial advice. Furthermore, the repatriates are generally protected by financial protection laws which are followed by Bansefi. The consumer protection offered directly to repatriates is in the form of enhanced information transparency, no predatory practices and unbiased market and product information.

2. Regulation

There can be regulatory innovations to resolve challenges. In Mexico, repatriates usually do not have the official identification documents necessary to obtain financial products or services. Therefore, the National Banking and Securities Commission, the banking regulatory agency in Mexico, approved the usage of the Migration Identification document *(Constancia de Repatriación)* solely by repatriates, as an official identification document and proof of residence.

Financial inclusion may also increase costs to customers as transactions generate expenses for the parties in the payment system which are, in the end, transferred to customers. Nevertheless, some costs have come down due to technological developments, which at the same time have become compulsory reductions in costs by means of regulatory modifications. Although some such price reductions have not been reflected in many countries, Bansefi is working to lower costs in the payment system to benefit debit card holders in the program.

3. Financial Product and Service Availability

Several studies have stated that having a large amount of options to choose from does not increase consumer satisfaction. Low income and vulnerable groups are not an exception. When working on financial inclusion of low income population or repatriates, among other vulnerable groups, it has been necessary to offer the basic products they need to satisfy their immediate needs during an initial phase of financial inclusion.

For the repatriate program, Bansefi created a deposit account with no fees named *Debicuenta Migrante,* a deposit account that has a debit card and two free microinsurance policies, which cover: i) death for $750 USD and ii) funeral expenses for $7,500 pesos. To obtain this product repatriates must present their Migration Identification document.

4. Financial Ecosystem

For financial inclusion to be effective, it is necessary for a strong financial ecosystem to be in place. Although access in terms of infrastructure has increased during the last years, Mexico still reflects a delay in comparison to other countries with a similar market size. To improve the usage of debit cards in the migrant program, Bansefi is working on a pilot to strengthen the ecosystem where beneficiaries of social programs are located, mainly rural communities.

In the case of the repatriate program, Bansefi installed 12 mobile branches at all entry points of repatriates from the USA. ATMs were installed to strengthen the operation of mobile branches as needed.

5. Operational Flexibility

While brick-and-mortar and internet banking remains prevalent, the Mexican regulation allows for mobile branches to operate, while maintaining

safety and operational standards to comply with banking issues, such as money laundering and consumer data protection. This business model gave Bansefi the necessary flexibility to have a presence, at a lower cost, where its targeted population needs it to be, in order to overcome barriers for financial inclusion like time and transportation costs.

This flexibility allowed Bansefi to respond rapidly to the expected arrival of an increased number of repatriates. Mobile branches were installed daily at each location.

II. FINANCIAL INCLUSION PROGRAM FOR THE ATTENTION OF MIGRANTS

As mentioned before, it has been the government´s priority to empower migrants through financial inclusion. In order to financially include returning migrants, Bansefi took aspects from previous programs and used the mentioned pillars to develop the Financial Inclusion Program for the Attention of Migrants *(Programa de Inclusión Financiera para la Atención de Migrantes).* The program operates through 12 mobile Bansefi branches, and the objective is to offer repatriates formal financial services they may need as they enter Mexico.

All beneficiaries are repatriates from the U.S. that are returned to Mexico by the U.S. migration authorities and are received in Mexico by the National Migration Institute (NMI). Repatriation takes place when the person has concluded their prison sentence or is being forced to return to Mexico because they were undocumented in the USA. While approximately 30% finished their jail sentence, the rest were, in some cases, picked up while walking on the streets on their way to work, after taking their kids to school, or after a traffic violation.

1. Institutional Synergies

As a development bank, Bansefi´s priority has been social profitability as opposed to financial profitability. Therefore, it was fundamental to generate synergies with other governmental institutions in order to lower costs and be able to increase disposable resources for the program. Bansefi was able to generate synergies with the National Migration Institute and use the installations where *Somos Mexicanos* operates.

Somos Mexicanos operates in 11 entry points in the northern border and one in the International Airport of Mexico City. Originally, the program offered

IMAGE 1

12 POINTS OF ENTRY FOR REPATRIATES FROM THE USA

medical, legal, labor, and psychological assistance to Mexicans being returned to Mexico. The assumption of and increased number of repatriates brought together more governmental institutions to strengthen *Somos Mexicanos.*

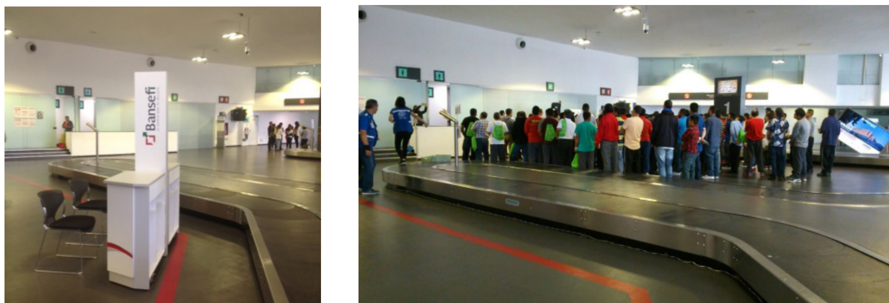
IMAGE 2

MOBILE BRANCHES

Tijuana

Juan, first repatriate with his Migrant Account

IMAGE 3
MEXICO CITY INTERNATIONAL AIRPORT



All the locations where Bansefi installed the mobile branches are federal properties, except for the one at Mexico City´s International Airport, belongs to the NMI. This fact allowed for the mobile branches to be installed within a short period: the NMI and Federal Government facilitated the bank´s requirement.

Once the repatriate enters the National Migration Institute, they are registered and given their *Constancia de Repatriación.* They are then offered medical and psychological assistance as main priorities, after which they receive a meal, legal assistance and a change of clothing when available, as they usually arrive with prison clothing. Afterwards they are invited to go to Bansefi´s mobile branch.

The program is achieving its intended goals to offer competitive financial products and services to repatriates, in order to foster a dignified return to Mexico and lower the financial uncertainties for their basic and immediate needs.

Nevertheless, challenges remain. As the mobile branches are maturing its operation, additional needs on behalf of the repatriates have become evident: i) to have a faster service at the mobile branch and ii) to have their checks cashed.

It is imperative for Bansefi´s services to be faster, given the fact that, in most cases, repatriates have a transportation bus, provided by the Institute, to take them to the bus station to reach their final destination. Most of the time taken at the mobile banking is to:

1. Open deposit accounts.

2. Receive remittances.

3. Money exchange.

The one that takes the most time is the money exchange service. This is because Bansefi currently is not offering this service to people who do not already have a deposit account with the bank. However, in order to cater to the needs of repatriates, Bansefi has modified its policy and by March of 2018 it will be providing the money exchange service to migrants.

With regards to repatriates' need for check cashing, Bansefi has analyzed the possibility of offering the service. Repatriates may receive a check at the detention center with money from three possible sources:

a. Money earned during prison time.

b. Carried on when arrested by immigration authorities.

c. Balance at the detention center store.

The average amount of the checks is 350 USD and they are issued by state institutions like the Cornell Correctional from the state of Texas or the Arizona State Department of Corrections from the state of Arizona. No bank in Mexico currently cashes these checks and migrants therefore rely on companies that are not regulated and that charge up to 30% in commission. Bansefi is committed to finding the means to lower such high commission and will continue working towards this service given its customer centricity policy.

III. FOUNDATION FOR A SUCCESSFUL PROGRAM

The development of the Financial Inclusion Program for the Attention of Migrants involved considering pillars that would foster a successful and responsible financial inclusion program with a customer centricity focus. However, a strong foundation is of foremost importance to guarantee the success of the program. Otherwise, the various vulnerabilities that repatriates may have could make their financial inclusion a burden in their life and not the welfare tool that it is intended to be. A high percentage of repatriates has low wealth accumulation, and this makes it even more important for their financial inclusion to have a strong foundation.

The complexity of financial products and services may be best tackled with education to foster informed decisions. Education is a priority no matter the financial sophistication of the customer as they all have vulnerabilities when it comes to understanding the benefits, responsibilities and risks involved when deciding on different products and services through different channels, which at the same time, may involve additional uncertainties. Acknowledging such is a challenge by itself. The latter increases the importance of protecting customers from the challenges engrained in the financial sector. Therefore, a responsible financial inclusion must have financial education as foundation.

1. Financial Education

While the six pillars mentioned were necessary for the development of the Migrant Program, the success of the program through the years will be based on the financial education given to repatriates during their lifespan to foster a fruitful social inclusion. There isn't one single global definition for financial education. The one developed by the Organization for Economic Cooperation and Development (OECD) and endorsed by G20 leaders, when Mexico presided over the group in 2012, states:

> "the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being." (OECD, 2005).

This definition reiterates the importance of financial education. It can be stated that financial education is a permanent need of customers, as it will help them throughout their lives to cope with permanent challenges in financial decisions, as these change throughout life.

Just in time guided behavior can be an effective way to guide the desired behavior to foster welfare, regardless of the socioeconomic status of the customer. However, giving the right information at the right time about the right product or service may not suffice for the customer to reach his or her well-being due to market failure or behavioural biases. While financial education is meant to empower consumers, and strengthen their financial decision making and personal financial management, the biases that may influence decision making should be taken into consideration, regardless of the socioeconomic situation, due to intertemporal choices and biases inherent in human nature.

The latter becomes more relevant to understanding the specific characteristics and circumstances of customers. The financial education strategy must be designed to cater to the needs of those involved. The approach chosen for the program was that of libertarian paternalism, while maintaining the customers´ freedom to choose (Thaler and Sunstein, 2003).

2. Product Innovation

There is a constant tendency to innovate in financial products and services. Advances in technology allow for wider diversity in the design and channels to reach potential consumers. This innovation introduces complex products and services that must be marketed with the adequate customer information and comprehension of the client, which at the same time, must be unbiased and differ from commercial advice. It is necessary to consider that the more complex the products and services, the more comprehensive the information that must be presented to customers.

The financial crisis of 2008 made clear that the lack of information of even sophisticated investors, as financial consumers had made even the financial sector vulnerable. Customers of different backgrounds and financial needs had not been informed of the characteristics and risks of investment products like derivatives. Just as a repatriate enters the formal financial sector must be informed about the basic benefits and obligations entailed in a deposit account, an investor in innovative derivate products must also be informed on the inherited risks of the product. The first customer is as vulnerable as the second one, even if the products and the sophistication of each one is different.

3. Channel Innovation

Bansefi´s mobile branches are repatriates´ entry point to financial inclusion in Mexico and will continue to provide financial education once they reach their permanent branch at their final destination. Additionally, there are other channel innovation that introduce challenges for customers. New technologies have allowed reaching a broader spectrum of customers and may even reach repatriates one day.

Just as customers need to be informed about different channels available for a given institution to facilitate their banking experience, they must also be informed about new risks, responsibilities and security issues they might be

subject to. There are new mobile applications that might need prior tutorial before a customer uses it, whether it is a simple payment through an SMS text messaging or the sale of an options contract in a stock market mobile application. Given the vulnerability that customers are subject to, with more sophisticated financial products and channels, further consideration must be given to establishing mandatory financial education prior to the usage of innovative channels, as a preventive measure.

4. Information Asymmetry

Information asymmetry is inherent to financial markets. Information asymmetry is one of the reasons that justifies transparency reinforcement in financial regulation. There are also some institutions that offer information to market agents like credit bureaus and securities and credit risk rating agencies, among others. However, repatriates, and customers in general, also need means to reach information. One of those means is financial education that inform customers about tools at their disposal to better evaluate the information available about options, responsibilities and risks to which they are subject.

It is necessary, for example, to educate repatriates about the different comparative charts available for them to compare and contrast financial products and services. The CONDUSEF (Comisión Nacional para la Protección y Defensa de los Usuarios de Servicios Financieros), Mexico's consumer financial protection bureau makes such tools public and are free. There are additional tools that repatriates will have to become familiar with like the Annual Total Cost (*CAT,* short in Spanish), a rate which will make comparable loan costs, or the Annual Total Gain (*GAT,* short in Spanish), a rate which makes comparable revenue gain on investments. Financial education allows information asymmetry to be neutralized to continue to improve their financial inclusion through informed decisions.

5. Predatory Practices

A predatory practice takes place when excessive or unnecessary fees are imposed. While there is financial regulation intended to mitigate predatory practices, financial education will give repatriates the ability to identify practices that take advantage of their vulnerabilities and react accordingly. Financial education is not an antidote for predatory practices but will always improve customers´ awareness and protection from such practices. In this sense, financial education increases the consciousness of such practices and offers the tools to foster informed decision making.

In the case of repatriates, the approximately 30% commission they must pay to have their checks cashed is considered a predatory practice. Financial education will help repatriates shop for a reasonable commission or alternative schemes to have additional options and pay a reasonable commission prevalent in the financial sector.

IV. FINAL CONSIDERATIONS

The moral responsibility of a savings and retail banking institution, in charge of financial inclusion of nonbanked and/or vulnerable groups in society, must consider all the fundamental pillars in public policy to achieve responsible and sustainable financial inclusion. It must be considered that sophisticated products with multidimensional characteristics and uncertain pricing and inclusion barriers to overcome the financial market are intimidating for such groups. Customer centricity helps overcome such challenges, as it forces retail and savings banks to put the needs of costumers ahead of financial profitability, ensuring a long-lasting relationship with customers.

Financial inclusion of such groups will be best achieved through financial education, as the foundation of any social program, whose objective is to improve people´s welfare through a responsible financial inclusion. The Financial Inclusion for the Attention of Migrants Program of Bansefi takes formal financial services and products where repatriates enter Mexico so that they may have a dignified return to Mexico without the additional burdens that a new beginning may encompass. The program will be considered successful as long as financial education accompanies repatriates from the beginning in their financial inclusion in Mexico throughout the rest of their life as their financial needs change and their appetite for more sophisticated financial products and services evolves. Financial education makes an irreversible development in the competence of migrants to make informed decisions towards their financial wellbeing.

RELATED RESOURCES

(2012), *Somos Mexicanos Strategy,* National Migration Institute, Mexico, https://www.gob.mx/inm/acciones-y-programas/estrategia-somos-mexicanos?idiom=es

(2015), *Encuesta Nacional de Inclusión Financiera,* Comisión Nacional Bancaria y de Valores, Mexico, http://www.cnbv.gob.mx/Inclusi%C3%B3n/Paginas/Encuestas.aspx

(2017a), *National Financial Inclusion Report 8,* National cc on Financial Inclusion, Mexico, http://www.cnbv.gob.mx/Inclusi%C3%B3n/Documents/Reportes%20de%20IF/Reporte%20de%20Inclusion%20Financiera%208.pdf

(2017b), *G20 Financial Inclusion Action Plan (FIAP),* https://www.gpfi.org/publications/g20-financial-inclusion-action-plan-fiap-2017

BIBLIOGRAPHY

Alliance for Financial Inclusion (2010), *Consumer Protection: Leveling the Playing Field in Financial Inclusion,* Bangkok.

Angelucci, M.; Karlan, D., and J. Zinman (2015), "Microcredit Impacts: Evidence from a Randomized Microcredit Program Placement Experiment by Compartamos Banco," *American Economic Journal: Applied Economics,* 7(1): 151–182.

Collins, D. (2016), H*acer rendir el dinero, Findings from the Mexico Financial Diaries,* Bansefi & Bankable Frontiers Associates, Mexico.

Comisión Nacional Bancaria y de Valores (2010), *Case Study, Measuring Financial Inclusion in Mexico. CNBV´s approach to Obtaining Better Data for Decision Makers,* Alliance for Financial Inclusion, Bangkok.

Ehrbeck, P., and M. Tarazi (2012), *Financially Inclusive Ecosystems: The Roles of Government Today,* CGAP, Washington, DC.

Hasting, J.; Madrian, B., and W. Skimmyhorn (2012), Financial Literacy, Financial Education and Economic Outcomes, *Working Paper,* National Bureau of Economic Research.

Organization for Economic Co-operation and Development, OECD (2005), *Recommendation on Principles and Good Practices for Financial Education and Awareness.*

Saldívar, G., and A. Paz (2011), *Financial education, financial inclusion, and consumer protection: The relevance for the financial system in Mexico,* Ministry of Finance and Public Credit. Mexico.

Thaler, R. H., and C. R. Sunstein (2003), "Libertarian Paternalism," *The American Economic Review,* 93: 175 - 179.

Thaler, R. H., and S. Benartzi (2004), "Save More tomorrow (TM): Using Behavioral Economics to Increase Employee Saving," *Journal of Political Economy,* 112: 164 - 187.

Tufano, P., and D. Schneider (2008), Using Financial Innovation to Support Savers: From Coercion to Excitement.

United States Department of the Treasury (2009), *Annual Report to the President* 2008, President's Advisory Council on Financial Literacy, Washington, D.C.

World Bank (2012), *Financial Inclusion Strategies Reference Framework.*

PANEL 3

What is the Current Level of Financial Literacy and how can we Improve it?

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 (*ie.,* 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 Estadistica (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

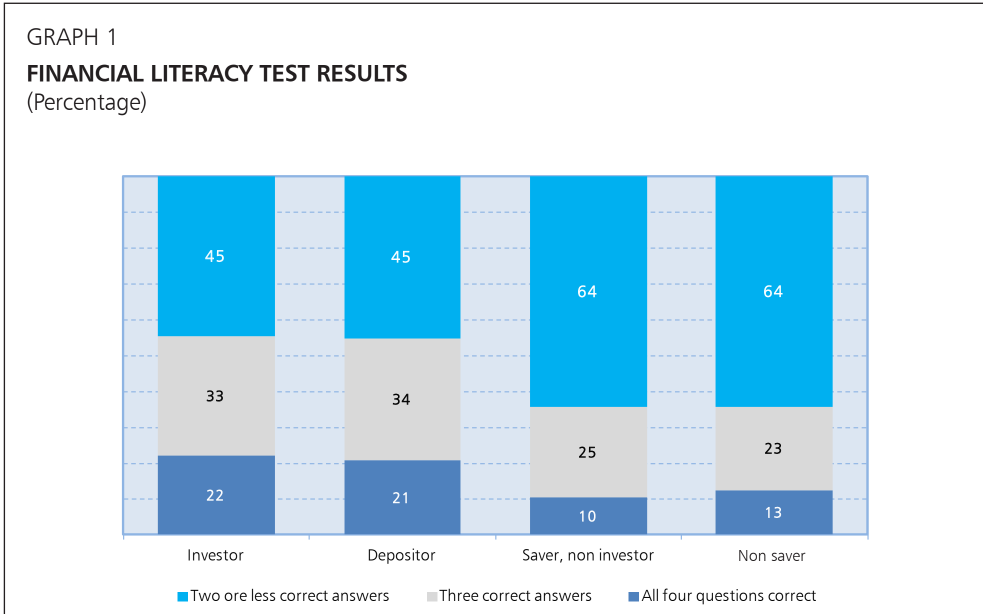
1. Basic Financial Literacy in Spain

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)

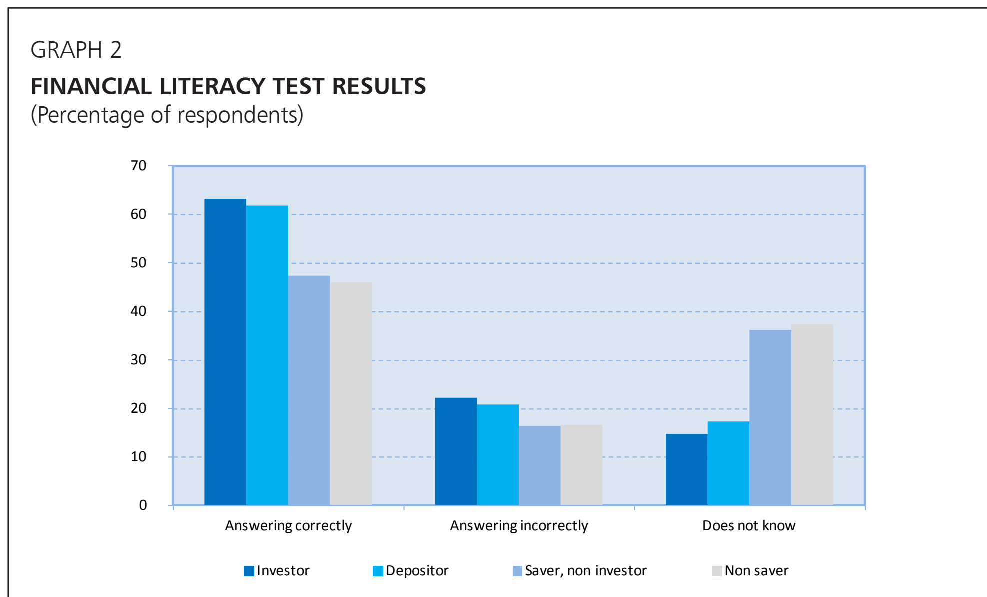


associated with inflation, simple and compound interest rate, and risk diversification. These questions were selected from Standard & Poor's rating services *Global Financial Literacy Survey* (S&P's Rating Services, 2014). As per the S&P survey, financial literacy is demonstrated by correctly answering 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)

	Correctly answered	*Incorrectly answered*	*Don´t know*
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

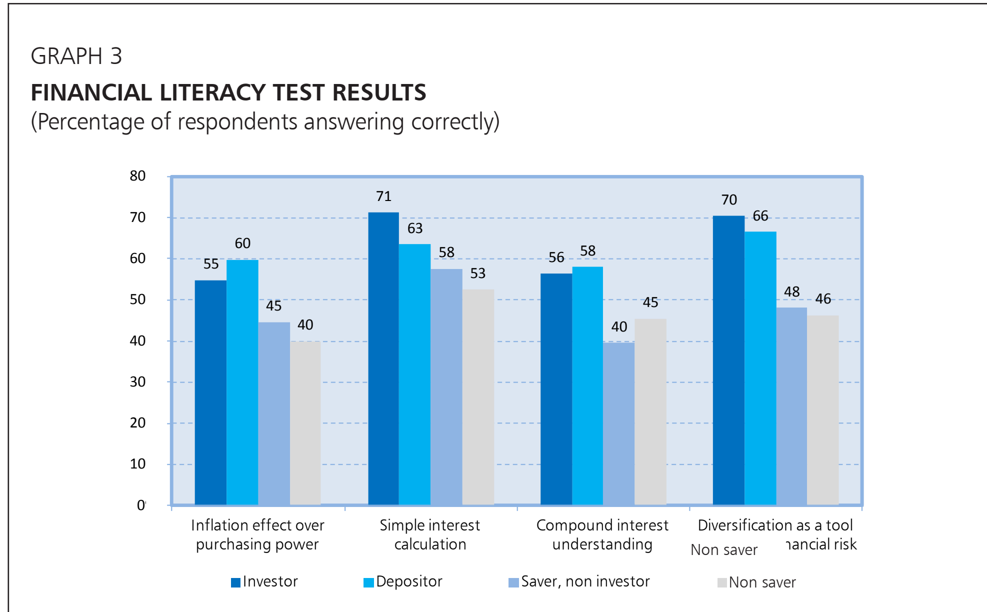
rather than guessing and risking an incorrect response. In contrast, Investors/ Depositors appear to (falsely) believe they know the correct response rather than acknowledge the possibility that they do not know the correct response. Investor overconfidence in amount of knowledge can be especially problematic 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

GRAPH 3

FINANCIAL LITERACY TEST RESULTS

(Percentage of respondents answering correctly)



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

	Ranging fom 1 to 10
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-

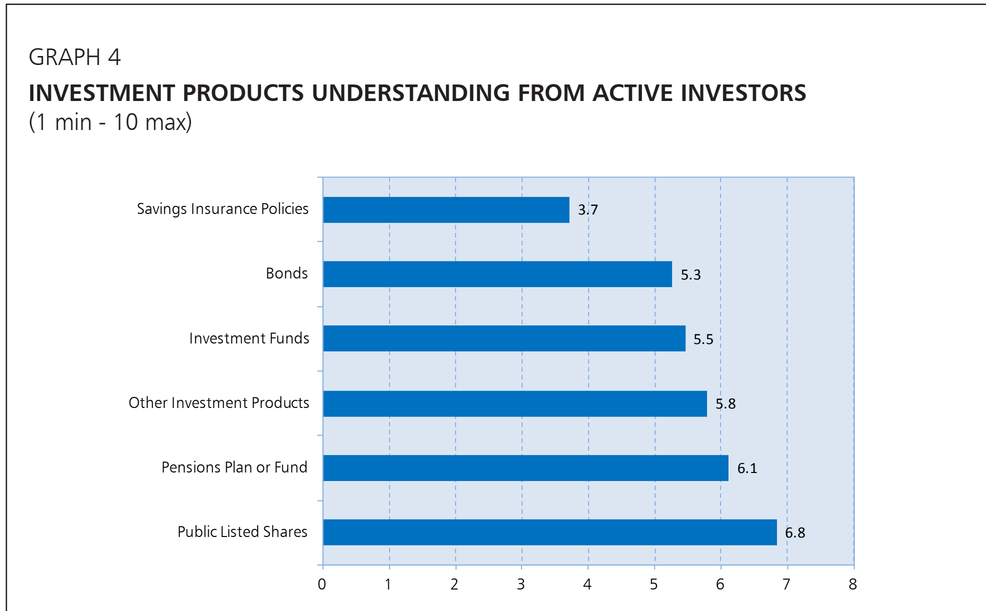
TABLE 4

INVESTMENT PRODUCTS UNDERSTANDING ACCORDING TO INVESTOR PROFILE

	Investor	*Depositor*	*Saver, non investor*	*Non saver*
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 sufficiently 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,

TABLE 5

TOP REASONS TO SAVE ACCORDING TO INVESTOR PROFILE

	Investor	*Depositor*	*Saver, non investor*	*Non saver*
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

	Investor	*Depositor*	*Saver, non investor*	*Non saver*
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 woth 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

TABLE 7

MAIN BARRIERS TO INVEST ACCORDING TO INVESTOR PROFILE

	Investor	*Depositor*	*Saver, non investor*	*Non saver*
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 later 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 with 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.

BIBLIOGRAPHY

Abreu, M., and V. Mendes (2010), "Financial Literacy and Portfolio Diversification," *Quantitative Finance,* 10(5): 515-528.

Asociación para la Investigación de Medios de Comunicación (2016), *Estudio General de Medios 2016,* 3rd Wave, October/November, http://www.aimc.es/egm/audiencia-internet-egm/

Banco de España (2014), *Encuesta Financiera a las Familias 2014 (EFF 2014).*

Behrman, J; Mitchell, O.; Soo, C., and D. Bravo (2012), "How financial literacy affects household wealth accumulation", *American Economic Review*, 102(3): 300–304.

Gratton, L., and A. Scott (2017), *La Vida de 100 Años. Vivir y trabajar en la era de la longevidad,* Verssus Libros.

Instituto Nacional de Estadística, INE (2015), *Education and culture,* http://www.ine.es/dyngs/INEbase/en/categoria.htm?c=Estadistica

— (2016), *Economically active population survey,* http://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica

Lusardi, A., and C. de Bassa Scheresberg (2013), Financial Literacy and High-Cost Borrowing in the United States, *NBER Working Paper,* 18969.

Lusardi, A., and O. S. Mitchell (2014), "The Economic Importance of Financial Literacy: Theory and Evidence," *Journal of Economic Literature,* American Economic Association, 52(1): 5-44.

Lusardi, A., and P. Tufano (2015), "Debt Literacy, Financial Experiences, and Over Indebtedness," *Journal of Pension Economics and Finance,* 14(4): 332-328.

Plan de Educación Financiera 2013-2017, Comisión Nacional del Mercado de Valores- Banco de España – Eurosistema.

Seru, A.; Shumway, T., and N. Stoffman (2010), "Learning by trading," *Review of Financial studies,* 23.

Standard & Poor´s Ratings Services (2014), *Global Financial Literacy Survey*.

Stango, V., and J. Zinman (2009), "Exponential Growth Bias and Household Finance," *The Journal of Finance,* 64(6): 2807-2849.

Szelyes, Z.; Braun, U.; Bruenner, S., and S. Leissner (2014), *Real estate as an asset class,* Credit Suisse Group AG.

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Ökonomien. Special Issue L'Homme. Europäische Zeitschrift für feministische Geschichtswissenschaft 1, 2016 (with Margareth Lanzinger and Claudia Opitz).

Useful knowledge. Monetary education of children and the moralization of productivity in the 19th Century in: Peter-Paul Bänziger, Mischa Suter (Hg.), Histories of Productivity. Genealogical Perspectives on the Body and Modern Economy, London: Routledge 2017, S. 74-91.

Weiße Männer, schwarze Krieger. Zur Geschichte kolonialer Männlichkeit in Deutschland, 1918-1964, Köln 2006.

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Financial History Workshop is designed to provide a forum for extensive discussion on new and innovative research on a very important and current topic for savings and retail banks in Europe and worldwide: financial literacy. This book compiles some of the research works that, due to their informative nature, were exhibited in it.

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