Financial Literacy *vs* Financial Illiteracy: a Case Study for a Region in the Northern of Portugal

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1. Introduction

The growing concern of financial entities and even state relating to the lack of financial literacy of a large part of the population is nowadays bigger, due to the current financial crises. It is crucial to battle this handicap, if not entirely, at least partially. It is in this context that this work inserts, trying to contribute to the increase of the financial literacy rate / level of the average citizen.

Section 1 has the main purpose of showing the state of financial literacy of one northern region of Portugal. In section 2, we consider the importance of financial literacy in contemporary society. In section 3, we present a case study of a northern region of Portugal (Vale do Sousa). In section 4, we analyse some results. In in section 5 we present some proposals to fight financial illiteracy and finally, in section 6, we present the main conclusions.

2. The importance of financial literacy in present day society

According to ASIC (2003) [1] the evaluation of the financial knowledge by the individual is dynamic and subjective, since a skillful individual in this issue, twenty or thirty years ago, may no longer be capable in present day society. This is due to events and factors that occur throughout the passage of years, forcing the concept of financial literacy of an individual to change.

It is common sense that the information given by financial institutions is very complicated and confuse, being preferable to find someone in which we can trust to solve the problem, instead of trying to understand or learn it. Rotfeld (2008) [2] defended the theory that it is better to study and learn to make decisions than ask advices to strangers. As said by Machado (2011) [3], financial literacy is a complex task that may be described and aggregated to a model called ("*life cycle model) or* ("*life events*") that shows the organization and evolution of each society.

Consonant with this idea, ASIC (2003) [1] and later Orton (2007) [4] alerted that some situations require the existence of a mediator/supervisor who may advise the consumer (existing, therefore, a relation of agency).

Such situation has accompanied us until nowadays, due to the following factors: (i) a bigger involvement of consumers in financial markets; (ii) an increase in markets' volatility, after a long period of growth; (iii) a reduction of savings and escalation of personal credit; (iv) a rise of consumer's awareness and accountability.

On account of this and because financial literacy is extremely important to the personal welfare and finances of each citizen, it is crucial to identify the lack of knowledge in this area among society and develop mechanisms to fight it, resorting to social awareness of possible future problems.

These were the foundations that motivated this essay.

3. Case study of a northern region of Portugal

In this section we present a case study created to determine the degree of financial (i)literacy of the average citizen, in what some terms used by financial institutions are concerned and that highly affect each one's economies.

The sample of this study is organized by a total of 115 respondents above 18 years old, from a region of Vale do Sousa, in Portugal.

The survey was made by direct interview, by inviting each surveyed to answer to a set of questions commonly used in financial affairs.

The inquiry was composite by 14 questions of common sense, as described in tables 1 and 2.

The software used in statistic treatment of the data was Microsoft Excel and SPSS.

The results are in the following chart:

Table 1: General Evaluation of the questions

Questions	**Answers**				
	1	**2**	**3**	**4**	**5**
1 – What does it mean **"Credit / Debit Card**	9,57%	40,87%	26,09%	23,48%	0,00%
2 e 3- What does it mean **"Debit / Credit Your Account"**	8,70%	19,13%	45,22%	26,96%	0,00%
4 - What is the difference between **"Simple / Compound Capitalization"**	90,43%	6,96%	1,74%	0,87%	0,00%
5 – What does it mean **" Interest"**	0,87%	2,61%	84,35%	12,17%	0,00%

6 – What does it mean **“Nominal Interest Rates”**	93,91%	6,09%	0,00%	0,00%	0,00%
7 – What does it mean **“ Equivalent Interest Rates”**	91,30%	8,70%	0,00%	0,00%	0,00%
8 – What does it mean **“ Proportional Interest Rates”**	88,70%	11,30%	0,00%	0,00%	0,00%
9 – What does it mean **“Effective Interest Rates”**	49,57%	20,87%	29,57%	0,00%	0,00%
10 – What does it mean **“Banking Spread”**	28,70%	39,13%	18,26%	13,91%	0,00%
11 – What does it mean **“Global Effective Annual Rate”**	82,61%	13,91%	3,48%	0,00%	0,00%
12 – What does it mean **“Effective Annual Rate”**	85,22%	13,04%	1,74%	0,00%	0,00%
13 – What does it mean **“Euribor Interest Rate”**	34,78%	31,30%	30,43%	3,48%	0,00%
14 – What does it mean **“Inflation**	10,43%	25,22%	53,91%	10,43%	0,00%

Source: *Authors*

Legends:

1 - Does not know at all
2 - Does not know
3 - Knows
4 - Knows well
5 - Fully knows

Regarding this inquest, it is possible to observe that none of the interviewed fully dominated the themes approached, obtaining results inferior to 5 in each question.
The following table contains the organized data, considering that 3 is the minimum value of understanding acknowledged.

Table 2: Synopsis of the gathered sample’s data

Questions	**% < 3**	**% > = 3**	**Average**	**IGLF**	**IGGLF**	**Standard Deviation**
				Median		
1 – What does it mean **“Credit / Debit Card**	50,43%	49,57%	2,63	2,00		0,9448297
2 - What does it mean **“Debit Your Account”**	27,83%	72,17%	2,90	3,00		0,8941735
3 - What does it mean **“Credit Your Account”**	27,83%	72,17%	2,90	3,00		0,8941735
4 - What is the difference between **“Simple / Compound Capitalization”**	97,39%	2,61%	1,13	1,00		0,4476361
5 – What does it mean **“ Interest”**	3,48%	96,52%	3,08	3,00		0,4200999
6 – What does it mean **“Nominal Interest Rates”**	100,00%	0,00%	1,06	1,00		0,2390909
7 – What does it mean **“ Equivalent Interest Rates”**	100,00%	0,00%	1,09	1,00	**1,92**	0,2817713
8 – What does it mean **“ Proportional Interest Rates”**	100,00%	0,00%	1,11	1,00		0,3166459
9 – What does it mean **“Effective Interest Rates”**	70,43%	29,57%	1,80	2,00		0,8667781
10 – What does it mean **“Banking Spread”**	67,83%	32,17%	2,17	2,00		0,9979184
11 – What does it mean **“Global Effective Annual Rate”**	96,52%	3,48%	1,21	1,00		0,4844657
12 – What does it mean **“Effective Annual Rate”**	98,26%	1,74%	1,17	1,00		0,4155758
13 – What does it mean **“Euribor Interest Rate”**	66,09%	33,91%	2,03	2,00		0,8891703
14 – What does it mean **“Inflation**	35,65%	64,35%	2,64	3,00		0,8042421

Source: Authors

In chart 2 it is possible to compare the percentage of answers that, according to the evaluation criteria, obtained a score inferior to 3 and superior or equal to 3, confirming the disparity of values concerning some questions. The same happens with the values of IGLF (Financial Literacy Degree Indicator – median of each question) for each question. Ideally, this value should be on level 3 or above it, but such only happened on questions 2, 3, 5 and 14. The IGLF of all the others remained below the desirable, emphasizing, however, questions 4, 6, 7, 8, 11 and 12 that obtained a lower IGLF (1, 00).
Likewise, it is possible to notice that the value of the indicator IGGLF (Global Financial Literacy Degree Indicator – average of all questions) is, once again, consistent with a low rate of the sample's financial literacy, grading 1, 92 in a scale of 0 to five.
This conclusion is corroborated by the IGLF, since in a large number of questions (10) this indicator was inferior to 3.
The IGGLF of the different groups differs according to the academic degree of the sample, increasing with higher academic levels.

Table 2: IGGLF by level of instruction.

Academic Degree	IGGLF
1º Ciclo 1st level	1,6032
2º Ciclo 2nd level	1,6190
3º Ciclo3rd level	1,7643
Secondary Education	1,9439
University Degree	2,1578

Source: Authors

The confidence interval of 95% obtained for the IGGLF was [1,85 ; 2,00].
Continuing this study, we tried to establish if factors such as gender and academic instruction influence the IGGLF of Vale do Sousa's population.
Two categories were established relating to academic degree: "Possess University Degree" and "Does not Possess University Degree", making the test t to *α=5%,* obtaining p=*8,5%* for the gender factor and p = *0%* for academic instruction.

4. Analysis of the results

In terms of descriptive statistics, we realize that the IGLF's sample concerning each question is much lower than the desirable, what certainly contributes to the low IGGLF of the sample.
This study demonstrated that the gender's variable does not influence IGGLF, opposite to the instruction's variable. In fact, the higher the instruction of the sample, the higher the grades of IGGLF.

5. Some proposals to overcome financial illiteracy

In Johnston's point of view (2005) [5], individuals and families should possess the skills and the knowledge required to allow them to comprehend the complexity of the financial world, so they can make responsible and safe decisions. On its turn, The Banco de Portugal (2010) [6] defends the importance of the domain of this area ok knowledge, since consumers 'decisions regarding these type of products lead to individual financial consequences and may affect the stability of financial and macro economy. Similarly, Huston (2010) [7] considers that increasing consumers' financial literacy should be one politics' goal, in order to improve their financial welfare. Consumers' excessive debts and bankruptcy rates are strong reasons to support this kind of projects.
Therefore, fighting financial illiteracy should contemplate: (i) financial educational programs; (ii) awareness and clarification campaigns directed to the general public; (iii) introduction of compulsory financial subjects in school programs, with specific contents, adapted to the different study levels.

6. Conclusions

This study shows that a large percentage of the population does not know the meaning of most of the expressions or financial terms. The results obtained in this group of questions are alarming, since the average of negative answers is 94, 65%, what confirms a great lack of knowledge in this area that makes citizens more vulnerable to financial issues.
We conclude that gender did not influence the financial literacy of the sample. However, the educational degree influences the financial literacy of the population, enhancing the IGGLF.
In conclusion, there is a big gap in this area of knowledge and much to be done to fight it. In our opinion, strategies to overcome this problem should comprehend compulsory school subject and implemented campaigns, with specific contents aimed to target audiences, particularly among those with lower levels of instruction. To sum up, we defend invest in education.

References

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