SURVEY ON THE FINANCIAL LITERACY OF THE PORTUGUESE POPULATION

2010





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INDEX

9 FOREWORD FROM THE GOVERNOR

I. PRESENTATION OF THE SURVEY ON FINANCIAL LITERACY

- 16 1. The concept of financial literacy
- 18 2. Objectives of the Survey
- **18** 3. Methodological aspects

II. HIGHLIGHTS OF THE SURVEY

III. DESCRIPTIVE ANALYSIS OF THE RESULTS OF THE SURVEY

35 Box 1 | Characterisation of the interviewees

38 1. Financial inclusion

- 38 1.1 Inclusion in the banking system
- 39 1.2 Financial inclusion levels
- 40 1.3 Holding of a bank account
- 42 1.4 Holding of other financial products
- 43 1.5 Access to Minimum Banking Services

43 2. Bank account management

- 44 2.1 Means of payment
- 44 2.2 Monitoring of the bank account
- 46 2.3 Homebanking
- 47 2.4 Choice of bank

48 3. Planning of expenses and savings

- 48 3.1 Planning of the household budget
- 50 3.2 Saving habits
- 52 3.3 Attitude with respect to consumption

53 4. Choice of banking products

- 53 4.1 Reasons for the choice
- 55 4.2 Knowledge of interest rates
- **55** 4.3 Comparison of interest rates
- 56 4.4 Pre-contractual and contractual information
- 57 4.5 Mortgage loans
- 59 4.6 Other loans
- 61 4.7 Credit cards
- 63 4.8 Bank overdrafts



64 4.9 Effort rate

65 5. Choice and knowledge of sources of information

- 65 5.1 Choice of sources of information
- 66 5.2 Knowledge of sources of information

68 6. Financial understanding

- 68 6.1 Knowledge of basic financial concepts
- 69 6.2 What people know best
- 70 6.3 What people know worse
- 72 Box 2 | Principal Components

IV. FINANCIAL LITERACY INDICES

- 79 1. Global Financial Literacy Index
- 79 1.1 Methodology
- 80 1.2 Analysis of the distribution of the Global FLI
- 82 2. Partial Financial Literacy Indices
- 82 2.1 Methodology
- 82 2.2 Analysis of the distributions of the Partial FLI

V. POPULATION GROUPS BY LEVELS OF FINANCIAL LITERACY

- 88 1. Analysis of the medians of the Financial Literacy Indices
- 88 1.1 Tests on the equality of the medians of the Global FLI
- 93 1.2 Tests on the equality of the medians of the Partial FLI
- 93 1.3 Comparison of population groups
- 98 Box 3 | Population groups by financial literacy level
- 100 2. Cluster analysis
- **105** Box 4 | Population groups by clusters

ANNEX 1: METHODOLOGY

- 109 1. Design of the questionnaire
- **110** 2. Pilot test of the questionnaire
- **111** 3. Characterisation of the sample
- **114** 4. Implementation of the Survey
- 115 5. Field work team

ANNEX 2: QUESTIONNAIRE

INDEX OF GRAPHS

Graph C.1.1	Characterization of the interviewees by the stratification criteria of the sample	35
Graph C.1.2	Characterisation of the interviewees by income level	37
Graph III.1.1.1	Characterization of the individuals who do not have a bank account	38
Graph III.1.1.2	Reason for not having a bank account	39
Graph III.1.2.1	Financial inclusion levels	40
Graph III.1.3.1	How many current accounts do you hold?	41
Graph III.1.3.2	Distribution of the number of accounts by income and schooling levels	41
Graph III.1.3.3	Frequency of use of the bank account	42
Graph III.1.4.1	What financial products do you hold?	42
Graph III.1.5.1	What is required to access the Minimum Banking Services?	43
Graph III.2.1.1	Means of payment most used in the regular acquisition of goods and services (1st preference)	44
Graph III.2.2.1	What is the main means of monitoring the movements and balance of your account? And with what frequency?	45
Graph III.2.2.2	Accuracy with which the bank account balance is known	45
Graph III.2.3.1	Knowledge and use of homebanking	46
Graph III.2.3.2	Reason for not using the homebanking	46
Graph III.2.4.1	What is the main reason for the choice of the bank where you have your account?	47
Graph III.2.4.2	Do you know the fees charged by the bank for your account?	47
Graph III.2.4.3	Reasons for not switching the current account to another bank	48
Graph III.3.1.1	Do you consider important to plan your household budget?	49
Graph III.3.1.2	Do you consider important to plan your household budget? How frequently do you plan your household budget?	49
Graph III.3.2.1	Do you usually save? Why do you not save?	50
Graph III.3.2.2	How frequently do you plan your household budget? What do you usually do with the money you save?	51
Graph III.3.2.3	What is the main reason that leads you to save?	51
Graph III.3.3.1	Propensity towards consumption	52
Graph III.3.3.2	Have you ever resorted to loans to acquire something that you later considered was not really that necessary?	53
Graph III.4.1.1	What made you choose the products you hold? (1st factor)	54
Graph III.4.1.2	Which criteria are of greatest importance in your choice of financial investments?	54

Graph III.4.2.1	Do you know the value of the interest rates of term deposits or other saving products you have at the bank? Do you know the value of the interest rates of loans you pay?	. 55
Graph III.4.3.1	Do you compare interest rates before investing / taking out a loan?	. 56
Graph III.4.4.1	Do you read the information given to you by the bank before investing or taking out a loan?	. 57
Graph III.4.5.1	Do you know the value of the spread of your mortgage loan?	. 58
Graph III.4.5.2	What was the main reason for the choice of your mortgage loan?	. 58
Graph III.4.5.3	Have you ever made early repayments of your mortgage loan, and with what frequency? Why do you never make early repayments of your mortgage loan?	. 59
Graph III.4.6.1	How many loans do you have? (excluding mortgage loans, credit cards and bank overdrafts)	. 60
Graph III.4.6.2	What is the main reason for the choice of your loan?	. 60
Graph III.4.7.1	What is the repayment scheme you usually use for your credit card?	. 61
Graph III.4.7.2	What is the payment scheme you usually use for your credit card? Do you know the value of the interest rate and other costs associated to your credit card?	. 62
Graph III.4.7.3	What is the payment scheme you usually use for your credit card? Do you use your credit card to pay current expenses?	. 62
Graph III.4.8.1	Does your bank account enable the use of a bank overdraft? How frequently do you use bank overdrafts?	. 63
Graph III.4.8.2	Do you know the interest rates and fees applied to bank overdrafts? How frequently do you use bank overdrafts?	. 64
Graph III.4.9.1	In what range is your monthly income? How much loan instalments represent of your monthly income?	. 65
Graph III.5.1.1	What entities do you think should provide you information on banking products? (1st preference)	. 66
Graph III.5.1.2	How would you like to receive information on banking products? (1st preference)	. 66
Graph III.5.2.1	What type of information do you follow regularly?	. 67
Graph III.5.2.2	Knowledge of the Bank Costumer Website	. 67
Graph III.5.2.3	What entities would you resort to, or have you resorted, in the event of disagreement with your bank?	. 68
Graph III.6.1.1	Number of correct answers	. 68
Graph III.6.3.1	What is the Euribor?	. 70
Graph III.6.3.2	Degree of risk attributed to different financial investments	. 71
Graph IV.1.2.1	Histogram of the Global Financial Literacy Index	. 81
Graph IV.2.2.1	Histograms of the Partial Financial Literacy Indices	. 83

INDEX OF TABLES

Table C.1.1	Distribution of the interviewees by age group and schooling level
Table C.1.2	Distribution of the interviewees by gender and schooling level
Table III.6.1.1	Financial understanding69
Table C.2.1	Description of the principal components of each group of questions74
Table IV.1.2.1	Descriptive statistics of the original index and Global FLI
Table IV.2.2.1	Descriptive statistics of the Partial Financial Literacy Indices
Table V.1.1.1	Kruskal-Wallis test to the Global FLI: by stratification criteria
Table V.1.1.2	Increases in the median of the Global FLI per year of schooling
Table V.1.1.3	Kruskal-Wallis test to Global FLI: by income indicators
Table V.1.1.4	Kruskal-Wallis test to Global FLI: by holding of banking products
Table V.1.1.5	Kruskal-Wallis test to Global FLI: by household budget management habits
Table V.1.3.1	Percentage of individuals with Financial Literacy Indices equal to or greater than the median, by stratification criteria
Table V.1.3.2	Percentage of individuals with Financial Literacy Indices equal to or greater than the median, by income indicators
Table V.1.3.3	Percentage of individuals with Financial Literacy Indices equal to or greater than the median, by holding of banking products
Table V.1.3.4	Percentage of individuals with Financial Literacy Indices equal to or greater than the median, by household budget management habits
Table C.3.1	Population groups where over half of the individuals are above or below median Global FLI
Table C.3.2	Population groups with the best and worst financial literacy results99
Table V.2.1.1	Characterisation of the clusters: by stratification criteria 10'
Table V.2.1.2	Characterisation of the clusters: by indicators of income 102
Table V.2.1.3	Characterisation of the clusters: by holding of banking products 103
Table V.2.1.4	Characterisation of the clusters: by household budget management habits 10 4
Table C.4.1	Population groups with over half of the individuals in cluster 1 and 2 10
Table A1.3.1	Average margin of error of each stratum 112
Table A1.3.2	Planned quotas and quotas carried out in each stratum 113

7

FOREWORD FROM THE GOVERNOR

Banco de Portugal has devoted special attention to the promotion of the financial literacy of bank customers. Together with the regulation of the duties of information of credit institutions and the supervision of compliance with the legislative framework of retail banking markets, the promotion of financial literacy is a strategic component of its action in the context of banking conduct supervision.

The Survey on the Financial Literacy of the Portuguese Population was a project that began in 2008, when Banco de Portugal was attributed specific duties in relation to the supervision of the market conduct of credit institutions. This project was developed taking into account the principles and best practices adopted internationally.

The Survey was structured so as to enable obtaining information about the financial attitudes, behaviour and level of understanding of financial matters by the population. Through the assessment of the various dimensions of the concept of financial literacy, the Survey contributes towards identifying the population groups and financial topics with the most significant gaps in terms of literacy. This represents an important means of diagnosis of the degree of financial literacy of the population and, as such, is an indispensible step towards the definition of financial education priorities.

Banco de Portugal decided to conduct the Financial Literacy Survey due to recognising the importance that citizens take informed and careful decisions in the management of their personal finance. By choosing financial products that are suited to their risk profile and financial needs, bank customers allocate their funds in the most efficient manner and contribute to the stability of the financial system.

The promotion of financial literacy contributes to foster the benefits of the instruments regulating transparency and duties of information of credit institutions and, therefore, to the more efficient functioning of financial markets. Citizens who are better informed have greater capacity to understand the information that is conveyed to them by the credit institutions, helping, thereby, to monitor the markets. Citizens who know their rights and duties are active agents of compliance with the legislative framework in force.

The international financial crisis has highlighted the importance of financial literacy and the informed decision making by bank customers as a form of promoting the efficiency and stability of the financial system. In this context, central banks and financial supervisors have attributed increasing importance to initiatives promoting financial literacy, becoming involved in the definition and implementation of national strategies on financial education. This concern is also shared by the European Supervisory Authorities, in particular, the European Banking Authority.

The results of the Survey suggest that, in general, the Portuguese have positive attitudes, although these attitudes do not always correspond to suitable financial behaviour. This fact is shown, especially by the importance attributed by the respondents to the planning of the household budget, which is not reflected, for example, in saving with a long term perspective. The importance attributed to saving by the respondents is not in accordance with its role in the appropriate allocation of individual resources over the life-time, in the soundness of the financial system and in sustainable economic growth. This aspect deserves particular attention since only a small part of the respondents reveals saving habits, with the percentage of those who state saving for retirement being very low.

The results shown by the Survey are positive with respect to financial inclusion, where the degree of use of the banking system by the population is particularly high. This is also an important indicator of social integration, which compares very favourably in international terms. The degree of financial inclusion, ascertained namely through the percentage of citizens with access to a bank account, is in line with that of other developed countries. Likewise, the data on the use of electronic means of payment confirms the importance that bank customers in Portugal attribute to electronic currency.

The results of the Survey are also positive in showing that the majority of the respondent population has a higher degree of financial literacy than the average of the individuals who participated in the Survey. However, the Survey highlights important asymmetries in the levels of financial literacy of different population groups. The population which is more elderly and has lower schooling levels shows very low levels of financial literacy. The younger population and unemployed also present levels of financial literacy that are below the average of the respondents, which confirms the importance of these groups as target groups in financial education actions. The level of financial literacy, both in the components relative to knowledge and to financial behaviour, is directly related to schooling and to the income range of the respondents.

The data shows gaps in knowledge of the sources of financial information and insufficient understanding of basic financial concepts, which makes it difficult for individuals to properly choose the financial products that are most suited to their effective preferences and risk profiles.

The answers of the respondents have also confirmed that they trust the credit institutions, with over half of the population choosing banking products based on the advice received at their branch and most stating that their branch is their preferred source of information. Trust in the financial system is an essential aspect for the financial stability that Banco de Portugal promotes through its supervisory activity. This attitude of trust demonstrated by bank consumers confers added responsibilities to the credit institutions, namely in practices related to the marketing of banking products.

According to the Survey results, decisions on the acquisition of banking products, which are increasingly complex and diverse, do not appear to result from a careful comparison of the existing alternatives. This is in spite of the fact that most of the respondents state analysing the pre-contractual information that is provided to them by the institutions and which has been the object of extensive regulation by Banco de Portugal.

Most of the interviewees prefer to obtain financial information through booklets and leaflets. Therefore, it appears appropriate the strategy of Banco de Portugal of preparing and disseminating thematic leaflets on banking products and services through the branches of credit institutions. This strategy began recently with the leaflet "Rights and duties in consumer credit".

Banco de Portugal is mentioned as the second most important source of information, while the Survey showed that the Bank Customer Website is still largely unknown. Likewise, Banco de Portugal is identified by the respondents as the reference entity in the settlement of conflicts with banks, which adds further importance to the work developed in the management of complaints from bank customers.

These and many other Survey results are analysed over this report. This information constitutes an important contribution to the work that Banco de Portugal develops and will continue to develop in its action as the supervisor of banking conduct in retail markets. The Survey is also a valuable baseline study for the National Plan of Financial Education (NPFE), that Banco de Portugal, together with the Securities Market Commission and Insurance and Pensions Fund Supervisory Authority, has promoted and which has already received the endorsement of the Minister of State and Finance.

Moreover, the Survey is also an essential instrument for the future evaluation of the impact of the NPFE. Although this assessment might employ a vast set of indicators, the Survey will always be a reference by allowing the comparison of the results which will be obtained after the implementation of the NPFE with the levels of financial literacy ascertained at this moment. A second survey on the financial literacy of the Portuguese population, very likely to be held in 2015, will enable doing so, and, certainly others will follow, thus assessing the progress that has been achieved in terms of the levels of financial literacy of the Portuguese population.

The Governor,

Carlos da Silva Costa



PRESENTATION OF THE SURVEY ON FINANCIAL LITERACY

1. THE CONCEPT OF FINANCIAL LITERACY

2. OBJECTIVES OF THE SURVEY

П

3. METHODOLOGICAL ASPECTS

I. PRESENTATION OF THE SURVEY ON FINANCIAL LITERACY

The Survey on the Financial Literacy of the Portuguese Population is a project carried out by Banco de Portugal under its mission of banking conduct supervision¹. The undertaking of this project indicates the importance which has been given to the promotion of financial literacy, as a component which reinforces the measures promoting the duties of transparency of the information provided by credit institutions.

The provision of financial information is very important, but does not necessarily lead to a better perception by bank customers of the characteristics, risks and returns of financial products, nor does it stimulate a change in financial behaviour. Financial education is a process by which consumers improve their understanding of financial products, enabling them to use financial information in a more efficient manner and enhance the effects of the instruments regulating the duties of information.

During the last few years, the concern over the asymmetry of information between institutions and customers has intensified, due to the greater diversity and complexity of the financial products offered on the market, which has been accompanied by a generalisation of the access of the population to these products. Consumer choice has thus become increasingly more difficult and requires greater consideration.

In this context, there is growing recognition, namely at an international level, that consumer decisions in retail banking markets, in addition to having individual financial effects, also have important repercussions on macroeconomic and financial stability. Better informed citizens with higher levels of financial education help to supervise markets and contribute to the stability of the financial system by choosing products that are suited to their risk profile.

The Survey on the Financial Literacy of the Portuguese Population is an instrument of diagnosis of the financial literacy level of the population since it enables the analysis of citizens' behaviour and attitudes in relation to financial issues and the assessment of their knowledge on the basic financial concepts. This diagnosis can also be used to support the definition of financial education projects, and will constitute a benchmark for their subsequent evaluation.

The preparation of this Survey followed the best practices which have been defined by the *International Network on Financial Education* (INFE), a network fostered by the OECD and composed of financial regulators, public authorities and experts who have developed extensive work in the definition and disclosure of guidelines on the promotion of financial literacy.

In this project, Banco de Portugal had the collaboration of Eurosondagem, a firm specialised in opinion studies, namely for the undertaking of the fieldwork.

The first results of the Survey on the Financial Literacy of the Portuguese Population were disclosed in October 2010. This report includes the detailed analysis of the results.

¹ The project of the Survey on the Financial Literacy of the Portuguese Population was presented in the Report on Banking Conduct Supervision of 2008. The Report on Banking Conduct Supervision of 2010 included an article on financial literacy strategies, highlighting the importance of the financial literacy surveys.

1. THE CONCEPT OF FINANCIAL LITERACY

According to the definition introduced by Schagen², "financial literacy is the the ability to make informed judgements and to take effective decisions regarding the use and management of money". Financial literacy contributes to citizens taking informed decisions on aspects of their financial life such as the management of the household budget, monitoring of the bank account and choice of banking products and services that are suited to their needs, namely when saving and resorting to loans.

Financial literacy thus plays an important supporting role underlying both everyday decisions and more complex financial decisions such as the choice of financial investments or the use of long-term credit (e.g. in order to finance a house), contributing also to the prevention of over-indebtedness. Considered in this perspective, the concept of financial literacy goes far beyond that of knowledge on financial matters, involving also the way this knowledge affects the behaviour and attitudes of citizens at the moment of taking decisions.

The Survey on the Financial Literacy of the Portuguese Population carried out by Banco de Portugal covered the different dimensions associated with the concept of financial literacy. The diagnosis of the level of financial literacy concerned not only financial behaviour, such as the frequency and form of monitoring the bank account, decisions on the constitution of savings, criteria of choice of loans or investment products, but also attitudes relative to factors of relevance in financial decision-making such as the importance attributed to planning the household budget and the motivation behind savings or the use of credit. Assessments were also made of financial knowledge such as the identification of sources of information on banking products and the understanding of some financial concepts such as the available balance in the bank account, the Euribor, the spread or the relationship between the interest rate and inflation rate.

CONCEPTS OF FINANCIAL LITERACY

The most quoted definition of financial literacy at an international level is the one introduced by Schagen. Over the last decade, various authors, as well as international organisations developing work in this area, have introduced other definitions, more or less detailed, but whose meaning does not differ from the definition given above. The following can be quoted as examples:

- "Personal financial literacy is the ability to read, analyze, manage, and communicate about the personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect everyday financial decisions, including events in the general economy"³;
- "The understanding ordinary investors have of market principles, instruments, organizations and regulations"⁴;
- "Individuals are considered financially literate if they are competent and can demonstrate they have used knowledge they have learned"⁵;
- "The ability to evaluate the new and complex financial instruments and make informed judgments in both choice of instruments and extent of use that would be in their own best long run interests"⁶;
- "Financial literacy is a combination of financial awareness, knowledge, skills, attitude and behaviours necessary to make sound financial decisions and ultimately achieve financial wellbeing"⁷.

3 Vitt, L. A.; Anderson. C.; Kent, J.; Lyter, D. M.; Siegenthaler, J. K.; & Ward, J. (2000). *Personal Finance and the Rush to Competence: Financial Literacy Education in the U.S*, Fannie Mae Foundation.

4 Financial Industry Regulatory Authority (2003). NASD investor literacy research: executive summary.

⁵ Moore, Danna (2003). Survey of financial literacy in Washington State: knowledge, behavior, attitudes and experiences, technical report 03-39, social and economic Science research Center, Washington State University.

⁶ Mandel, L. (2007). *Financial literacy of high school seniors*, in Jing J. Xiao (editor), Advances in Consumer Financial Research, New York: Springer Publishing 2008.

⁷ OECD.

2. OBJECTIVES OF THE SURVEY

In seeking to understand and analyse the three components inherent to the adopted concept of financial literacy, the questionnaire of the Survey was structured so as to provide answers to the following objectives:

- Assessment of the degree of financial inclusion in order to estimate the level of inclusion of the population in the banking system, the reasons why some individuals do not have a bank account, the frequency with which they use the account and the holding of other financial products;
- Characterisation of bank account management habits so as to ascertain the frequency and form of monitoring the movements and balance of the bank account (e.g. use of ATM cards and homebanking, reading of bank account statements), the customers' knowledge on the maintenance cost of the bank account and the reasons for the choice of the bank;
- Assessment of the capacity to plan expenses and savings so as to understand the frequency and importance given to the planning of expenses, as well as savings habits and their purposes;
- Characterisation of the financial products held by families and the process of choice of the main banking products in order to identify the financial products held by families (e.g. term deposits and other saving products, mortgage loans, consumer credit and credit cards) and the way that banking products are chosen, namely the criteria used in the assessment of the products, the knowledge of their characteristics and the reading of the pre-contractual and contractual information;
- Knowledge of sources of information and ways to obtain assistance so as to ascertain the information that the population would like to receive on banking products and through which channels, as well as the means that the population would use in order to obtain assistance in the event of disagreement with the credit institution or if they are unable to pay the loans instalments;
- Assessment of financial understanding in order to test the population's knowledge on various financial concepts.

3. METHODOLOGICAL ASPECTS⁸

In order to assess the financial literacy of the Portuguese population in terms of financial behaviour, attitudes and knowledge a questionnaire⁹ was structured with 94 multiple choice questions on the topics described above: financial inclusion, bank account management, planning expenses and savings, choice of banking products, choice and knowledge of sources of information and financial understanding.

⁸ For further details on the methodological aspects see Annex 1.

⁹ See questionnaire in Annex 2.

The final version of the questionnaire was preceded by the undertaking of a pilot test of 60 interviews which made it possible to assess the receptivity and clarity of the questions. The 2,000 door-to-door interviews, conducted by Eurosondagem, were carried out all over the national territory between February and March 2010, each lasting on average 45 minutes.

The size of the sample made it possible to estimate, through statistical inference, the results on the financial literacy of the defined population universe (population resident in Portugal aged 16 years or above) with an average error of 2.2 percent for a probability of 95 percent. The sample was stratified according to the following criteria: gender, age, geographic location, employment situation and schooling level.

The undertaking of face-to-face interviews (and not by telephone or Internet) allowed the questionnaire to cover a vast set of topics, besides improving the process of confirmation of the answers and encouraging the proactive participation of the interviewees.

The analysis of the answers to the Survey allowed obtaining detailed information on various aspects that are of relevance in financial decision-making (Chapter III). The application of the method of principal components to the questionnaire underlying the Survey led to the conclusion that it is not possible to eliminate a significant number of questions without losing the capacity to assess the financial literacy levels of the population in its three core areas (behaviour, attitudes and knowledge). Future questionnaires may be subject to some adjustments, but must continue to be necessarily long, similarly to the present one.

The Survey also sought to obtain a complete overview of the financial literacy level of the population, through the construction of Financial Literacy Indices (a global one and six partial, according to the thematic areas of the Survey), which aggregate the answers obtained in a selected group of questions (Chapter IV).

An Index enables the characterisation of population groups according to their financial literacy level and the identification of explanatory variables for financial knowledge and behaviour (Chapter V). However, the Index should not be interpreted as an absolute value of assessment of the Financial Literacy of the population, but rather as an instrument which enables comparison between population groups in the different thematic areas.

Thus, it was investigated whether the Global Financial Literacy Index and the Partial Financial Literacy Indices have different behaviour in the population groups defined in accordance with the various stratification criteria of the sample, as well as with income indicators, with the banking products held and with behaviour inherent to the management of the household budget. For this purpose, the medians of the Global Financial Literacy Index and Partial Financial Literacy Indices were analysed and clusters by financial literacy levels were constructed.



HIGHLIGHTS OF THE SURVEY

II. HIGHLIGHTS OF THE SURVEY

The results of the Survey on the Financial Literacy of the Portuguese Population show that the majority of the respondent population presents a level of financial literacy above the average observed in the answers to the different questions of the questionnaire. According to the Survey, access to the banking system is widespread and the use of electronic means of payment is very frequent, results that compare favourably with other developed countries.

In spite of the generally positive results concerning financial literacy, certain population groups stand out as having particular deficiencies, which correspond simultaneously to low levels of schooling and income. The more elderly population shows results that are greatly below the average, and this is also the age group that records lower schooling levels. Other groups also present relatively low levels of financial literacy, in particular the young and unemployed.

The questions asked to the interviewees covered a vast set of topics, for the purpose of assessing not only knowledge on financial concepts, but also attitudes and behaviour. The Survey showed that the financial attitudes of the interviewees are, in general, appropriate, namely in the importance attributed to the planning of the household budget or regarding consumption. But these attitudes do not have a direct correspondence in most of the behaviour adopted, such as, for example, in the accumulation of savings and in the suitable appraisal and comparison of the characteristics of banking products prior to their acquisition.

There is also evidence of important gaps in the understanding of basic financial concepts and in knowledge of the main sources of information. The answers to the questionnaire also indicate an overestimation by respondents of their financial knowledge. A deficient financial perception makes it difficult to make appropriate choices and according to the risk profile of the consumers. This confirms the strategic importance that should be attributed to financial information and education in order to change behaviour, without forgetting that this process is also associated to factors that depend on socioeconomic variables such as education and income levels.

The Survey reflects a relation of trust in the credit institutions, shown by the majority of bank customers, namely through the importance attributed to the advice received at the bank branch and the preference for receiving information through credit institutions.

This attitude of trust that the customers confer to the credit institutions brings them added responsibilities, being their task to assure the preservation of this trust, namely through the provision of clear, rigorous and complete information and appropriate marketing practices. The trust shown by the respondents is not only in institutions, but also in the advice given by family and friends. It is important to consider these sociological aspects in the implementation of financial information and education actions. Relatively positive results ...

... revealing appropriate attitudes in general that, however, are not fully reflected in behaviour

Knowledge on financial concepts and sources of information is still insufficient Π

In the selection and management of banking products, the proximity factor is equally important, which is evident in the choice of the credit institution due to its location relative to home or to the workplace. The importance of proximity also explains the weight of the points of sale as an alternative in the choice of the consumer credit product.

The Survey also shows that Banco de Portugal is the second most important source used to access information on banking products, in spite of the Bank Customer Website still being unknown to almost all the respondents. Banco de Portugal is also recognised as the first entity to resort to in the case of a dispute with a credit institution.

Financial inclusion

Access to a bank account is considered the main indicator of inclusion in the financial system, because it is an essential requirement for accessing other banking products and services. Nowadays, it is also indispensible for the acquisition of many goods and services. The degree of access to basic bank services is recognised as an important indicator of social integration, used in various international comparisons.

The degree of financial inclusion in Portugal is in line with that of other developed countries In Portugal, 11 percent of individuals aged 16 or above do not have a bank account. In the adult population (over the age of 18), this proportion falls to 9 percent. The values observed on the degree of financial exclusion are in line with the results obtained in other developed countries where surveys of this type have been conducted (e.g. United Kingdom, USA and New Zealand).

The great majority of the individuals who state not having a bank account (74 percent) are not part of the active population, although 10 percent are wage earners. Of the individuals who do not have a bank account, 48 percent are individuals aged over 55 and 31 percent are over the age of 70. Moreover, 19 percent of young people (aged 16 and 17) do not hold a bank account. In turn, approximately 70 percent of those who do not have a bank account either do not have any level of formal education or merely have primary education.

As the main reason for not having a bank account, 67 percent of the respondents state that they do not have sufficient income to justify it and 17 percent note that the account of another person (spouse or family) is sufficient.

The Minimum Banking Services, which aim at promoting access to a bank account and to various payment services, at low costs, are not known to most of the population. Indeed, 71 percent of the respondents state not knowing this service. Furthermore, those who do not have a bank account show not knowing the conditions of access to the Minimum Banking Services.

For the interviewees with a bank account, the average number of accounts is 1.4. The number of accounts and frequency of use are directly associated to schooling and income levels.

Bank account management

The appropriate management of the bank account is necessary to ensure control over expenses, in order to support the implementation of the household budget as planned and avoid the overdraft of the account.

The results show that individuals are concerned with the management of their bank account and the regular monitoring of their balances and movements. Amongst the respondents, 54 percent state monitoring their bank account more than once a week and 7 percent say they even do it daily. The answers relative to the reading of the bank statement sent regularly by the bank indicate that 89 percent of the individuals read it.

In spite of the concerns shown over control and movement of their account, 25 percent of those who have access to bank overdrafts state they use them with some frequency (11 percent "very frequently" and 14 percent "not very frequently"), which might indicate some lack of knowledge on their costs and other very short term financing alternatives on the market.

Regarding the criteria of choice of the bank for opening a deposit account, the criteria most frequently indicated are the recommendation of family and friends (35 percent) or criteria of a practical nature, such as the proximity of the bank branch to home or to the workplace (23 percent). The costs or expected remuneration are referred by only 9 percent of the respondents. These results are not surprising since 74 percent of the respondents answered "does not know" or "only knows approximately" when questioned whether they knew the value of the commissions/fees charged by the bank for the maintenance of their account.

The Minimum Banking Services are not known to most of the Portuguese population

25

Monitoring of the bank account's movements and balance is carried out very frequently

In the choice of the bank, customers give little importance to the cost and/ or remuneration of the account For bank account management, 24 percent of the respondents refer using homebanking, with the individuals in the 25 to 39 year old age group being those who most use this service provided by credit institutions. On the other hand, 15 percent of the individuals do not know this channel of account management. Amongst those who know of homebanking, but do not use it (61 percent), the main reason indicated for not using it is their preference for the ATM network (27 percent).

Electronic means are widely used for the regular payment of goods and services, with the use of the ATM card being indicated as their first preference by 44 percent of the individuals, a proportion which reaches 68 percent in the case of persons with a university degree. The proportion of those who authorise the payment of accounts through direct debit of their account is also 44 percent.

Planning of expenses and saving

The vast majority of the population attributes great importance to the planning of the household budget... Most of the population shows a positive attitude regarding the importance of planning expenses, when questioned on what their actions should be in the management of the household budget.

A very significant percentage of the individuals (89 percent) considers that it is "important" or "very important" to plan the household budget and, of these, 82 percent indicate that they carry out this planning with a periodicity that is at least monthly.

... but the percentage of those who say that they save is much lower Regarding saving, an essential aspect for appropriate budget planning, 52 percent of the respondents state saving, but only 56 percent of these state doing so regularly. In turn, only about one fifth of the population actually demonstrates that they save, applying funds into a term deposit account or other medium or long term investment.

Of those who say that they save, the majority (54 percent) consider as such the money left in a current account to spend at a later date. The practice of leaving surplus funds in a current account might indicate some inertia regarding saving, which normally arises from the lack of awareness on its importance or the lack of knowledge on its possible investment.

As the reason for not saving, the majority refers to insufficient income ...

> ...and only 6 percent of the respondents who save do so for retirement

The majority of the respondents who do not save indicate not having sufficient income as the main reason (88 percent). However, 7 percent show that they do not consider saving as a priority. When questioned on the motivation for saving, the majority of those who save indicate precautionary reasons (58 percent), that is, for the purpose of meeting unforeseen expenses; 15 percent refer to relatively immediate objectives, such as holidays and travel, and 8 percent save for the acquisition of durable goods. Only 6 percent of the respondents state that they do so thinking about retirement.

A relatively positive result is the fact that 65 percent of the respondents state that in order to purchase something they prefer to save first. In contrast, 26 percent recognise that they "sometimes" resort to loans, with 8 percent even admitting that they have in the past resorted to loans in order to buy something unnecessary.

The planning of expenses and constitution of saving are directly related to age, with the more elderly, in particular those who are retired, being those who show the most positive results. Women also stand out positively in relation to these attitudes and behaviour.

Choice of banking products

The complexity and great diversity of the offer of banking products on the market make it especially important that the choice of the product to be acquired is based on rigorous criteria, so that it is the most suited to the consumer's needs and profile. The standardised pre-contractual information, provided to the consumer prior to the acquisition of banking products, enables making an assessment and comparison of the respective costs and benefits.

The results of the Survey reveal great trust of the customers in the advice given by the credit institutions. They also indicate that the majority of the individuals (83 percent) analyses the pre-contractual information provided by the institution; however, this information is not used to make a comparison with other alternatives (only 8 percent state doing so).

This behaviour, showing some passivity in the acquisition of banking products, is confirmed once again by the 56 percent of the respondents who do not compare interest rates before investing in a term deposit or other saving product and by the 40 percent who do not compare interest rates when contracting loans. The lowest percentage of those who do not compare the interest rates of loans appears to reveal greater concern on the part of the respondents with the costs assumed with loans than with the return of savings.

The use of the usual bank as a criterion of choice of the banking product(s) is indicated by 28 percent of mortgage loan holders and by 26 percent of those with consumer credit.

In the case of consumer credit, 23 percent refer to the convenience of obtaining the loan at the place of acquisition of the product as the most relevant factor, which shows the importance of "points of sale" in credit intermediation.

Regarding the reasons for the choice of banking products, the advice received at the bank branch (54 percent) or from family or friends (25 percent) are considered more important.

The majority reads the pre-contractual and contractual information...

... but there is no widespread habit of comparison of costs Π

The choice of the loan considers above all the instalment ... In the criteria of choice of mortgage loan, only 4 percent of those who have this product indicate the Annual Percentage Rate of Charge (APR) and 18 percent mention the interest rate. For consumer credit, the criteria related to the costs of the loan are of even lower importance: 5 percent indicate the rate that includes all the costs of the loan (APR) and 13 percent refer to the interest rate.

... but the total cost is not properly assessed

The amount of the instalment is the criterion most referred to in the choice of a loan, both for mortgage and consumer credit (41 and 27 percent of the respondents, respectively), which reveals the consumers' concern with the monthly debt-to-income ratio associated to the debt service. However, although 43 percent of those who have loans state that they allocate less than a quarter of their monthly income to the payment of the respective instalments, 12 percent of the respondents refer having amounts of instalments that are above 50 percent of their income, while 13 percent answer "does not know" to the question.

Amongst credit card holders, 52 percent state that they pay the outstanding debt in full at the end of the month, 43 percent pay partially over time and 5 percent recognise that they "do not know" the repayment modality of their credit card. Regarding knowledge on the interest rates and other costs of the card, there are no significant differences between the respondents who pay at the end of the month and those who pay partially over time.

Concerning the use of bank overdrafts, the percentage of respondents who show that they do not know the costs associated to bank overdrafts seems to indicate a low perception of the fact that their use actually constitutes the use of a loan and of the alternatives available in the market for very short term financing.

In the choice of banking products, the individuals with higher schooling levels present the most satisfactory results.

Knowledge of sources of information

Customers prefer to receive information on banking products through their bank... In the choice of sources of information, the majority of the individuals (81 percent) indicate their own bank as their preferred channel to receive information on banking products, reflecting a high degree of trust in the banking system. Banco de Portugal emerges as the second entity most referred by individuals regarding preferences to receive information on banking products (10 percent of the respondents), in spite of the lack of knowledge on the existence of the Bank Customer Website (only 7 percent indicate that they have consulted it).

... in the format of booklets and leaflets

 In turn, 33 percent refer to booklets and leaflets as their preferred format to obtain financial information. This choice confirms the importance of the recent initiative of Banco de Portugal to proceed with the preparation and dissemination of thematic leaflets on banking products and services, through the branches of the credit institutions. Bank deposits (current and term) are the product in relation to which the majority of the individuals shows interest in receiving information (65 percent), followed by mortgage loans (14 percent). Not unrelated to this fact is the relative importance of these banking products in the total products held by the respondents.

Regarding knowledge on the entities to which the customer may resort in the event of a dispute with the respective credit institution, Banco de Portugal is the entity most bank customers referred to (44 percent), followed by consumer associations (29 percent) and courts (22 percent).

When questioned on who they would resort to in a situation of inability to pay the instalments on their loans, the majority (52 percent) indicates the family.

The worst results of the Survey refer to the knowledge of the sources of information. When questioned on their regular following of news relative to the legislation and regulation of banking products, 82 percent of the respondents refer not following this type of information. These answers reveal the need, not only to disseminate financial information to bank customers through the means they indicate as their preferred channels (their own bank and Banco de Portugal), but also to promote the means of dissemination of information that are already available, such as the Bank Customer Website.

Financial understanding

The questions relative to financial understanding seek to directly assess the knowledge of the individuals. The results in this thematic area reveal deficiencies of financial literacy related to various concepts that are of importance in decision-making, which was also evident from the analysis of the areas of the questionnaire on attitudes and behaviour.

In turn, the number of incorrect answers to the questionnaire (instead of the alternative "does not know") might indicate that the respondents overestimate their own financial knowledge. This conclusion is in conformity with that observed in surveys conducted in other countries.

The Survey presents satisfactory results regarding knowledge on the relationship between the interest rate and inflation rate (57 percent answered correctly) and on the individual liability for the payment of a loan incurred together with another person (with 78 percent of correct answers). However, when questioned on the concept of the Euribor, only 9 percent of the respondents answered correctly.

The results on financial understanding are directly related to the schooling level. The groups corresponding to workers and to individuals aged 25 to 54 years old also present more positive results than the average of the respondents.

Banco de Portugal is the reference entity in the event of disagreement with the bank

The respondents tend to overestimate their financial knowledge

The liability for jointly incurred loans is correctly identified

The concept of the Euribor is not well known

Population groups which stand out

The aggregate analysis of the answers to the Survey enables characterising the financial literacy levels of various population groups. The concept of financial literacy used is defined as the set of attitudes that are relevant for the financial decision-making (such as the importance attributed to planning the household budget), behaviour (which includes monitoring the account balance and the criteria for the choice of banking products) and knowledge (namely the identification of sources of information and understanding of basic financial concepts).

Financial literacy indices were constructed based on the selection of various questions of the questionnaire, which enable a quantitative valuation of the answers obtained, both for the entire set of the questions, and for each of the thematic areas considered. Subsequently, a comparison of the results obtained for the different population groups was made.

The analysis carried out enables the identification of population groups that present comparatively higher/lower financial literacy results, although there are sometimes important asymmetries within each group.

POPULATION GROUPS WITH HIGHER LEVELS OF FINANCIAL LITERACY

Higher financial literacy levels are associated to individuals with an undergraduate or graduate degree, and those who are in the 24 to 59 year old age group. Also presenting the best results are individuals with higher income levels (monthly net income above 1,000 euros) which is in accordance with the existing positive correlation between schooling level and income level.

In the analysis of the population according to employment situation, it is particularly noteworthy that the respondents with employment present more positive results, which reflects the fact that prevails in this group higher schooling and income levels than in the case of the unemployed.

Individuals who hold banking products (bank account, term deposit, mortgage loan, consumer credit and credit card) in general present better financial literacy results. This circumstance suggests that experience and greater use of the banking system are important factors in the level of financial literacy. Users of homebanking services also show higher indicators of financial literacy.

POPULATION GROUPS WITH LOWER LEVELS OF FINANCIAL LITERACY

The population groups with the lowest indicators of financial literacy are, in particular, the more elderly population (aged over 70) and those without primary education.

The population with lower schooling and income levels (monthly net income below 500 euros), in which women are predominant, also emerges in the population groups with comparatively lower levels of financial literacy.

Also showing less positive results is the younger population and the unemployed, for whom the development of financial education actions assumes particular importance.

Individuals who do not have a bank account – and who are, therefore, excluded from the banking system – also present low levels of financial literacy.

A low level of financial literacy is also, in general, a characteristic of the people who show a negative attitude in relation to the importance of planning the household budget.



DESCRIPTIVE ANALYSIS OF THE RESULTS OF THE SURVEY

FINANCIAL INCLUSION
BANK ACCOUNT MANAGEMENT
PLANNING OF EXPENSES AND SAVINGS
CHOICE OF BANKING PRODUCTS
CHOICE AND KNOWLEDGE OF SOURCES OF INFORMATION
FINANCIAL UNDERSTANDING
III. DESCRIPTIVE ANALYSIS OF THE RESULTS OF THE SURVEY

The Survey enabled estimating a group of indicators on the financial behaviour, attitudes and knowledge of the Portuguese population. The assessment of financial literacy was made, in the first place, through the direct analysis of the answers of the interviewees to the question-naire. Moreover it sought to identify situations where the answers were greatly differentiated according to socio-economic characteristics such as age, schooling level or income level.

The results enabled assessing the financial inclusion of the population, understanding habits relative to planning of expenses and savings and the form of bank account management. The banking products held by the population and the criteria used in their choice are also characterised.

The answers to the Survey enable the recognition of the channels through which customers prefer to receive information on banking products and the assessment of the population's knowledge regarding sources of financial information and ways to obtain assistance in the event of disagreement with the credit institution or difficulty in meeting the loans instalments.

The Survey also sought to assess financial understanding through various questions on the basic financial concepts encountered by a significant part of the population on an everyday basis.

BOX 1 | CHARACTERISATION OF THE INTERVIEWEES

For the interpretation of the results of the Survey it is important to characterise the sample of the interviewees. The sample was defined in accordance to five stratification criteria: gender, age, geographic location, employment situation and schooling level. For each stratification criterion the distribution of the number of interviewees by the strata followed the quotas that reflect their weight in the Portuguese population¹.

Of the 2,000 interviewees, 52 percent are female and 58 percent are part of the active population. Approximately half are aged between 25 and 54 years old, and 13 percent are over the age of 70. Approximately a quarter of the interviews were conducted in the North of the country and 36 percent in the Centre and in Lisbon and Tejo Valley. A little over half of the respondents (53 percent) have compulsory schooling (current 9th year) and only 12 percent have a university degree.



Graph C.1.1

1 For the strata, quotas were defined in proportion to their occurrence in the Portuguese population over the age of 16, according to the data published by INE for the 2001 Census (see Annex 1 in the methodological description).



In the distribution of the interviewees by age group and schooling level, the higher schooling levels are associated to the younger cohorts of the population (two thirds of those with a university degree are aged below 40). Over half of the interviewees aged 70 or above did not have complete primary education and in the cohort between 55 and 69 years old primary education is predominant.

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DISTRIBUTION OF THE INTERVIEWEES BY AGE GROUP AND SCHOOLING LEVEL								
	Without primary education	Primary education	Elementary education	Secondary education	Undergraduate or graduate education	Total		
16 to 24 years old	I	2.4%	7.2%	5.2%	1.5%	16.3%		
25 to 39 years old	0.4%	6.0%	7.3%	7.9%	6.2%	27.8%		
40 to 54 years old	0.5%	11.0%	5.6%	4.0%	2.7%	23.8%		
55 to 69 years old	2.4%	12.2%	1.7%	1.5%	1.3%	19.1%		
70 or older	6.3%	5.6%	0.4%	0.4%	0.3%	13.0%		
Total	9.6%	37.2%	22.2%	19.0%	12.0%	100%		

Questions: A4 and A5; Basis: 2,000 interviewees

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DISTRIBUTION OF	THE INTERVIEWEES	BY	GENDER AND	SCHOOLING	I FVFI
			GENDEN AND	SCHOOLING	

	Without primary education	Primary education	Elementary education	Secondary education	Undergraduate or graduate education	Total
Female	5.1%	18.4%	10.6%	10.6%	7.4%	52.1%
Male	4.5%	18.8%	11.6%	8.4%	4.6%	47.9%
Total	9.6%	37.2%	22.2%	19.0%	12.0%	100%

Questions: A3 and A5; Basis: 2,000 interviewees

In the distribution by income levels, approximately 31 percent of the interviewees referred earning up to 500 euros net per month, 31 percent from 500 to 1,000 euros, 14 percent between 1,000 and 2,500 euros and 1 percent above 2,500 euros. On the other hand, 6 percent indicated not having income and 17 percent did not answer the question.

There is a positive relationship between schooling level and income level.



Graph C.1.2



1. FINANCIAL INCLUSION

Nowadays, having a bank account is an indicator of social integration, as an essential requirement for access to a generalised group of goods and services.

The data that is currently available show that, even in developed countries, many people remain excluded from the financial system, with no access to basic banking products, such as is clearly the case of a current account.

The degree of financial inclusion is an indicator which is also used in the comparison of economic development at an international level. The results obtained in the Survey on the degree of financial inclusion are positive and in line with those of other countries where this type of survey has been conducted.

of those without a bank account falls to 9 percent.

1.1. Inclusion in the banking system

11 percent of the respondents do not have a bank account...

account... ... the percentage falls to 9 percent falls to 9 percent

for those over the age of 18

Of the total of respondents who do not have a bank account, 50 percent are aged 16 and 17 or over 70. On the other hand, approximately 74 percent are individuals belonging to the non-active population, of which 37 percent are retired and 10 percent are wage earners; 53 percent have a net monthly income up to 500 euros and 69 percent are individuals without education or with primary education only.

Approximately 11 percent of the respondents do not hold a bank account.

However, considering only interviewees above the age of 18, the percentage

As the reason for not having a bank account, 67 percent indicate that their income is insufficient to justify it and 17 percent refer that another person's account is sufficient. On the other hand, 40 percent noted that they had held a bank account in the past.

Graph III.1.1.1



CHARACTERIZATION OF THE INDIVIDUALS WHO DO NOT HAVE A BANK ACCOUNT

CHARACTERIZATION OF THE INDIVIDUALS WHO DO NOT HAVE A BANK ACCOUNT



Question: B1; Basis: 221 interviewees

Graph III.1.1.2





1.2. Financial inclusion levels

Apart from accessing the financial system, for which holding a current account is essential, a wider concept of financial inclusion can be analysed, considering also the frequency of the use of the bank account and the holding of other financial products. According to these indicators, it was possible to distinguish different levels of financial inclusion:

- Level 1: individuals who do not have a bank account;
- Level 2: individuals who have a bank account, but do not use it regularly;
- Level 3: individuals who have a bank account and use it, but do not hold any other financial product;
- Level 4: individuals who have other financial products beyond the bank account.

Graph III.1.2.1

FINANCIAL INCLUS	ON LEVELS					
Total sample	11% 2 <mark>%</mark>	25%	62%			
(above 16 years)						
Above 18 years	9% 2%	25%	64%			
	l					
Level 1: Do not have a bank account						
Level 2: Have a bank account but do not use it regularly						
Level 3: Have a bank account and use it regularly, but do not have any other financial product						
Level 4: Hold financial produtes as well as a bank account						

Questions: B1, B3 and E1; Basis: 2,000 interviewees

Apart from the individuals without bank account (11 percent), there are 2 percent of interviewees who, in spite of having an account, do not use it regularly, which means that 13 percent of the respondents do not use the banking system on an everyday basis.

Furthermore, 25 percent have a bank account and use it, but do not hold other financial products. Therefore, these interviewees are included in the financial system and use it, but do not draw on it, for example, to invest savings or to resort to credit.

62 percent use the banking system in an active manner

the On the other hand, 62 percent have other banking products in addition to a bank account, using the banking system more actively.

1.3. Holding of a bank account

The number of bank accounts and the frequency of their use are positively correlated with schooling and income levels

For the interviewees with a bank account, the average number of accounts is 1.4. Approximately 66 percent have one bank account and 26 percent hold two accounts. It was found that 61 percent state using the account more than once a week.

The number of bank accounts and the frequency of their use are positively correlated with the schooling level and income level. This result derives from the positive relationship between these two last indicators.

Graph III.1.3.1



Questions: B1 and B2; Basis: 1,769 interviewees

Graph III.1.3.2







Schooling level

Question: B2; Basis: 1,769 interviewees

Graph III.1.3.3



Question: B3; Basis: 1,769 interviewees

1.4. Holding of other financial products

29 percent of those who have a bank account, do not have other financial products Of the individuals who have a bank account and use it with some regularity², 29 percent do not have any other financial product. The most common products are insurance (37 percent), credit cards (32 percent), term deposits (31 percent), mortgage loans (26 percent) and bank overdrafts (25 percent). It was also found that there is a positive correlation between the holding of practically all the financial products and schooling level. This relationship is clearly not unrelated to the high correlation between schooling and income levels.





Question: E1; Basis: 1,742 interviewees

2 This analysis excluded individuals who referred having a bank account, but who never or almost never use it.

1.5. Access to Minimum Banking Services

The Minimum Banking Services system promotes financial inclusion, by enabling access to a current account and respective debit card, with annual costs not above 1 percent of the guaranteed minimum monthly remuneration. In order to have an account under this system, customers are merely required not to have another bank account³.

The degree of information on this right proved to be very low, since 71 percent of the respondents stated not knowing of its existence. Of the respondents who stated knowing the Minimum Banking Services (mainly individuals with primary or elementary education), only 5 percent gave the correct answer "not having a bank account" when questioned on the conditions of access to this system. This leads to the conclusion that only 1.4 percent of the total respondents actually revealed knowing what are the Minimum Banking Services. Among the 11 percent of individuals who do not have a bank account, none gave the correct answer on the conditions of access to this system.

The Minimum Banking Services are not known to most of the population

Graph III.1.5.1

WHAT IS REQUIRED IN ORDER TO ACCESS THE MINIMUM BANKING SERVICES?



Question: B8; Basis: 574 interviewees

2. BANK ACCOUNT MANAGEMENT

When paying for goods and services, individuals can use money or resort to other means of payment implying a movement in the bank account.

Monitoring of bank account movements is essential to ensure that the intended level of the account balance is maintained and that expenses are carried out in such a way as not to exceed the available balance in the account. The regular monitoring of the bank account contributes to ensure that the implementation of the household budget is conducted as planned.

The movements of the bank account balance can be monitored through various means provided by the banks, namely through the analysis of the paper statement sent by the bank, the consultation of ATM, the reading of the booklet (*caderneta*), when applicable, or the consultation of the bank site on the Internet (homebanking).

³ At the date of the Survey, the Minimum Banking Services were covered by Decree-Law no. 27-C/2000, of 10 March. This legal system has, in the meantime, been replaced by Law no. 19/2011, of 20 May.

2.1. Means of payment

68 percent of those with university degrees prefer to use the debit card The means of payment most used for the regular acquisition of goods and services continues to be cash, emerging as the first preference of payment for 53 percent of the interviewees. The use of the debit card stands out as the first preference of 44 percent of the interviewees.

The preference for the use of the debit card increases with the schooling level, since this is the preferred means of payment of 8 percent of the respondents without primary education, but of 68 percent of the interviewees with university education.

Other means of payment, such as cheques or credit cards, show a low expression in everyday purchases.

Graph III.2.1.1





Question: C1; Basis: 1,742 interviewees

44 percent use direct debitin the accountwith the services most referred being electricity (29 percent), water (24 percent) and insurance (19 percent).

2.2. Monitoring of the bank account

50 percent use the
ATM to monitor
their accountThe interviewees with a bank account and who use it with some regu-
larity4 prefer the ATM (50 percent), followed by the bank statement sent
regularly by the bank (27 percent), as a means of control of the accounts'
movements and balance. Considered together, the bank statement and
booklet (caderneta)⁵ are used by 38 percent of the interviewees.

⁴ This analysis excluded individuals who referred having a bank account, but who "never" or "almost never" use it (see point III.1.2).

⁵ The booklet (caderneta) is a means of control of the account's movements and balance offered only by some banks.

The use of the Internet as a means of monitoring the bank account is referred, as a first preference, by only 8 percent of the interviewees and increases with the schooling level.

Over half of the respondents (54 percent) monitor the movements and balance of their current account with great regularity (more than once a week). Only 3 percent refer not being concerned with the control of their bank account.

54 percent monitor their account's balance and movements more than once a week



Questions: C3 and C4; Basis: 1,742 interviewees

Regarding the accuracy of knowledge of the bank account balance, approximately 86 percent of the interviewees stated knowing its amount with an error of less than 50 euros. With respect to the attention given to the statement of the current account (whatever the support), 47 percent of the interviewees state reading it "in detail", while 42 percent state reading it "roughly". Only 11 percent of the interviewees admit not reading the bank statement.



Question: C5; Basis: 1,742 interviewees

2.3. Homebanking

24 percent use homebanking

Regarding homebanking services offered by banks, 24 percent of the interviewees state using this means to manage their bank account. On the other hand, 61 percent know about homebanking but do not use it and 15 percent refer to not knowing this service offered by the banks.

The use of the Internet for account management for residents in the region of Lisbon and Tejo Valley is higher than the national average (39 percent versus 24 percent). The results also show a greater use of the Internet by younger people, especially in the age group of 25 to 39 years old (39 percent).

The main reasons for its non-use, claimed by those who know the homebanking service, are: preference for ATM (27 percent of the interviewees); difficulty in dealing with technology (19 percent); mistrust concerning security conditions (19 percent); lack of regular access to the Internet (18 percent); and preference for over-the-counter contact.

Graph III.2.3.1



Question: C8; Basis: 1,742 interviewees

Graph III.2.3.2



Question: C10; Basis: 1,052 interviewees

2.4. Choice of the bank

The main reasons given by the interviewees for the choice of the bank where they have their main current account are: recommendation from family or friends (35 percent); proximity to home or the workplace (23 percent); requirement of the employer entity (14 percent); and the fact that it is the bank where the mortgage loan or other loan was taken out (12 percent). The reasons related to the cost or remuneration of the account scored last in a scale of preferences, and were referred by only 9 percent of the respondents. The main reasons for the choice of the bank are recommendation from family or friends or the proximity to home or the workplace

Graph III.2.4.1



Question: C11; Basis: 1,742 interviewees

Of the interviewees with a bank account, 89 percent state reading the bank statement ("in detail" or "roughly"), but 40 percent confess not knowing the fees charged by the bank for their account and 34 percent refer knowing them only approximately. The lack of knowledge is higher for the lower schooling levels.

40 percent do not know the fees paid for the account



Graph III.2.4.2

Question: C15; Basis: 1,742 interviewees

Only 9 percent of the respondents referred having transferred their account to another bank in the last 5 years, while 82 percent have never considered this possibility. The remaining 9 percent have already thought about it but did not do so, mostly (59 percent) because they are not certain of the benefits of this change. Other reasons indicated included the fact that they consider important the long-term relationship with their current bank and the cost and time associated to this change.



Question: C14; Basis: 138 interviewees

3. PLANNING OF EXPENSES AND SAVINGS

The appropriate management of the household budget requires the identification of income levels and the forecast of current and occasional expenses, also taking into account a medium and long term perspective. The constitution of savings is an important principle in the good management of the household budget, enabling the accumulation of wealth and meeting unforeseen situations, such as a temporary reduction of income or the occurrence of unexpected expenses.

The importance of saving is reinforced in view of the current transfer of liabilities and risks to individuals in the formulation of retirement and health plans, accentuated by the demographic trend towards the aging of the population.

This Survey sought to assess the degree of awareness of the population toward savings and regular and appropriate planning of their household budget. The promotion of savings is one of the main objectives of most of the financial education programmes.

3.1. Planning of the household budget

89 percent consider household budget planning "important" or "very important"... When questioned on the importance of the planning of future revenue and expenses, 51 percent of the interviewees consider this task "very important" and 38 percent find it "important", with there being a positive relationship between this assessment and the schooling level. However, 11 percent consider this planning "not very important" or "not at all important". Interviewees in the 25 to 39 year old age group show greater concern with household budget planning, with 59 percent considering it to be "very important".

Of the 89 percent of the interviewees who consider household budget planning "important" or "very important", 6 percent state doing it on a daily basis, 25 percent weekly and 51 percent monthly.

Of those who recognise household budget planning as "important" or "very important", 8 percent do not carry out this task and another 9 percent only do so in a non-periodic manner. These results reveal some difference between financial attitudes and behaviour: the high importance attributed to household budget planning is not necessarily reflected in its regular undertaking.

... and of these, 82 percent plan at least on a monthly basis





Graph III.3.1.2

Graph III.3.1.1

DO YOU CONSIDER IMPORTANT TO PLAN YOUR HOUSEHOLD BUDGET? HOW FREQUENTLY DO YOU PLAN YOUR HOUSEHOLD BUDGET?





3.2. Saving habits

Only half of the individuals save...

Regarding saving habits, it was found that approximately 48 percent of the interviewees state not saving. Of these, the vast majority (88 percent) indicate insufficient income level as the reason for not saving, while 7 percent do not consider it a priority.



Questions: D3; Basis: 2,000 interviewees | D6; Basis: 963 interviewees

... and only a fifth do so in a long term perspective Amongst those who save, only 56 percent refer to save regularly, with 44 percent doing so in an irregular manner (using, for example, their holiday or Christmas allowance). On the other hand, the questions on the investment of savings reveal that only approximately one fifth of the interviewees save in a medium and long term perspective by investing funds in a term account or other financial instrument. Most of those who state saving, either leave the savings in their current account to spend at a later date (54 percent) or spend the money rapidly (3 percent). It is found that it is amongst the younger people that savings are most used for spending in the near future..

The importance given to budget planning is not reflected in the constitution of savings

A very significant percentage (89 percent) of the respondents consider that it is "important", or even "very important", to plan the household family budget. However, when the question refers to the constitution of savings, a component of appropriate budget planning, the proportion of the respondents who state to save is only 52 percent (of which, only 56 percent do so on a regular basis).

Additionally, over half of the individuals who state planning the household budget, weekly or monthly, leave money in their usual account for spending at a later date.

The importance attributed to the household budget planning is not reflected in generalized savings. This result may reflect the fact that the question on family budget planning involves attitudes (i.e. on what the respondents consider to be the correct action), while the other question refers to their effective behaviour regarding the investment of savings. However, might also reflect the fact that some respondents might not consider saving as an inherent requirement for the correct planning of the household budget.

Graph III.3.2.2

HOW FREQUENTLY DO YOU PLAN YOUR HOUSEHOLD BUDGET? WHAT DO YOU USUALLY DO WITH THE MONEY YOU SAVE?



Questions: D2 and D4; Basis: 1,037 interviewees

Most (58 percent) of the interviewees who save refer to the possibility of having to meet unforeseen expenses as the main reason for saving. Of those who save, 15 percent indicate their main motivation being the meeting of non-regular expenses (e.g. holidays), 8 percent the acquisition of durable goods, 8 percent have in mind their children's education and 6 percent the use of their savings in retirement.



Question: D5; Basis: 1,037 interviewees

3.3. Attitude with respect to consumption

84 percent "never or rarely" resort to loans to make a purchase

The propensity and impulsivity in relation to consumption and the easyuse of credit are frequently indicated as the main causes of the low levelof savings and high indebtedness of the population.

For the purpose of assessing the propensity towards consumption and the way that they consider a purchase beforehand, the interviewees were asked to indicate the way they identify with three statements.

In relation to the statement "to buy something, I would rather save first" it was found that 65 percent prefer to "always or almost always" save before buying, while 26 percent refer to doing so "sometimes".

When faced with the statement "when I want to buy something, I immediately resort to credit", 14 percent indicate that they "sometimes" do it and 83 percent answered that they "never or rarely" take that option.

Approximately 75 percent do not identify with the behaviour "I tend to buy things in an impulsive manner", and 21 percent recognise that they "sometimes" do have this attitude.

Of those who say they prefer to "always or almost always" save first before buying, 17 percent also note that "sometimes" they have a tendency to buy in an impulsive manner and 11 percent state that "sometimes" they immediately resort to credit.



Graph III.3.3.1

8 percent recognise having resorted to credit to buy something rather unnecessary Furthermore, 8 percent of the interviewees stated that they have incurred loans in order to acquire something that they later considered that they did not need. This proportion is slightly higher for respondents aged from 25 to 39 and from 40 to 54 years old (11 and 12 percent, respectively) while for those over 70 years old, only 1 percent admit having resorted to credit in such situation.

Question: D8; Basis: 2,000 interviewees

Graph III.3.3.2



HAVE YOU EVER RESORTED TO LOANS TO ACQUIRE SOMETHING THAT YOU LATER CONSIDERED WAS NOT REALLY THAT NECESSARY?

4. CHOICE OF BANKING PRODUCTS

The bank customer is offered a vast range of alternatives for the banking product that he/she wishes to acquire. The choice of the product for the investment of saving or for the use of credit should be based on a careful process of choice. The detailed analysis of the characteristics and commercial conditions of the different options for each banking product is, therefore, indispensible for the customer to select the one most suited to his/her profile and needs.

In order to analyse the behaviour of bank customers in their choice of the products, an assessment was made of the motivations, criteria and the information used in this process.

The specific questions on each banking product were asked only to interviewees who stated holding it, since the intention was to assess the knowledge about the acquired products⁶.

4.1. Reasons for the choice

When questioned on the reasons underlying the choice of their banking products, 54 percent of the interviewees indicated as the factor of choice the advice received at the branch where they have their account and 25 percent the advice of family or friends. Only 8 percent of the interviewees mentioned the comparison between various alternatives as the determinant factor in the choice of the banking product. Over half indicated the advice at the branch as the main reason of choice of the banking products Ш

Question: D7; Basis: 2,000 interviewees

Graph III.4.1.1



Question: E2; Basis: 1,223 interviewees

Profitability and low risk are the main criteria of choice of financial investments

When asked about the most important criteria for the choice of the savings products they own, 27 percent of interviewees refer its profitability, 26 percent the low level of risk, and 16 percent the fiscal benefits.

Graph III.4.1.2



Question: E3; Basis: 1,223 interviewees

4.2. Knowledge of interest rates

Although the majority of the interviewees (66 percent) states knowing the value of the interest rates of their investments (term deposits or other saving products), 50 percent recognise that they only know it approximately and 16 percent exactly. Approximately 19 percent stated not having any idea of the value of the interest rates they receive.

Regarding the interviewees who have loans, it was also found that most (65 percent) know the interest rates applied at their exact value (22 percent) or approximately (43 percent).

The proportion of those who do not know what the interest rate is or are informed only at the time of the contracting is similar for saving products and loans. However, the proportion of those who state knowing the interest rates they pay for loans (22 percent) is higher than that of the interviewees who know the exact value of the rates they receive for their investments (16 percent). Although both percentages are relatively low, it is clear that there is a greater concern with the costs that have been assumed than with the income received from the investment of savings. The percentage of those who know the exact value of the interest rates is low: 16 percent for investment of saving and 22 percent for loans

Graph III.4.2.1



Questions: E4; Basis: 670 interviewees | E6; Basis: 822 interviewees

4.3. Comparison of interest rates

When constituting term deposits or other saving products, 56 percent of the interviewees admit to not carrying out any type of prior comparison of the remunerations applied. In the case of loans, the percentage of those who do not compare interest rates falls to 40 percent, pointing out again to a greater concern with the costs assumed in relation to loans than with the income from savings.

Among the interviewees who state comparing interest rates, approximately half carry out this comparison only between the banks of which he or she is a customer while the rest also extend their research to other banks. 56 percent do not compare products before investing their savings; this proportion falls to 40 percent in the case of use of credit For interviewees with the highest schooling level (university degree), there is a higher percentage who compare the interest rates applied to saving products and loans.

Graph III.4.3.1



Questions: E5; Basis: 670 interviewees | E7; Basis: 822 interviewees

4.4. Pre-contractual and contractual information

The vast majority reads the precontractual and contractual information The vast majority (83 percent) of interviewees with banking products refers reading the pre-contractual information of the products to be contracted, although only 34 percent state reading it in "great detail". Even so, 15 percent of the interviewees do not read the information provided by the credit institutions: 13 percent because they trust the branch employee and 2 percent because they do not consider it very important.

The high percentage of interviewees who refer reading the pre-contractual information does it to learn about the characteristics of the product to be acquired, since only 8 percent indicate selecting banking products on the basis of a comparison between alternative products.

The proportion of interviewees (82 percent) who state reading the contracts binding them to the institution is also significant.

As for pre-contractual and contractual information it is evident that there is less of a habit of reading the information provided by the institutions amongst those with lower schooling levels and those who are over 70 years old. Graph III.4.4.1



Question: E9; Basis: 1,223 interviewees

4.5. Mortgage loans

When the interviewees with mortgage loans were questioned on the respective repayment scheme, 57 percent referred having loans repayable in constant instalments, 25 percent in mixed instalments and 10 percent admitted not knowing the type of instalment applicable to their contract. On the other hand, regarding the type of interest rate, 16 percent referred that the interest rate is indexed to the 3-month Euribor, 53 percent that it is indexed to the 6-month Euribor and 14 percent said that it is a fixed interest rate.

The interviewees who stated having a mortgage loan at a fixed interest rate were questioned on the variability of the amount of their instalment, for the purpose of assessing whether they correctly interpret the concept of a fixed interest rate: 78 percent stated that the instalment is always the same, 19 percent noted that it varies periodically and 3 percent admitted not knowing. These answers reveal the lack of knowledge on the concept of fixed interest rate, at least in the group of individuals who had indicated having a loan at a fixed interest rate, but who said that the instalment of their mortgage loan "varies periodically".

Since the data from the financial system on the percentage of mortgage loan contracts with a fixed interest rate show a rather lower percentage than that resulting from the answers of the interviewees, this effectively shows a lack of knowledge on the concept of a fixed interest rate.

The interest rate spread is one of the main components of the mortgage loan, and is negotiated between the bank and the customer at the time of the respective contracting. However, approximately 41 percent of the interviewees who have a mortgage loan, admit to not knowing what spread is applied by the bank. Only 39 percent state knowing exactly the value of the spread. This knowledge increases for the higher schooling levels. 10 percent do not know the instalment regime of their mortgage loan

Only 39 percent state knowing the exact value of the spread of their mortgage loan

Graph III.4.5.1



DO YOU KNOW THE VALUE OF THE SPREAD OF YOUR MORTGAGE LOAN?

Question: E16; Basis: 444 interviewees

The amount of the instalment is the main reason (41 percent) for the choice of the mortgage loan

Analysing the reasons for the choice of the mortgage loan, the amount of the instalment is the most important factor for 41 percent of the interviewees, reflecting that the amount of the instalment is important for the calculation of debt-to-income ratio and for the assessment of capacity to meet the financial commitment. However, this amount does not reflect all the costs associated to the loan or the period of repayment.

The Annual Percentage Rate of Charges (APR), which reflects, on an annual basis, all the costs associated to the loan, and which should be used to compare alternative proposals with identical characteristics, is only referred to by 4 percent of the interviewees as having been considered beforehand in the choice of the mortgage loan.

Graph III.4.5.2



Question: E17; Basis: 444 interviewees

The fundamental advantage of the partial early repayment of a loan is the reduction of the capital in debt (principal) and the reduction of the costs related to interest, which in mortgage loan contracts, characterised by long maturity periods, is of particular importance.

Approximately 87 percent of the interviewees stated never carrying out the early repayment of their mortgage loan. When questioned on the reasons for not doing so, 61 percent stated not having the available money, 14 percent did not consider it a priority and 25 percent do not see the advantage. 39 percent do not consider early repayment of a mortgage loan an advantage or a priority

Graph III.4.5.3



Questions: E18; Basis: 444 interviewees | E19; Basis: 384 interviewees

4.6. Other loans

Of the 16 percent of interviewees who have loans other than the mortgage loan (excluding also those related to credit cards and bank overdrafts), the great majority (78 percent) have only one contract of this type, 16 percent have two contracts and 1 percent indicated having taken out 4 or more loans.

Regarding the purpose of the loan, 54 percent of these loans were used for the acquisition of a car, 32 percent for the purchase of household goods and 6 percent for travel.

Buying a car is the purpose of 54 percent of consumer loans

Graph III.4.6.1



HOW MANY LOANS DO YOU HAVE? (excluding mortgage loans, credit cards and bank overdrafts)

Question: E20; Basis: 285 interviewees

The amount of the instalment and the use of the usual bank or point of sale are the main reasons of choice of consumer credit When contracting these loans the amount of the instalment was the most important criteria of choice for 27 percent of the interviewees. The Annual Percentage Rate of Charge (APR), which reflects, on an annual basis, all the costs associated to the loan, is referred to by only 5 percent of these interviewees.

In turn, 26 percent of the interviewees prefer to take out the loan at their usual bank and 23 percent refer to the convenience of contracting at the point of sale as the main reason for the choice of their loan.



Graph III.4.6.2

Question: E23; Basis: 285 interviewees

4.7. Credit cards

Credit cards are a banking product held by 32 percent of the interviewees with a bank account. Credit cards allow credit of a revolving nature, with relatively higher costs than classical loans.

In relation to the terms of repayment of the credit card, approximately half of the interviewees (52 percent) pay the full outstanding balance at the end of the month, 43 percent pay partially over time and 5 percent did not answer. This percentage of interviewees who "does not answer" is higher than that observed in the answering of the other questions of the Survey, which might reveal lack of knowledge on the terms of repayment.

Of the interviewees who pay the full outstanding balance on the credit card at the end of the month, 31 percent state knowing the exact value of the interest rate and other costs associated to the card and 27 percent admit to not knowing these costs. On the other hand, of those who partially pay the balance on the credit card, only 22 percent refer knowing the exact amount of the costs. The proportion of those who admit not knowing it is also 27 percent. The proportion of those who state "roughly" knowing the costs associated to the card is higher for interviewees who partially pay the balance on the card than for those who state paying it in full (51 percent versus 42 percent).

Therefore, there seems to be greater knowledge on the interest rate and other costs amongst those who pay the full balance on the card at the end of the month in comparison to those who pay partially over time, in spite of the fact that the information is considerably more relevant for the latter, to the extent that they effectively pay the cost of the interest applied to the part of the debt that is not paid at the end of the month. 52 percent pay the outstanding balance on the credit card in full at the end of the month

27 percent of those not paying the full balance at the end of the month do not know the costs of the credit card

WHAT IS THE REPAYMENT SCHEME YOU USUALLY USE FOR YOUR CREDIT CARD?
Pay in full the following month
Pay partially over time
Does not answer

Graph III.4.7.1

Question: E28; Basis: 564 interviewees

Graph III.4.7.2





Questions: E28 and E29; Basis: 564 interviewees

23 percent of those who pay partially the outstanding balance of the credit card, use it to pay current expenses

When the interviewees were questioned whether they use their credit card for the payment of current expenses (e.g. food, clothing), it was found that 23 percent frequently use their credit card for this purpose, 39 percent refer to only doing so rarely and 37 percent never do it. The use of the credit card for current expenses is slightly higher for the percentage of interviewees who state paying the outstanding balance on the credit card at the end of the month (25 percent), but 23 percent of those who pay partially, use the card for current expenses.

Graph III.4.7.3





Questions: E28 and E30; Basis: 564 interviewees

4.8. Bank overdrafts

The bank overdraft (or overdraft facility) is a loan contract associated to a current account which enables using the account beyond its balance until the maximum credit ceiling contracted with the credit institution beforehand. Some interviewees recognised not knowing what bank overdrafts are, in which case they were clarified on the concept.

Of the interviewees with bank account⁷, 19 percent stated not knowing if they have this credit facility and 56 percent stated that their account does not permit overdrawn situations.

The remaining 25 percent, who declared that their account permits the use of overdrafts, were questioned on the frequency with which they use it: 38 percent noted that they never use it and 37 percent state that they rarely do so. Hence, 25 percent of the interviewees with access to a bank overdraft use this credit facility with some regularity.

25 percent of those with access to a bank overdraft use this credit facility with some regularity

Graph III.4.8.1

No 56%



38%





Never use

Questions: C17; Basis: 1,742 interviewees | C18; Basis: 433 interviewees

Of the interviewees who use bank overdrafts very frequently, at the end or over the month, more than 40 percent do not know the associated costs. The lack of knowledge on the interest rates and/or fees associated to bank overdrafts is higher amongst the respondents who stated never using this credit facility (53 percent) and who, therefore, do not effectively pay these costs. There is also greater knowledge on the interest rates and/ or fees that the bank applies to bank overdrafts amongst interviewees with higher schooling levels. 42 percent of those who use bank overdrafts frequently do not know its charges

⁷ This question was not asked to interviewees who stated that they "never" or "almost never" use their current account over the year.

The lack of knowledge on bank overdraft costs is higher than in other loan products Of all the interviewees with access to bank overdrafts, 43 percent do not know the associated costs. This figure compares to the 29 percent of the interviewees with credit cards that recognised not knowing the value of the respective interest rate and with the 22 percent of those who gave an identical answer for loans in general. The highest percentage of lack of knowledge of costs in the case of bank overdrafts appears to indicate a lower perception of the fact that its use constitutes a use of credit.

Graph III.4.8.2



Questions: C18 and C19; Basis: 433 interviewees

4.9. Effort rate

13 percent of those who have loans do not know what proportion the instalments represent in their income The weight of the costs related to loans in the household budget (i.e. effort rate) is an important indicator in the assessment of the liability in the concession and contracting of the loan. For 43 percent of the interviewees who have loans, the debt service represents less than a fourth of their monthly income; for 75 percent it represents less than half; and for 12 percent more than half of their monthly income. On the other hand, 13 percent of the interviewees with loans state not knowing what proportion the instalments represents in their income.

For interviewees with a higher income, that is, above 2,500 euros of net monthly income, there is a greater percentage (56 percent) for whom the effort rate is less than a quarter of their monthly income. However, for all other income brackets no significant differences are found in the effort rate. Graph III.4.9.1



Questions: E18 and G11; Basis: 822 interviewees

The individuals holding financial products were also questioned whether they had already resorted to a loan to pay the costs of another loan, where 5 percent responded affirmatively.

5. CHOICE AND KNOWLEDGE OF SOURCES OF INFORMATION

Bank customers should be offered relevant information on the characteristics of the banking products, which might be used at the time of their choice. It is credit institutions obligation to provide customers with information on the products they sell. Regulators are in charge of disseminating information on the regulatory framework of the markets.

In order to promote the use of the information it is important to provide it through the customers' preferred channels and means and disclose other existing sources of information so that they might also be used by the bank customers.

5.1. Choice of sources of information

Deposit accounts (demand, term and saving accounts) are the banking products in relation to which the interviewees with bank accounts would specially like to receive a higher level of information (65 percent). This is followed by the preference for information on mortgage loans (14 percent) and on other loans and credit cards (7 and 6 percent, respectively).

As for the channel to obtain this information, 81 percent of the interviewees prefer the bank where they are customers. Banco de Portugal is also referred by 10 percent of the respondents and consumer associations by 5 percent.

Regarding the means through which this information may be publicised, approximately one third of the interviewees prefer booklets and leaflets. The Internet and written press are referred to, respectively, by 21 and 20 percent of the interviewees.

Customers prefer to receive information through their bank and in the form of booklets and leaflets

Graph III.5.1.1



WHAT ENTITIES DO YOU THINK SHOULD PROVIDE YOU INFORMATION ON BANKING PRODUCTS? (1st preference)

Question: F2; Basis: 1,742 interviewees

Graph III.5.1.2



Question: F3; Basis: 1,742 interviewees

5.2. Knowledge of sources of information

82 percent do not follow news concerning banking product legislation and regulation

About half of the interviewees state following general economic news regularly. However, only 32 percent follows interest rate developments. When the question concerns news about legislation and regulation on banking products, only 18 percent refer following this type of information.



Question: F4; Basis: 1,742 interviewees

When questioned on their knowledge and/or use of the Bank Customer Website, 79 percent of the interviewees indicated that they did not know it, 14 percent know of it but have never used it and only 7 percent know and use the Bank Customer Website.

79 percent do not know the Bank Customer Website



Question: F5; Basis: 1,742 interviewees

When asked about the entities they would resort to in the event of dispute with the credit institution of which they are customers, Banco de Portugal emerges as the entity referred to by most interviewees (44 percent), followed by consumer associations (29 percent) and courts (22 percent).

On the other hand, in the event of inability to meet the instalments of their loans 52 percent of the interviewees would resort to their family and 41 percent would go to their own bank. A further 13 percent state not knowing which entities they should address.

44 percent refers Banco de Portugal as the institution they would resort in case of a dispute with a credit institution

Graph III.5.2.3



Question: F6; Basis: 1,742 interviewees * Multiple answer allowed

6. FINANCIAL UNDERSTANDING

Graph III.6.1.1

Appropriate behaviour, namely in the choice of banking products depends on the knowledge that individuals have on the characteristics of the products. Hence, in addition to the financial behaviour analysed above, it was also sought to assess the knowledge of the interviewees on various basic financial concepts.

6.1. Knowledge of basic financial concepts

Regarding the 7 questions on financial knowledge asked to all the interviewees, on average they correctly answered to more than half of the questions (average of 4.1 questions). It was found that 53 percent of the interviewees answered 4 or 5 questions correctly, and 3 percent answered all the questions correctly.

NUMBER OF CORRECT ANSWERS

Questions: G1, G2, G4 to G8; Basis: 2,000 interviewees

Table III.6.1.1

FINANCIAL UNDERSTANDING			
	Correct	Incorrect	Don't know
Definition of Euribor	9%	53%	38%
Definition of spread	17%	22%	61%
Assessment of risk aversion in term deposits	49%	32%	19%
Relationship between the inflation rate and the interest rate	57%	14%	29%
Assessment of the responsibility in the payment of a joint loan	78%	13%	9%
Identification of the current account balance	73%	9%	18%
Identification of a change in the balance of the current account, after a movement	46%	35%	19%

Questions: G1, G2, G4 to G8; Basis: 2,000 interviewees

6.2. What people know best

When confronted with the question "If you take out a loan together with another person (e.g. spouse), who is liable to the bank for the payment of this loan?", 78 percent of the interviewees gave the correct answer, showing a high degree of knowledge that both contractors are responsible for the entire debt.

In order to assess the degree of understanding of the information contained in a bank statement, the interviewees were presented with a statement of a hypothetical account and asked to identify the current account balance. It was found that 73 percent gave the correct answer. However, when questioned whether it would be possible to carry out an additional movement in this account or whether this would imply the use of a bank overdraft, only 46 percent gave the correct answer. This last result indicates the interviewees lack of knowledge on the difference between the concepts of available balance and authorised balance, which frequently arise in bank statements.

In seeking to assess whether the interviewees understand the concept of a real interest rate and the relationship between the interest rate and inflation, they were asked the following question "If a term deposit has an interest rate of 3 percent and inflation is 4 percent, do you consider that you received a positive yield on your savings?", to which 57 percent of the interviewees gave the correct answer, recognising in this case that the remuneration of the investment would not be positive. Shared

responsibility for the payment of a joint loan was the financial concept with the best results

6.3. What people know worse

Highest lack of knowledge was shown in the concepts of Euribor and spread, which are associated to the contracting of loans The Euribor is the reference rate of most mortgage loans. However, it was found that only 9 percent of the interviewees knew that this involves a "rate resulting from the loans made amongst a group of European banks". Even in the group of interviewees who state having a mortgage loan, only 12 percent answered this question correctly.

The knowledge of what is the "Euribor" actually is positively related with schooling level: for interviewees with higher education the percentage of correct answers increased to 17 percent.

Graph III.6.3.1



Question: G1; Basis: 2,000 interviewees

It was found that 61 percent of the interviewees do not know the spread added to a reference interest rate. The interviewees who stated having a mortgage loan did not reveal having more knowledge on this concept than the rest of the interviewees.

The analysis of the classification of the degree of risk of financial investments by the respondents suggests some lack of knowledge on the structure of the products in question. For example, 45 percent of the interviewees considered that retirement saving plans are low risk investments, which might not necessarily be true, because some of the plans offered on the market are based on funds of shares and bonds, which can be considered of high risk. On the other hand, 31 percent of the interviewees attribute medium/high risk to the term deposit, products which are of guaranteed capital. There is a high percentage of interviewees who answered "does not know" the level of risk associated to each type of product

The strong relationship between the level of financial knowledge and schooling is also worth emphasising.


Question: G4; Basis: 2,000 interviewees

The high number of incorrect answers, instead of admiting not knowing (mainly concerning questions relative to the risk of deposits and Euribor), might indicate that the interviewees overestimate their own financial understanding.

BOX 2 | PRINCIPAL COMPONENTS

The application of principal components analysis to the questionnaire allows assessing whether the generality of the questions included are important to explain the levels of financial literacy of the population or if it is possible, in future questionnaires, to reduce the number of questions without losing explanatory power.

The principal component method⁸ enables aggregating multiple variables into a small number of factors or components. The method models the structure of the variance of a group of variables using linear combinations (or components) of these variables and identifies those which are correlated, which allows reducing the number of variables used in a certain analysis without losing the explanatory power of the results. Thus, through the use of a lower number of components, the model aims to reproduce as faithfully as possible the data's original structure of variance.

This method was used for each section of the questionnaire in order to identify the questions which are really fundamental to explain the results obtained from the interviewees in each thematic group. This exercise thus enables the identification of the key concepts in each group of questions, permitting, in future questionnaires the elimination of questions, which answers are correlated.

Applying the principal component method to the group on *Financial inclusion (Group B)*, we can simplify the 9 questions⁹ comprising this group into 3 components¹⁰ which explain 79.5 percent of the total variance of the questions. The first component is mostly associated to the holding or not of a bank account (explains 47.3 percent of the variance), the second component to the knowledge on Minimum Banking Services (explains 20 percent of the variance) and the third component to the reasons for not having a bank account (explains 12.2 percent of the variance).

Regarding *Bank account management (Group C)* the 19 questions comprising this group can be simplified into 5 components¹¹ which explain 60.7 percent of the total variance. The first component is mostly associated to the reading of statements and knowledge on the fees applied (explains 31.1 percent of the variance), the second to knowledge and use of bank overdrafts (explains 13.0 percent of the variance), the third to knowledge and use of homebanking (explains 6.2 percent of the variance), the fourth to the use of means of payment and control of bank account movements (explains 5.6 percent of the variance) and the fifth to questions concerning mobility between banks (explains 4.8 percent of the variance).

⁸ The principle components of a group of variables are obtained by calculating the eigenvalues of the matrix of variance and covariance that are observed. The first principal component thus derives from the linear combination of the unit value of the original variables with maximum variance and the following components maximise the variance over the linear combinations of the unit value, orthogonal to the previous components.

⁹ Although group B has 8 questions, one is subdivided into two.

¹⁰ By the Kaiser criteria, there are 3 eigenvectors greater than one.

¹¹ By the Kaiser criteria, there are 6 eigenvectors greater than one, but according to the Scree test the 5 first factors are fundamental.

For *Planning of expenses and saving (Group D)*, the 10 questions¹² may be summarised into 3 components¹³ which explain 63.6 percent of the variance of the answers. The first component is related to saving (explains 35 percent of the variance), the second to the planning of the household budget (explains 15.1 percent of the variance) and the third to impulsive buying habits and the resorting to credit (explains 13.5 percent of the variance).

For *Choice of banking products (Group E)*, the 30 questions may be simplified into 4 components¹⁴, but which explain only 47.1 percent of the variance of the answers. This result shows that it is not possible to find groups of questions which, in themselves, justify particular levels of financial literacy, that is, each question will individually have a high explanatory power. Even so, it should be noted that the first component is related to the type of financial products held (explains 26.6 percent of the variance), the second to mortgage loans and the reading of pre-contractual information (explains 9.1 percent of the variance), the third to consumer credit excluding credit cards and bank overdrafts (explains 7.3 percent of the variance) and the fourth to changes in the conditions of the loans and questions on credit cards (explains 4.1 percent of the variance).

For Choice and knowledge of sources of information (Group F), the 31 possible answers may be summarised into 6 components¹⁵ which explain only 47.0 percent of the total variance, therefore, as in the previous group, the application of this method does not permit reducing the number of questions explaining levels of financial literacy.

For *Financial understanding (Group G)*, the 19 possible answers are simplified into 5 components¹⁶ which explain 61.7 percent of the total variance. The first component refers to knowledge of the degree of risk of different financial investments (explains 31.7 percent of the variance), the second is related to knowledge of the concept of the spread (explains 9.5 percent of the variance), the third refers to the reading of the bank statement (explains 8.9 percent of the variance), the fourth is related to numeracy, literacy and income levels (explains 6.1 percent of the variance) and the fifth to knowledge of the concept of the Euribor (explains 5.5 percent of the variance).

13 By the Kaiser criteria, there are 3 eigenvectors greater than one.

¹² Although *Planning of expenses and saving (Group D)* has 8 questions, the last is treated as three separate questions.

¹⁴ By the Kaiser criteria, there are 15 eigenvectors greater than one, but according to the Scree test the 4 first factors are fundamental.

¹⁵ By the Kaiser criteria, there are 11 eigenvectors greater than one, but according to the Scree test the 6 first factors are fundamental.

¹⁶ By the Kaiser criteria, there are 5 eigenvectors greater than one.

Table C.2.1

DESCRIPTION O	F THE PRINCIPA	L COMPONENT	S OF EACH GROUP OF QUESTIONS
Group	Number of components	Percentage of explained variance	Description of the components
Financial Inclusion (Group B)	3	79.5%	 Holding a bank account; Knowledge of the Minimum Banking Services; Reasons for not holding a bank account.
Management of the bank account (Group C)	5	60.7%	 Control of statements and costs of the current account; Knowledge and utilization of bank overdrafts; Knowledge and utilization of homebanking services; Means of payment utilization and control of the movements and balance of the current account; Bank switching.
Planning expences and savings (Group D)	3	63.6%	 Saving habits; Planning of the family budget; Consumption habits and credit resort.
Banking product choice (Group E)	4	47.1%	 Type of financial produts held; Mortgage credit and pre-contractual and contractual information; Consumption credit (with exception to credit cards and bank overdrafts); Change in loan conditions and credit card questions.
Choice and knowledge of information sources (Group F)	6	47.0%	 Type of financial information followed and knowledge of the Banking Customer Website; Information about banking products and entities that should give that information; Entities to resort in case of disagreement with the bank or in case of indebtedness
Financial understanding (Group G)	5	61.7%	 Knowledge of the risk aversion of different financial applications; Knowledge of the definition of spread; Reading banking statements; Numercy, literacy and income levels; Knowledge of the definition of Euribor.

The results obtained through the principal component method show that it is not possible to significantly reduce the number of questions of the questionnaire without losing its explanatory power on levels of financial literacy. With the exception of the questions on *Financial inclusion (Group B)*, the percentage of the variance that is explained by the principal components obtained is relatively minor.

The dimension of the questionnaire underlying the Survey on the Financial Literacy of the Portuguese Population has proved to be appropriate for the conclusions on financial knowledge, attitudes and behaviour that it sought to assess. The application of the principal component method shows that this type of Survey must necessarily be long. In the design of future questionnaires, which have the same type of objectives as the current one, some adjustments may be made to the questions to be included; however, it is not possible to eliminate a significant number of questions without undermining the quality of the assessment of the levels of financial literacy of the population in its many aspects.



FINANCIAL LITERACY INDICES

1. GLOBAL FINANCIAL LITERACY INDEX

IV

2. PARTIAL FINANCIAL LITERACY INDICES

IV. FINANCIAL LITERACY INDICES

The descriptive analysis of the answers to the Survey, presented in the previous chapter, allows knowing with a high level of detail the results obtained in each question asked in the Survey and crossing them with the stratification variables of the sample and others portrayed as relevant in each topic.

However, this type of analysis does not allow a complete overview of the level of financial literacy of the population; hence, in this chapter, the answers obtained in a significant series of questions are aggregated into a synthetic indicator – the Global Financial Literacy Index. Complementing this global indicator, Partial Financial Literacy Indices were also calculated for each thematic area addressed by the Survey.

Each Financial Literacy Index, as constructed, is a synthetic indicator which may be used both to describe the current situation, and to serve as a benchmark in the analysis of the evolution over time of financial literacy.

For the description of the level of financial literacy, an analysis of the intensity of occurrence of the different values of the indicator is carried out, which leads to its frequency distribution. The format of this distribution, which may be summarised in terms of the average value of the Index and its dispersion, provides information on the degree of financial literacy and its concentration around the average value. From the distribution of the Index conclusions may be drawn in relation to the relative position of the median and the average, which indicate the format of the distribution in terms of the greatest concentration of the values of the Index, whether they are below or above the average.

The Indices should not be interpreted as absolute values of the assessment of the financial behaviour and knowledge of the population, but rather enable the comparison between population groups in the different thematic areas, so as to identify the groups on which future financial training initiatives should be focused¹.

1. GLOBAL FINANCIAL LITERACY INDEX

1.1. Methodology

The construction of the Global Financial Literacy Index is based on the selection of questions that are considered "timeless", which might be asked again in a few years time, in order to repeat its calculation and allow for the assessment of the evolution of the financial literacy of the Portuguese population. For its construction, 57 questions considered relevant were selected. This group includes questions that assess financial knowledge, behaviour and attitudes, since the definition of financial literacy covers these three components.

¹ These results are presented in the following chapter.

The answers to the selected questions were classified on the scale $\{-2, -1, 0, 1, 2\}^2$ so as to produce a global indicator of financial literacy. However, the distribution of the scores in the questions is not always the same because, due to their importance in the degree of financial literacy and the variability of the admissible answers, not all were capable of containing answers with the maximum score of "+2" and/or minimum of "-2".

For the questions on financial understanding, the maximum score was given to the correct answer and the minimum to all the other answer options. Regarding questions which assess financial behaviour and attitudes, the classification of the answers on the scale referred above was based on the behaviour/attitude that was considered most appropriate and revealed highest capacity of financial assessment. For the construction of this indicator questions such as those relative to the socio-economic characterisation of the interviewee, to the possession of a given financial product and those not susceptible of a valuation were not selected.

For each interviewee, an index was calculated which results from the arithmetic sum of the scores of their answers³, divided by the number of questions posed to the interviewee. Thus, the index of each interviewee takes into consideration only the questions that were answered, enabling a comparison between the indices of interviewees with a different number of answers⁴.

After the calculation of the index of each interviewee, it was found that the lowest value observed is -1.18 and the maximum is 1.29. However, because the interviewees did not necessarily answer the same questions, the individual indices are not all at the same scale⁵, and so they were transformed to a scale of 0 to 100⁶. The values expressed in this scale constitute a Global Financial Literacy Index (Global FLI) comparable between interviewees.

1.2. Analysis of the distribution of the Global FLI

The distribution of the Global FLI presents a median (60.27) that is higher than the average (58.01), which means that over half the interviewees have indices higher than the average of the Global FLI. Indeed, 75 percent of the interviewees have a Global FLI below 68.25; however, it is the interviewees who are at the opposite extreme, that is, of the 1st quartile (49.75), who contribute most strongly to making the average of the Global FLI lower than the median and the distribution slightly asymmetrical to the left.

² For each question, the value of "-2" reflects the lowest classification of financial literacy and at the opposite end of the scale, the value of "+2" reflects the highest classification of financial literacy, with the value "0" reflecting a situation of neutrality. For example, in question "Do you consider that it is important to plan your family budget, that is, your future revenues and expenses?" (D1), the choice of answer "very important" was given the score of "+2"; the choice "not very important" was given the score of "-1"; and the choices "not at all important" and "does not know/does not answer" were given the score of "-2".

³ Considering the totality of the answers, the maximum score achievable is 111 points and the minimum score achievable is -123 points.

⁴ It should be recalled that in the questionnaire there is a significant amount of questions that are not applicable to all the interviewees, either because some do not hold certain banking products, or due to the existence of questions constrained to a specific type of answer in previous questions.

⁵ See Annex 1.1 Design of the questionnaire.

⁶ According to the questions answered by each individual, the minimum theoretical value was made to correspond to the value of "0" and the maximum theoretical value to the value of 100 percent.

In spite of the low Kurtosis value (3.0519), the bias towards the left, shown by the negative value of Skewness (-0.6413), implies that the test to normality⁷ enables rejecting the hypothesis that the Global FLI is close to a normal distribution. This result must necessarily be taken into account in the multivariate statistical analysis presented in chapter V, namely with respect to the type of statistical tests applied in the comparison of the Indices of the various population groups.

DESCRIPTIVE STATISTICS OF THE ORIGINAL INDEX AND GLOBAL FLI					
	Minimum	Maximum	Average	Median	Standard deviation
Original Index	-1.18	1.29	0.22	0.31	0.51
IFL Global	9.30	88.71	58.01	60.27	14.24

Table IV.1.2.1

Graph IV.1.2.1



7 Based on the test described by D'Agostino, Belanger, and D'Agostino Jr. (1990) adjusted by Royston (1991), we can reject the hypothesis that the Global Financial Literacy Index follows a normal distribution (*p*-value of 0.000).

2. PARTIAL FINANCIAL LITERACY INDICES

2.1. Methodology

In order to complement the analysis of the Global FLI, Partial Indices were calculated, one for each of the 6 groups of thematic areas of the questionnaire: *Financial inclusion (Group B); Bank account management (Group C); Planning of expenses and saving (Group D); Choice of banking products (Group E); Knowledge of sources of information (Group F);* and *Financial understanding (Group G).*

The calculation methodology of these Partial Indices follows that used for the Global FLI, that is, for each interviewee, the sum of the scores obtained in the questions of this group was divided by the number of questions posed to the individual. Then, the Index was transformed to the scale of 0 to 100, according to the minimum and maximum values of each individual. Therefore, 6 Partial Financial Literacy Indices were obtained for each interviewee.

2.2. Analysis of the distributions of the Partial FLI

The median of each Partial FLI is higher than the respective average, as was observed for the Global FLI. Albeit with the exception of the case of the FLI of *Knowledge of sources of information (Group F)*, where the bias of the distribution is towards the right, so the value of this Index is lower than the average for over half of the interviewees.

The application of the normality test to each one of the Partial FLI leads to the conclusion that their distributions do not follow a normal distribution, as is also observed for the Global FLI.

The FLI of *Planning of expenses and saving (Group D)* is the index which presents the highest median (77.42 percent) while the FLI of *Knowledge of sources of information (Group F)* presents the lowest median (45.56 percent). This last value enables identifying an area where efforts of promotion of financial literacy should be concentrated: it is important to inform bank customers on the channels through which information may be obtained, namely by publicising the Bank Customer Website, and facilitating access to this information through the use of their preferred channels (e.g. through their bank and disseminating booklets and leaflets).

DESCRIPTIVE STATISTICS OF THE PARTIAL FINANCIAL LITERACY INDICES					
	Minimum	Maximum	Average	Median	Standard deviation
FLI Financial inclusion (Group B)	0	100	61.25	66.67	20.64
FLI Management of the bank account (Group C)	18.60	96.30	66.01	66.67	13.25
FLI Planning expenses and savings (Group D)	0	100	74.65	77.42	13.66
FLI Banking products choice (Group E)	9.09	100	64.61	66.57	16.88
FLI Knowledge o sources of information (Group F)	0	100	45.70	45.56	20.14
IFL Financial understanding (Group G)	0	92.73	47.46	50.91	22.58

Table IV.2.2.1

Graph IV.2.2.1

HISTOGRAMS OF THE PARTIAL FINANCIAL LITERACY INDICES



Planning expenses and savings (Group D)



Knowledge of sources of information (Group F)







Banking products choice (Group E)



Financial understanding (Group G)





POPULATION GROUPS BY LEVELS OF FINANCIAL LITERACY

V

ANALYSIS OF THE MEDIANS OF THE FINANCIAL LITERACY INDICES
 CLUSTER ANALYSIS

V. POPULATION GROUPS BY LEVELS OF FINANCIAL LITERACY

For the purpose of characterising population groups an assessment is made on the existence of differentiated levels of financial literacy for each of the stratification criteria of the sample (gender, age, geographic location, employment situation and schooling level), in the different ranges of monthly income, according to the banking products held and habits concerning household budget management.

Various methodologies were used for the effect: (i) tests on the equality of medians of the Global FLI and Partial FLI, (ii) identification of population groups with indicators equal to or greater than the medians of the Global FLI and Partial FLI; and (iii) construction of clusters associated to different levels of financial literacy.

The tests on the equality of medians assess whether the values of the medians of the Global FLI and Partial FLI of different groups of interviewees are identical. The result of this test may allow concluding that the medians are statistically similar or lead to the rejection of this hypothesis. In this last case, where there is no evidence that the different population groups are similar, the conclusion indicates higher levels of financial literacy in population groups with higher median values of the Financial Literacy Index.

To complement the tests on the equality of medians, the population groups where a high proportion of the individuals present indices equal to or greater than the median value of the Global FLI or each Partial FLI were also identified, which leads to the conclusion that the performance of these groups relative to financial literacy are above that of most individuals in general.

On the other hand, the cluster analysis examines how many differentiated levels of financial literacy can be identified amongst the interviewees, thus also enabling the characterisation of the population groups associated to each of these levels of financial literacy.

The different methodologies used allow for the drawing of similar conclusions on the population groups with higher and lower levels of financial literacy, which confers robustness to the results obtained.

1. ANALYSIS OF THE MEDIANS OF THE FINANCIAL LITERACY INDICES

1.1. Tests on the equality of the medians of the Global FLI

The Kruskal-Wallis¹ test was used in the assessment of the equality of medians of the Global FLI. The null hypothesis of this test is that the medians of different population groups are identical; hence, the rejection of this hypothesis (*p-value* below 0.05) leads to the conclusion that the medians of each population group are different.

Below is a presentation of the results of the Kruskal-Wallis test to the medians of the Global FLI for the stratification variables of the sample, indicators of income, holding of banking products and habits concerning household budget management.

By stratification criteria

The Kruskal-Wallis test leads to the conclusion that the medians of the Global FLI of the groups considered in each stratification variable are statistically different.

From the comparison between medians the following results were obtained:

- **Gender:** The median of the Global FLI for men (61.31) is higher than that for women (59.45);
- Age: The medians of the Global FLI for individuals of the intermediate age groups (25 to 39 and 40 to 54 year olds) are the highest (65.39 and 64.00, respectively);
- **Geographic location:** The medians of the Global FLI are highest in the regions of Lisbon and Tejo Valley (62.67) and Algarve (62.15); the lowest are in the Autonomous Region of Madeira (56.55) and the Alentejo (57.27);
- **Employment situation:** The median of the Global FLI of active individuals (64.55) is higher than that of individuals in non-active situations (52.72);
- Schooling level: The median of the Global FLI increases with schooling level. Individuals without formal education show a median Global FLI of 40.01, which compares with the value of 70.30 for individuals with a university degree. Analysing the increase of Global FLI for each year of schooling it was found that there is a gain in the median of 3.93 percent per year of primary education; of 1.05 percent per year of elementary education; of 1.83 percent per year of secondary education; and of 0.95 percent per year of higher education.

Table V.1.1.1

KRUSKAL-WALLIS TEST TO THE GLOBAL FLI: BY STRATIFICATION CRITERIA				
Gender	Median Global FLI	p-value		
Men	61.31	0.0002		
vvonien	59.45			

1 This test is a non-parametric alternative to the ANOVA test, which cannot be used in this case because the Global FLI does not present a normal distribution. The Kruskal-Wallis test is approximately a χ^2 distribution with "n-1" degrees of freedom, where "n" is the number of groups within each stratum.

	Age	Median	Global FLI	p-value
16 to 24 years old		56	5.98	
25 to 39 years old		65	5.39	
40 to 54 years old		64	4.00	0.0001
55 to 69 years old		57	7.43	
70 and over		45	5.21	

	Geographic location	Median Global FLI	p-value
North		59.98	
Centre		61.31	
Lisboa ar	nd Tejo Valley	62.67	
Alentejo		57.27	0.0003
Algarve		62.15	
Autonon	nous Region of Madeira	56.55	
Autonon	nous Region of Azores	60.45	

	Employment situation	Median Global FLI	p-value
Active		64.55	0.0000
Not activ	е	52.72	0.0000

Schooling level	Median Global FLI	p-value
Without primary education	40.01	
Primary education	55.73	
Elementary education	60.98	0.0001
Secondary education	66.48	
Undergraduate or graduate education	70.30	

INCREASES IN THE MEDIAN OF THE GLOBAL FLI PER YEAR OF SCHOOLING					
Schooling level	Number of years	Median Global FLI	Increase for each scholling year		
Without primary education	0	40.01	-		
Primary education	4	55.73	3.93		
Elementary education	9	60.98	1.05		
Secondary education	12	66.48	1.83		
Undergraduate or graduate education	16	70.30	0.95		

By income indicators

The Kruskal-Wallis test also permits concluding that the medians of the Global FLI of the groups considered according to income indicators are statistically different.

From this analysis, the following results were obtained:

- Monthly income: Individuals with net monthly income below 500 euros have the lowest median Global FLI (52.07). This median increases with the income level up to the maximum value of 73.04 for individuals with incomes above 2,500 euros;
- **Contribution to income:** The median Global FLI is highest in cases where the interviewee contributes in equal parts or in greater proportion to the income of the household (63.35 and 60.77, respectively).

Table V.1.1.3

KRUSKAL-WALLIS TEST TO GLOBAL FLI: BY INCOME INDICATORS				
Net monthly income	Median Global FLI	p-value		
Without income*	53.76			
Up to 500 euros	52.07			
Between 500 and 1,000 euros	63.94			
Between 1,000 and 2,500 euros	69.43	0.0001		
Over 2,500 euros	73.04			
Does not know	52.94			
Does not answer	61.71			

* About 70 percent of the interviwees that stated not having income are aged 16 to 24 years old and are full time students.

Who contributes the most to the household income?	Median Global FLI	p-value
Myself	60.77	
Other person (spouse or relative)	58.14	
Myself and other person (spouse or relative) in equal parts	63.35	0.0001
Does not know	43.44	
Does not answer	44.63	

By holding of banking products

The medians of the Global FLI of individuals who contract a given banking product (i.e. bank account, term deposit or saving plan, mortgage loan, credit card and other consumer credit) are higher than those of the interviewees who do not hold this type of product. The results of the tests on the equality of the medians of the Global FLI for individuals who contract each banking product and for those who have not done so, show that the medians are statistically different.

For other consumer credit (e.g. personal, car) there is no statistical evidence that the medians of the Global FLI are different according to the number of credit schemes contracted (p-value of 0.5197 greater than 0.05).

It was also found that knowledge and use of homebanking services are associated to a median of the Global FLI (70.29) that is higher than that of individuals who know of but do not use these services (61.32) and that of individuals who do not know of the existence of homebanking services (51.42).

Table V.1.1.4		
KRUSKAL-WALLIS TEST TO GLOBAL FLI: BY HOL	DING OF BANKING PRODUCTS	
Holding at least one account	Median Global FLI	p-value
Yes	62.17	0.0000
No	36.67	0.0000
With term deposits or others	Median Global FLI	p-value
Yes	66.91	0 0000
No	56.07	
With mortgage loan	Median Global FLI	p-value
Yes	67.39	0 0000
No	57.92	
With credit card	ILF Global mediano	p-value
Yes	67.38	0.0000
No	56.88	
With other consumer credits (e.g. personal, car)	Median Global FLI	p-value
Yes	65.42	0.0000
No	59.30	0.0000
Number of other consumer credits	Median Global FLI	p-value
1	64.96	
2	67.89	0.5197
3 or more	65.38	
Use of homebanking	Median Global FLI	p-value
Uses it	70.29	
Knows but does not use it	61.32	0.0001
Does not know it	51.42	0.0001
Does not answer	37.36	

By household budget management habits

Regarding variables relative to household budget management, it was also shown that the medians of the Global FLI are statistically different amongst groups, hence leading to the following conclusions:

- **Responsibility for the household budget:** Individuals who state that the household budget management is carried out jointly with their spouse have a median Global FLI (63.59) that is higher than those where the management is done by the individual alone (60.53) or when this responsibility is attribute to another person (57.87);
- Importance of planning: The median Global FLI increases with the importance attributed to the planning of the family budget. Individuals who consider it "very important" present a median Global FLI (64.14) higher than that of individuals who consider this planning "not at all important" (48.50);
- Saving habits: The medians of the Global FLI of individuals who state saving in a regular (65.82) or irregular (65.28) manner are higher than those of individuals who say that they do not save (53.93).

Table V.1.1.5

KRUSKAL-WALLIS TEST TO GLOBAL FLI: BY HOUSEHOLD BUDGET MANAGEMENT HABITS						
Main person responsible for the household budget management	Median Global FLI	p-value				
Myself	60.53					
Other person	57.87	0.0001				
Joint management (spouse/other)	63.59	0.0001				
Does not answer	47.35					

Importance the house	of planning old budget	Median Global FLI	p-value
Very important		64.14	
Important		58.11	
Not that important		51.09	0.0001
Not important at all		48.50	
Does not know/Does	not answer	26.43	

Saving habits	Median Global FLI	p-value
Saves regularly	65.82	
Saves irregularly	65.28	0.0001
Does not save	53.93	0.0001
Does not answer	60.53	

1.2. Tests on the equality of the medians of the Partial FLI

The Kruskal-Wallis test on the equality of medians was also carried out for each Partial FLI, according to the stratification variables of the sample, the indicators of income, the holding of banking products and the household budget management habits.

In contrast to the findings for the Global FLI, not all the results of the tests indicate that the medians are statistically different. For the FLI *Financial inclusion (Group B)* there is no evidence that the medians are different between regions (NUTS 2); the medians of the FLI *Bank account management (Group C)* are not statistically different between men and women; for the FLI *Planning of expenses and saving (Group D)* there is also no evidence of different medians between regions, between those who have contracted a mortgage loan and those who have not, or between those who hold credit cards or who do not. For the FLI *Choice of banking products (Group E)* the medians are not statistically different according to responsibility for the planning of the household budget, the holding of term deposits or other saving plans or the possession of a credit card.

For population groups where, in the Partial FLI, there is statistical evidence of a difference between the medians, the relation between them may not be the same as that observed in the Global FLI. For example for FLI *Planning of expenses and saving (Group D)*, women present a higher median index (77.42) than that of men (75.86), the inverse situation being observed for the Global FLI, where the median for men (61.31) is higher than that of women (59.45).

1.3. Comparison of population groups

With the objective of characterising the population groups with higher and lower levels of financial literacy, the interviewees were disaggregated as follows: i) group of individuals with Financial Literacy Indices equal to or greater than the median value of the Global FLI and ii) group of individuals with Financial Literacy Indices below the median value of the Global FLI.

For each Partial FLI, population groups were also identified with indices equal to or greater than the respective median and groups with indices below the value of this median.

The results² are presented below, as previously, for the stratification variables of the sample, indicators of income, holding of banking products and household budget management habits.

Population groups with indices equal to or greater than the medians of the Global FLI

The comparison of the Financial Literacy Indices of the individuals belonging to the different population groups with the median of the Global FLI leads to the following conclusions:

- **Gender:** The percentage of men with indices equal to or greater than the median value of the Global FLI (53 percent) is higher than that of women (47 percent);
- Age: 68 percent of the individuals aged between 25 and 39 and 62 percent of those between the ages of 40 and 54 present indices equal to or greater than the median of the Global FLI; 82 percent of the individuals aged 70 or over have indices below the median value of the Global FLI;
- Employment situation: 69 percent of the workers have indices equal to or greater than

² This analysis is corroborated later in this report through the use of cluster analysis.

the median of the Global FLI; 68 percent of the students and 70 percent of those who are retired present indices below this value;

- Schooling level: 84 percent of those with a university degree have indices equal to or greater than the median value of the Global FLI; 92 percent of the individuals without formal education have indices below this value;
- Monthly income: More that 80 percent of individuals with a monthly net income above 1,000 euros have indices greater than or equal to the median of the Global FLI; approximately 75 percent of the individuals without income or who earn up to 500 euros per month have indices below that value;
- **Bank account:** 56 percent of the individuals with a bank account present indices equal to or greater than the median of the Global FLI; only 4 percent of those who do not have a bank account are in this situation;
- Term deposits and others: 73 percent of the individuals with term deposits or saving plans have indices equal to or greater than the median of the Global FLI;
- Loans: 74 percent of the individuals with a mortgage loan, 77 percent of the credit card holders and 70 percent of those who have contracted other consumer credit have indices equal to or greater than the median of the Global FLI;
- Importance of planning: 84 percent of the individuals who consider the planning of the household budget "not at all important" present indices below the median value of the Global FLI;
- Saving habits: 68 percent of the individuals who state not saving have indices below the median of the Global FLI.

Population groups with indices equal to or greater than the medians of the Partial FLI

The behaviour of the Partial FLI, with the exception of that relative to the *Planning of expenses* and saving (Group D), in general, follow the characteristics of the Global FLI.

The FLI of *Planning of expenses and saving (Group D)* shows a more homogenous distribution along the variables analysed, which leads to the conclusion that this index is not determined by the same fundamentals of the Global FLI. For this Partial Index the following is especially evident:

- **Gender:** The percentage of women with indices equal to or greater than the median of the FLI of *Planning of expenses and saving* (54 percent) is higher than that of men (49 percent), in contrast to what happens in the Global FLI;
- Age: The percentage of individuals with indices equal to or greater than the median value increases with age, which compares with the fact that in the Global FLI, the highest percentages are concentrated during active life;
- Schooling level: The percentage of individuals with indices equal to or greater than the median value is higher for both the lowest levels of education and the highest; this result contrasts with that for the Global FLI where these percentages increase with the level of education;
- Bank account: 35 percent of the individuals who do not hold a bank account have indices equal to or above the median value, which compares with a percentage of only 4 percent in the case for the Global FLI;
- Homebanking: The percentage of individuals with indices equal to or greater than the median value increases with the degree of knowledge/use of homebanking, but in a less pronounced manner than is the case of the Global FLI.

PERCENTAGE OF INDIVIDUALS WITH FINANCIAL LITERACY INDICES EQUAL TO OR GREATER THAN THE MEDIAN, BY STRATIFICATION CRITERIA*

	Global FLI	Financial Inclusion FLI	Bank account manage- ment FLI	Planning expenses and saving FLI	Choice of banking products FLI	Knowled- ge of the sources of informa- tion FLI	Financial understan- ding FLI
Gender							
Men	53%	64%	52%	49%	56%	54%	57%
Women	47%	58%	52%	54%	46%	47%	44%
Age							
16 to 24 years old	38%	51%	40%	35%	44%	44%	45%
25 to 39 years old	68%	79%	70%	53%	53%	59%	63%
40 to 54 years old	62%	72%	57%	54%	55%	57%	62%
55 to 69 years old	41%	52%	42%	56%	50%	47%	43%
70 and over	18%	26%	19%	59%	43%	26%	19%
Geographic location							
North	49%	57%	50%	50%	58%	44%	50%
Centre	55%	62%	51%	50%	65%	50%	52%
Lisboa and Tejo Valley	55%	60%	63%	51%	45%	53%	58%
Alentejo	39%	58%	48%	52%	41%	53%	42%
Algarve	54%	67%	55%	56%	46%	60%	52%
Autonomous Region of Madeira	41%	69%	46%	51%	38%	39%	43%
Autonomous Region of Azores	51%	59%	40%	54%	53%	64%	47%
Employment situation	n						
Workers	69%	80%	68%	53%	53%	59%	66%
Unemployed	35%	48%	39%	48%	43%	43%	40%
Retired	30%	38%	29%	58%	52%	40%	32%
Student	32%	46%	32%	33%	43%	40%	39%
Schooling level							
Without primary education	8%	19%	12%	57%	33%	23%	10%
Primary education	36%	51%	37%	49%	45%	39%	38%
Elementary education	52%	64%	57%	45%	50%	49%	52%
Secondary education	74%	81%	68%	51%	57%	67%	73%
Undergraduate or graduate education	84%	86%	81%	65%	63%	74%	78%

* The distribution of some Partial FLI presents a group of individuals with indices equal to the value of the respective median. For this reason, there are some variables in which all the options present over half of the respondents with an index equal to or higher than the median.

On the methodology adopted for the construction of the Indices see Annex I.

PERCENTAGE OF INDIVIE MEDIAN, BY INCOME IN	DUALS WI	TH FINANC S*	IAL LITERA	CY INDICES E	QUAL TO O	R GREATER	THAN THE
	Global FLI	Financial Inclusion FLI	Bank account manage- ment FLI	Planning expenses and saving FLI	Choice of banking products FLI	Knowled- ge of the sources of informa- tion FLI	Financial understan- ding FLI
Net monthly income							
Without income**	26%	41%	31%	30%	43%	42%	34%
Up to 500 euros	25%	41%	30%	53%	39%	32%	28%
Between 500 and 1,000 euros	65%	74%	60%	56%	55%	56%	61%
Between 1,000 and 2,500 euros	80%	87%	78%	61%	55%	75%	76%
Over 2,500 euros	86%	86%	82%	59%	76%	91%	82%
Does not know	34%	45%	30%	29%	63%	34%	40%
Does not know	55%	59%	54%	44%	53%	50%	58%
Who contributes the m	nost to t	he househ	old incom	e?			
Myself	52%	63%	53%	55%	53%	52%	52%
Other person (spouse or relative)	42%	55%	45%	46%	45%	47%	44%
Myself and other person (spouse or relative) in equal parts	59%	66%	59%	55%	55%	54%	57%
Does not know/Does not answer	17%	25%	25%	33%	25%	25%	25%

* The distribution of some Partial FLI presents a group of individuals with indices equal to the value of the respective median. For this reason, there are some variables in which all the options present over half of the respondents with an index equal to or higher than the median.

On the methodology adopted for the construction of the Indices see Annex I.

** Approximately 70 percent of the interviewees who stated not having income are aged between 16 and 24 years old and are fulltime students.

PERCENTAGE OF INDIVIDUALS WITH FINANCIAL LITERACY INDICES EQUAL TO OR GREATER THAN THE **MEDIAN, BY HOLDING OF BANKING PRODUCTS*** Knowledge of the Bank Planning Choice of **Financial** account expenses banking sources of Financial informa- understan-Global Inclusion and saving products manage-FLI FLI ment FLI FLI FLI tion FLI ding FLI Holding at least one account 56% 68% 54% 55% Yes No 4% 0% 35% 9% With term deposits and others Yes 73% 79% 63% 67% 54% 62% 71% 39% 52% 45% 44% 48% 43% 40% No With mortgage loan Yes 74% 73% 72% 88% 56% 44% 68% No 43% 53% 45% 50% 56% 45% 44% With credit card Yes 77% 88% 74% 51% 52% 69% 74% No 39% 50% 41% 52% 51% 42% 41% With other consumer credits (e.g. personal, car) 70% Yes 83% 71% 44% 44% 63% 70% 47% 57% 48% 53% 54% 48% 47% No Use of homebanking** 87% 90% 85% 62% 80% Uses it 58% 73% Knows but does 54% 69% 50% 53% 49% 47% 55% not use it Does not know it 44% 9% 36% 19% 52% 28% 24%

* The distribution of some Partial FLI presents a group of individuals with indices equal to the value of the respective median. For this reason, there are some variables in which all the options present over half of the respondents with an index equal to or higher than the median.

On the methodology adopted for the construction of the Indices see Annex I.

** The question on the use of homebanking was asked only to interviewees with a bank account and who use it with a minimum regularity. For this reason, in some thematic groups it was found that over 50 percent of the respondents have indices above the median value in all the options of answer.

MEDIAN, BY HOUSEN	OLD BUDG			5112			
	Global FLI	Financial Inclusion FLI	Bank account manage- ment FLI	Planning expenses and saving FLI	Choice of banking products FLI	Knowled- ge of the sources of informa- tion FLI	Financial understan- ding FLI
Main person respons	sible for t	he househ	old budge	t managem	ent		
Myself	51%	62%	54%	55%	55%	51%	49%
Other person	42%	53%	42%	45%	51%	45%	45%
Joint management (spouse/other)	62%	72%	61%	54%	51%	57%	61%
Importance of plann	ing the h	ousehold b	oudget				
Very important	62%	67%	61%	71%	57%	57%	57%
Important	43%	58%	45%	40%	46%	47%	46%
Not that important	26%	46%	31%	7%	40%	31%	39%
Not important at all	16%	41%	29%	2%	36%	34%	29%
Saving habits							
Saves regularly	66%	71%	61%	79%	59%	60%	60%
Saves irregularly	67%	75%	63%	58%	54%	60%	62%
Does not save	32%	48%	39%	33%	40%	38%	39%

PERCENTAGE OF INDIVIDUALS WITH FINANCIAL LITERACY INDICES EQUAL TO OR GREATER THAN THE

* The distribution of some Partial FLI presents a group of individuals with indices equal to the value of the respective median. For this reason, there are some variables in which all the options present over half of the respondents with an index equal to or higher than the median.

On the methodology adopted for the construction of the Indices see Annex I.

BOX 3 | POPULATION GROUPS BY FINANCIAL LITERACY LEVEL

The comparison of the Indices of various population groups with the median Global FLI enables the identification of particular segments of the population in which results are, in their majority, above those of the interviewees in general. On the other hand, it also enables characterising the segments with the worst results of financial literacy.

The table below presents the population groups where over half of the interviewees show results equal to or greater than the median Global FLI and the groups where over half of the interviewees show indices below this value.

Table C.3.1

POPULATION GROUPS WHERE OVER HALF OF THE I GLOBAL FLI	NDIVIDUALS ARE ABOVE OR BELOW MEDIAN
Groups where over half of the interviewees have indices equal to or greater than the median Global FLI	Groups where over half of the interviewees have indices below the median Global FLI
• Men	• Women
Aged between 25 and 54 years old	• Aged between 16 and 24 years old and over 55
• Workers	• Unemployed, students and retired
• With at least elementary education (9 th year)	• Without formal education or only primary education
• With monthly income above 500 euros	• With monthly income below the 500 euros
• Contribute equally or in a higher proportion to household income	 Contribute in a lower proportion than the other family member to household income
Hold at least one account	• Do not hold a bank account
• With term deposits or saving plans	• Without term deposits or saving plans
• With a mortgage loan, credit card and/or other consumer credit	• Without credit
Know homebanking	• Do not know homebanking
• Household budget planning carried out by the individual or together with the spouse	• Budget management is carried out by a family member
• Consider that it is "very important" to plan the family budget	• Do not consider that it is "very important" to plan the household budget
• Save (on a regular or irregular basis)	• Do not save

In order to identify population groups with significantly higher levels of financial literacy, the groups where over 75 percent of the individuals have Indices equal to or greater than the median Global FLI are shown below. The groups where less than 25 percent of the interviewees have Indices equal to or above the median are also presented, as those with the worst financial literacy results.

Table C.3.2

POPULATION GROUPS WITH THE BEST AND WORST FINANCIAL LITERACY RESULTS				
Best results (over 75 percent with indices equal to or greater than the median Global FLI)	Worst results (less than 25 percent with indices equal to or greater than the median Global FLI)			
 With university degree With income above 1,000 euros With credit card Use homebanking 	 Without primary education Aged 70 or over Without a bank account Do not know homebanking Consider that household budget planning is "not at all important" 			

2. CLUSTER ANALYSIS

Cluster analysis is a methodology which aggregates the available information of each interviewee into groups of individuals (clusters). Each cluster is constituted by individuals with identical characteristics amongst them and whose characteristics are clearly different from those of the individuals comprising other clusters. The cluster analysis of the information collected in the Survey aims at segmenting individuals according to their level of financial literacy.

In view of the large quantity of variables available for the construction of the clusters, the Global FLI and Partial FLI were used to construct the clusters. This analysis considers only holders of at least one banking product in addition to a bank account. The use of the "k-means"^{3,4} methodology results in the creation of only 2 clusters, with the following characteristics:

- **Cluster 1:** High financial literacy (57 percent of the interviewees, with an average Global FLI of 71.03 percent);
- **Cluster 2**: Low financial literacy (43 percent of the interviewees, with an average Global FLI of 55.18 percent).

The analysis of these two clusters by the different stratification criteria, indicators of income, holding of banking products and household budget management habits confirms the results obtained in the analysis of quintiles and in the tests on the equality of medians of the Global FLI, thus demonstrating robustness in these conclusions.

By stratification criteria

- **Gender:** 62 percent of the men are in cluster 1 (High FL), a percentage higher than that of women (53 percent);
- Age: 65 percent of the individuals aged between 25 and 39, and 63 percent of those between 40 and 54 are in cluster 1 (High FL); by contrast, 67 percent of those 70 or over are in cluster 2 (Low FL);
- Geographic location: 62 percent of those resident in Lisbon and Tejo Valley and 64 percent of those in the Autonomous Region of the Azores belong to cluster 1 (High FL); and 56 percent of those resident in the Alentejo are in cluster 2 (Low FL);
- Employment situation: 65 percent of the workers belong to cluster 1 (High FL) and 64 percent of the unemployed and 57 percent of the students are in cluster 2 (Low FL);
- Schooling level: 81 percent of the individuals with a university degree are in cluster 1 (High FL); on the other hand, 80 percent of those without formal education are in cluster 2 (Low FL).

³ This is a clustering technique that is used for large databases, which creates divisions of groups that are not overlapping. In this method, the number of clusters (k) is chosen à *priori* and, following an iterative process, each observation is made to correspond to the group whose average is closest (the Euclidean distance was used as the measurement). The process continues until no single observation changes from one group to the next. The Calínski and Harabasz stopping rule (1974) was used for the choice of the number of clusters.

⁴ Other methodologies for the construction of clusters were also tested, namely the construction of hierarchical clusters (average linked cluster analysis). However the stopping rules (Duda/Hart) consistently indicate the existence of two clearly different levels of financial literacy.

Table V.2.1.1

CHARACTERISATION OF THE CLUSTERS: BY STRATIFICATION CRITERIA					
Percentage of individuals	Cluster 1 High FL	Cluster 2 Low LF			
Gender					
Men	62%	38%			
Women	53%	47%			
Age					
16 to 24 years old	48%	52%			
25 to 39 years old	65%	35%			
40 to 54 years old	63%	37%			
55 to 69 years old	49%	51%			
70 and over	33%	67%			
Geographic location					
North	56%	44%			
Centre	60%	40%			
Lisboa and Tejo Valley	62%	38%			
Alentejo	44%	56%			
Algarve	59%	41%			
Autonomous Region of Madeira	52%	48%			
Autonomous Region of Azores	64%	36%			
Employment situation					
Workers	65%	35%			
Unemployed	36%	64%			
Retired	48%	52%			
Student	43%	57%			
Schooling level					
Without primary education	20%	80%			
Primary education	39%	61%			
Elementary education	59%	41%			
Secondary education	73%	27%			
Undergraduate or graduate education	81%	19%			

By income indicators

- Monthly income: 73 percent of the individuals with net a monthly income between 1,000 and 2,500 euros and 90 percent of those with a net monthly income above 500 euros are in cluster 1 (High FL). It compares with 66 percent of the individuals without income and 69 percent of the individuals with net a monthly income below 500 euros who are in cluster 2 (Low FL);
- **Contribution to income:** 63 percent of the interviewees who contribute equally to household income are in cluster 1 (High FL).

CHARACTERISATION OF THE CLUSTERS: BY INDICAT	ORS OF INCOME	
Percentage of individuals	Cluster 1 High FL	Cluster 2 Low LF
Net monthly income		
Without income	34%	66%
Up to 500 euros	31%	69%
Between 500 and 1,000 euros	62%	38%
Between 1,000 and 2,500 euros	73%	27%
Over 2,500 euros	90%	10%
Does not know	56%	44%
Does not answer	65%	35%
Who contributes the most to the household i	ncome?	
Myself	59%	41%
Other person (spouse or relative)	50%	50%
Myself and other person (spouse or relative) in equal parts	63%	37%
Does not know/ Does not answer	25%	75%

Table V.2.1.2

By holding of banking products

- Term deposits and other: 63 percent of the individuals with term deposits and saving plans belong to cluster 1 (High FL);
- Loans: 65 percent of the individuals with a mortgage loan and 68 percent of the credit card holders are in cluster 1 (High FL);
- Homebanking: 83 percent of the individuals who use homebanking services are associated to cluster 1 (High FL); 79 percent of the individuals who do not know these services are in cluster 2 (Low FL).

Table V.2.1.3

CHARACTERISATION OF THE CLUSTERS: BY HOLDING	CHARACTERISATION OF THE CLUSTERS: BY HOLDING OF BANKING PRODUCTS*					
Percentage of individuals	Cluster 1 High FL	Cluster 2 Low LF				
With term deposits and others						
Yes	63%	37%				
No	51%	49%				
With mortgage loan						
Yes	65%	35%				
No	53%	47%				
With credit card						
Yes	68%	32%				
No	49%	51%				
With other consumer credits (e.g. personal, ca	r)					
Yes	59%	41%				
No	57%	43%				
Number of other consumer credits						
1	57%	43%				
2	68%	32%				
3 or more	61%	39%				
Use of homebanking						
Uses it	83%	17%				
Knows but does not use it	51%	49%				
Does not know it	21%	79%				

* The cluster analysis was applied only to individuals who, as well as having a bank account, also hold another banking product, since, only with respect to these, it is possible to estimate the Partial FLI on choice of banking products. For this reason, there is no classification according to the holding or not of a bank account.

By household budget management habits

- **Responsibility for the household budget:** 64 percent of the individuals who state that the household budget management is performed together with their spouse belong to cluster 1 (High FL);
- Importance of planning: 64 percent of the individuals who consider that planning the household budget is "very important" are part of cluster 1 (High FL); 76 percent of those who consider that this planning is "not at all important" belong to cluster 2 (Low FL);
- Saving habits: 66 percent of the individuals who state saving on a regular basis and 64 percent of those who save on an irregular basis are associated to cluster 1 (High FL), while 58 percent of those who state that they do not save are part of cluster 2 (Low FL).

Table V.2.1.4		
CHARACTERISATION OF THE CLUSTERS: BY HOUS	SEHOLD BUDGET MANAGEME	ENT HABITS
Percentage of individuals	Cluster 1 High FL	Cluster 2 Low LF
Main person responsible for the household	l budget management	
Myself	58%	42%
Other person	51%	49%
Joint management (spouse/ other)	64%	36%
Importance of planning the household buc	lget	
Very important	64%	36%
Important	52%	48%
Not that important	39%	61%
Not important at all	24%	76%
Saving habits		
Saves regularly	66%	34%
Saves irregularly	64%	36%
Does not save	42%	58%

BANCO DE PORTUGAL | SURVEY ON THE FINANCIAL LITERACY OF THE PORTUGUESE POPULATION I 2010

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BOX 4 | POPULATION GROUPS BY CLUSTERS

The table below presents the population groups that characterise the clusters with a high level of financial literacy (cluster 1) and the groups with low financial literacy (cluster 2).

The table highlights population groups with over half of the interviewees in one cluster, when this situation is differentiating in the characterisation variable of the population under analysis. Otherwise, that characterisation in omitted from the table. For example, when applying the cluster analysis to the characteristic 'gender', both men and woman are in the cluster of high financial literacy, as both have more than half of its members in that cluster. Therefore, according to the cluster analysis, 'gender' is not a differentiating characteristic of the level of financial literacy.

For the same reason, the table also does not show groups in which the classification is made according to: the degree of individual contribution to the household income; the responsibility in the household budget; or the holding of term deposits and saving plans or the recourse to credit.

For the relevant criteria, the population groups with over 50 percent of the individuals belonging to the cluster with high financial literacy, in general, coincide with the groups that have already been identified as having over half of the individuals with Global FLI above the median.

In these situations, the cluster analysis reinforces the conclusions already obtained by the analysis of the distribution of the Global FLI.

POPULATION GROUPS WITH OVER HALF OF THE INDIVIDUALS IN CLUSTER 1 AND 2

TO DEALON GROOTS WITTOVER HAEF OF THE INDIVIDUALS IN CLOSTER FAND 2	
Groups with over half of the interviewees in the cluster with high financial literacy (Cluster 1)	Groups with over half of the interviewees in the cluster with low financial literacy (Cluster 2)
Aged between 25 and 54	Aged between 16 and 24, and over 55 years old
• Workers	• Unemployed, students and retired
• With at least elementary education (9 th year)	• Without formal education or only primary education
• With monthly income above 500 euros	• With monthly income below 500 euros
• With credit card	• Without credit card
Know homebanking	• Do not know homebanking
• Consider that it is "very important" or "impor- tant" to plan the household budget	 Consider that it is "not very important" or "not at all important" to plan the household budget
• Save (on a regular or irregular basis)	• Do not save

Table C.4.1
ANNEX



ANNEX 1: METHODOLOGY

ANNEX 2: QUESTIONNAIRE

ANNEX 1: METHODOLOGY

The preparation of the Survey on the Financial Literacy of the Portuguese Population involved the definition of methodologies for the design of the questionnaire, which was subject to a pilot test to assess the receptivity and clarity of the questions.

The sample was structured in order to reflect in the stratification criteria of gender, age, geographical location, employment situation and schooling level, their respective quota in the population, according to the 2001 Census. The interviews were conducted door-to-door, following the random-route method for the location of the interviewee.

Banco de Portugal received the collaboration of a firm specialised in opinion surveys, Eurosondagem, namely for the field work, for which it has selected a team of interviewers, review officers and supervisors of the collected information.

1. DESIGN OF THE QUESTIONNAIRE

The questionnaire used in the Survey was structured in order to achieve the following specific objectives:

- Assessment of the degree of financial inclusion of the Portuguese population;
- Characterisation of bank account management habits;
- Assessment of the capacity to plan expenses and savings;
- Characterisation of the financial products held by the families and the process of choice of the main banking products;
- Knowledge of the sources of information preferred by bank costumers and of ways to obtain assistance in the event of disagreement with credit institutions and in the case of difficulty in meeting the instalments associated to loans; and
- Assessment of financial understanding.

According to these objectives, the Survey was organised into the following groups of questions:

- Profile of the interviewee (Group A with 11 questions) questions to define the placement of the interviewee in the intended sample, according to stratification variables relative to gender, age, geographic location, employment situation and schooling level;
- Financial inclusion (Group B with 8 questions) questions to appraise the use of the banking system: number and frequency of use of demand deposit account(s) and, when applicable, reasons for not having a bank account;
- Bank account management (Group C with 19 questions) questions to assess the form of utilization and monitoring of movements and balance of the demand account (use of debit cards, use of homebanking, reading of bank account statements, use of overdrafts) and the reasons for the choice of the bank;
- Planning expenses and savings (Group D with 8 questions) questions on habits regarding the planning of expenses and savings;
- Choice of banking products (Group E with 30 questions) questions on the main banking products held by families: term deposits and other savings products, mortgage

loans, consumer credit and credit cards. The questions concerned the process of choice of products, the knowledge of their characteristics and the reading of pre-contractual and contractual information;

- Choice and knowledge of information sources (Group F with 7 questions) questions to assess the information that the population would like to obtain on banking products and through which means, as well as knowledge on the ways to obtain assistance in the event of disagreement with credit institutions or in the case of difficulty in meeting the loan instalments;
- Financial understanding (Group G with 11 questions) questions to find out the knowledge of the population on various financial concepts.

Not all the questions were posed to all interviewees, because some of the replies of the interviewee to previous questions constrained the questions that were made subsequently. There were, therefore, different paths for the progression of the questionnaire.

The questions on the Profile of the interviewee (Group A), Financial inclusion (Group B), Planning expenses and savings (Group D) and Financial understanding (Group G) were posed to all the interviewees. Interviewees who did not have a bank account, or if they did, never or hardly ever carried out operations, were not asked the questions on Bank account management (Group C), Choice of banking products (Group E) and Choice and knowledge of information sources (Group F).

The questions on the characteristics of banking products were only posed to interviewees who stated holding these products (e.g. questions on the type of instalment or knowledge of the spread of the mortgage loan were only asked when the interviewee revealed having this type of loan). The interviewees without banking products were not asked the questions on *Choice of banking products (Group E)*.

2. PILOT TEST OF THE QUESTIONNAIRE

Before the implementation of the Survey, a pilot test was conducted in November 2009 with 60 personal interviews, 30 in the area of Greater Lisbon and 30 in the area of Greater Porto, in order to assess the receptivity and clarity of the questions included in the preliminary version of the questionnaire. Although the test was restricted to these two regions, the interviews fully complied with the quotas in relation to the remaining stratification criteria of the sample: gender, age, employment situation and schooling level.

The interviews conducted in the pilot test had an average duration of about 45 minutes, with a minimum duration of 15 minutes (in cases where the interviewee stated not having a bank account) and a maximum duration of 60 minutes.

The receptivity of interviewees to the topic of the Survey was, in general, positive, with only one contacted person having refused to answer the Survey questions due to the subject matter involved.

The version of the questionnaire that was used in the pilot test phase proved to be suitable to the objectives of the project. However, after an analysis of the results, it was considered that slight adjustments should be made, which consisted in the introduction and elimination of questions, in minor changes to the text and in the inclusion of new options of answers to some questions. One of the questions that was introduced in the final version of the questionnaire was "Does the value of your instalment never vary? No, it's always the same; varies periodically; does not know; does not answer" (E15) in order to assess the correct interpretation of the concept of fixed interest rate on the part of the interviewees. In the pilot test, when faced with question "The interest rate of your mortgage loan: varies with the 3 month Euribor; varies with the 6 month Euribor; varies with the 12 month Euribor; it is a fixed rate; other situations; does not know; does not answer" (E14), 44 percent of the interviewees answered that they had a mort-gage loan with a fixed interest rate, which is clearly higher than the actual figure observed in the mortgage loan market, where contracts with variable interest rates predominate. These answers pointed to a lack of knowledge of the concept of a fixed interest rate, justifying the introduction of a new question as a way to rule out incorrect answers on the type of interest rate of the mortgage loan.

In turn, in the final version of the questionnaire the question "*How do you assess the value of the interest rate?*" was eliminated since the results of the pilot test showed that most of the interviewees had difficulty in understanding the intended objective, which led to low quality answers.

Other questions were changed in order to add more answer options. In question "What is the main reason for the choice of the bank where you have your main current account?" (C11), the answer option "proximity to home or the workplace" was added because it had been mentioned by some interviewees in the pilot test. In the question "Before investing in a savings product or taking out a loan do you read the information given by the bank on the conditions of the products?" (E10), about 52 percent of the interviewees had mentioned reading this type of information in detail, so a finer scale was created, introducing the options "Yes, I read them in some detail" and "Yes, I read them, but not in great detail", in addition to the already existing options of "I don't read them, I trust what the branch employee conveys to me verbally" and "I don't read them, I don't consider it very important".

3. CHARACTERISATION OF THE SAMPLE

The undertaking of a Survey on Financial Literacy implies the choice of a sample which reflects the characteristics of the population universe in an unbiased manner, so that it is then possible to use the answers of the interviewees to estimate, by statistical inference, the degree of financial literacy of the population in general and of some population groups.

This Survey was carried out with the objective of measuring the degree of financial literacy of a universe composed of the Portuguese population resident in Portugal (Mainland and Autonomous Regions) of an age equal to or above 16 years. For this purpose a sample of 2,000 individuals was defined so as to enable estimating, by statistical inference, the results with an average error of 2.2 percent with a probability of 95 percent.

Stratification of the sample

The sample of 2,000 validated interviews complied with a segmentation with the following stratification criteria: gender, age, geographic location, employment situation and schooling level.

Concerning the criteria of stratification of the population, the following disaggregation was considered:

- Gender: male/female;
- Age: 16 to 24 years old, 25 to 39 years old, 40 to 54 years old, 55 to 69 years old and over 70 years old;
- Geographical location (NUTS¹ 2): North, Centre, Lisbon and Tejo Valley, Alentejo, Algarve, Autonomous Region of Madeira, and Autonomous Region of the Azores;
- Employment situation: active²/not active;
- Schooling level: without primary education, primary education (4th year), elementary education (9th year), secondary education (12th year), licentiate degree or above.

The strata were subject to the definition of quotas identical to the proportion in which they occur in the Portuguese population aged 16 or above, according to the data published by INE (National Statistics Institute) in the 2001 Census.

Margins of error in the sample

For each stratum, the average error was calculated *à priori*, which is an indicator of the level of reliability of the results obtained in each stratification criterion.

In the strata of geographic location, the definition of the sample based on the proportion of the population of each region would lead to a very small number of interviews in the regions with lower population, with the consequence that the level of average error would be very high.

It was assumed that the maximum average error for any of the NUTS 2 regions of the "geographic location" criterion could not be higher than 7.5 percent, which implied a minimum number of 188 interviews in the regions of the Alentejo, Algarve, Autonomous Region of the Azores and Autonomous Region of Madeira.

The average margin of error of the sample was 2.2 percent with a probability of 95 percent. The average margin of error of each stratification criterion of the sample is presented in the table below:

AVERAGE MARGIN OF ERROR OF EACH STRATUM	
Stratification criteria	Average margin of error
Gender	3.1%
Age	4.9%
Geographical location	5.8%
Employment situation	3.1%
Schooling level	4.9%

Table A1.3.1

Nomenclature of Territorial Units for statistical purposes.

2 The active population is defined as the group of employed or unemployed individuals who, during the reference period, constituted the available labour for the production of goods and services.

Quotas of the strata

The following tables present the quotas attributed and carried out³ relative to each stratum of the criteria of gender, age, geographic location, employment situation and schooling level. Moreover, and in order to improve the implementation of the random route method of location of the interviewee, a finer division of location ("place") was also introduced, chosen in accordance with the number of inhabitants.

The comparison between the attributed quotas and the quotas carried out in each stratum indicates percentage deviations from the planned quotas equal to or below 0.5 p.p. in each stratum, while the quotas of the strata corresponding to geographic location were fully achieved.

PLANNED QUOTAS AND QUOTAS CARRIED OUT IN EACH STRATUM				
Gender	Planne	ed quota	Realized quota	
Female	1,045	52.2%	1,143	52.1%
Male	995	47.8%	957	47.9%
Total	2,000	100.0%	2,000	100.0%
Age	Planne	ed quota	Realize	ed quota
16 to 24 years old	323	16.1%	325	16.2%
25 to 39 years old	550	27.5%	555	27.7%
40 to 54 years old	476	23.8%	476	23.8%
55 to 69 years old	382	19.1%	382	19.1%
70 or older	269	13.5%	262	13.1%
Total	2,000	100.0%	2,000	100.0%
	DI.		D 11	
Geographical location: NUTS 2	Planne	ed quota	Realize	ed quota
North	519	26.0%	519	26.0%
Centre	341	17.1%	341	17.1%
Lisbon and Tejo Valley	388	19.3%	388	19.3%
Alentejo	188	9.4%	188	9.4%
Algarve	188	9.4%	188	9.4%
Autonomous Region of Madeira	188	9.4%	188	9.4%
Autonomous Region of Azores	188	9.4%	188	9.4%
Total	2,000	100.0%	2,000	100.0%

Table A1.3.2

³ The implementation of the Survey in the field in accordance with the five stratification criteria is complex, since it requires the location of interviewees with very specific characteristics. Therefore, in some strata there was a slight deviation of the realized quota in relation to the planned quota, which, however, is not relevant for statistical effects.

Place	Planne	Planned quota		d quota
Up to 4,999 inhabitants	1,160	58.0%	1,160	58.0%
5,000 to 19,999 inhabitants	339	17.0%	339	17.0%
20,000 to 99,999 inhabitants	255	12.8%	255	12.8%
100,000 or more inhabitants	246	12.2%	246	12.2%
Total	2,000	100.0%	2,000	100.0%

Employment situation	Planned quota		Realized quota	
Active	1,150	57.5%	1,159	58.0%
Not active	850	42.5%	841	42.0%
Total	2,000	100.0%	2,000	100.0%

Schooling level	Planned quota		Realize	d quota
Without primary education	195	9.7%	192	9.6%
Primary education (current 4th year)	742	37.1%	744	37.2%
Elementary education (current 9th year)	444	22.2%	444	22.2%
Secondary education (current 12th year)	376	18.8%	379	18.9%
Undergraduate or graduate education	243	12.2%	241	12.1%
Total	2,000	100.0%	2,000	100.0%

4. IMPLEMENTATION OF THE SURVEY

The implementation of the Survey in the field, with the undertaking of personal interviews (door-to-door), took place between February and March 2010. The interviews had an average duration of 45 minutes.

The choice of the interviewee was based on the random route method conditioned to the previously defined quotas for all the strata. For the categories of strata with lower probability of being reached (ages above 70 or without primary education, for example), the random route method implies ignoring households which do not fulfil the desired categories of strata. However, the choice of the next household (street, door and floor number) continues to be based on the random method.

The continuation of the interview (continuation criteria) depended on the answers given by the interviewee to the questions on the *Profile of the interviewee (Group A)*, which define his/ her correct placement in the sample, and on *Financial inclusion (Group B)*, which define his/ her eligibility to provide a significant number of answers in the following groups of questions. Individuals who answered that they did not know if they have a bank account and/or how frequently they carry out operations in it were not included in the sample.

On the other hand, the first questions on the *Profile of the interviewee (Group A)* allowed to assess the placement of the interviewee in the universe of the Survey (e.g. population resident

on national territory and above 16 years old). These interviewees were detected in the first questions of this Group, so as to minimise the time spent by the interviewer. The interviews that were annulled did not count for any statistical treatment, and were merely recorded in order to measure the efficiency of the sampling methodology.

There were 138 annulled interviews for the following reasons: 15 due to incorrect selection of the interviewee; 68 due to having been conducted in localities which did not belong to the places under study; 35 due to the impossibility of inspecting the work carried out and 20 due to being beyond the planned quotas.

On the other hand, 29 percent of the individuals that were contacted refused to answer the Survey questions, which implied the selection of other interviewees in order to complete the sample of 2,000 interviews.

5. FIELD WORK TEAM

In order to ensure the quality of the answers, Eurosondagem organised the process of collection of information and data treatment into the following groups of agents:

- Interviewers: 66 were selected with experience of previous door-to-door surveys, and were given specific classroom training in order to clarify the objectives of the Survey and each question in particular, so as to enable boosting the quality of the answers and provide them with the capacity to deal with more complex situations. The training of the interviewers was compulsory and followed a specific programme of 8 hours. When conducting the interviews, the interviewers had a Manual of the Survey⁴ in order to facilitate the interview process and minimise incoherencies in answers;
- Field officers: former interviewers accompanied the first interviews of each interviewer.
 They monitored the "quotas" reached in each stratum and reported them to the senior persons in charge of the project;
- Review officers: they reviewed off-site all the interviews, answer by answer, and in the case of detection of any non-conformities, omissions or incoherencies, informed the field officer and the supervisor and asked them for an assessment of the need to repeat the interview or decide on its annulment. The review officers performed, from the beginning to the end of the Survey, the review of the interviews conducted by the same interviewers, through initial random allocation;
- Supervisors: Carried out a second verification of the work carried out by the interviewers, through the random selection of 30 percent of the interviews conducted by each interviewer, and through the contact of the interviewee either at his/her home or by telephone. The supervisors verified the information collected by the interviewer by asking the interviewee some "key" questions from the questionnaire. In some cases, this contact also served to complete missing answers;
- Persons in charge of the project: monitored and appraised the work carried out, in meetings with the different agents involved so as to ensure that the objectives, deadlines and quality of the project were achieved. The quotas reached by each interviewer, for each stratum, were monitored in order to ensure the proportionality of the stratum.

⁴ Designed by Eurosondagem, but validated by Banco de Portugal. The purpose of the Manual was to compile all the clarifications required for the good application of the questionnaire to the interviewees.

ANNEX 2: QUESTIONNAIRE

Interview number _____

Survey on the Financial Literacy of the Portuguese Population

QUESTIONNAIRE

Good morning/afternoon/evening. My name is I am working for the firm EUROSONDAGEM, in a national level project for Banco de Portugal (show identification/statement).

The recent economic and financial developments, both in our country and worldwide, have led to an evolution in the financial products offered by banks and are reflected in the way people manage the household budget in their everyday life. Therefore, the survey we are currently conducting seeks knowledge on the way people aged 16 or over deal with financial issues.

Your answers, apart from being of great importance to this project, will be strictly confidential and used exclusively for the purposes of this study. Your personal data will not be passed on to any other person or organisation.

This interview will take about 40 minutes. May we do it now or would you prefer to schedule it for another time?

A – Profile of the interviewee

We will begin with some personal data:

A1 – REGION (Record the region of residence) (See quotas)	
North	1
Centre	2
Lisbon and Tejo Valley	3
Alentejo	4
Algarve	5
Autonomous Region of Madeira	6
Autonomous Region of the Azores	7

A2 – MUNICIPALITY/PARISH (Record municipality and parish of residence)		
Municipality:	Parish:	

A2.1 – PLACE (See quotas)	
Up to 4,999 inhabitants	1
From 5,000 to 19,999 inhabitants	2
From 20,000 to 99,999 inhabitants	3
100,000 or more inhabitants	4

A3 – GENDER (Record the gender of the interviewee) (See quotas)	
Female	1
Male	2

A4 – AGE: years (Record the group in which the person is classified) (See quotas)	
Note: The interviewer should provide an estimate if the interviewee does not wish to an	swer.
16 to 24 years old	1
25 to 39 years old	2
40 to 54 years old	3
55 to 69 years old	4
70 or older	5

A5 – What is your schooling level? (See quotas)	
Without primary education	1
Primary education (current 4th year)	2
Elementary education (current 9th year)	3
Secondary education (current 12th year)	4
Undergraduate or graduate education	5
More than a completed licentiate degree (Master's/PhD degree)	6
Does not answer (do not read)	7

A6 – What is your work or occupational situation? (See quotas)	
Active - Employee	1
Active - Self-employed	2
Active - Employee and self-employed	3
Active - Student and part-time employed	4
Active - Unemployed	5
Active - Senior Citizen/Retired WITH activity	6
Not active - Full-time student	7
Not active - Works at home looking after the family	8
Not active - Senior Citizen/Retired WITHOUT activity	9
Active - Other	10
Not active - Other	11
Does not answer (do not read)	12

A7 – Who do you live with?		
Alone	→ Go to A10	1
With spouse/partner, with our without children		2
With family members		3
With friends		4
Does not answer (do r	not read)	5

A8 – Who is the main person responsible for your household budget management?	
The interviewee	1
Another person (spouse/partner, family member)	2
There is no primary person responsible; there is always joint management with another person	3
Does not answer (do not read)	4

A9 – Who contributes the most to the household income?	
l do	1
I and my spouse/partner/family member in equal parts	2
My spouse/partner/family member	3
Does not know	4
Does not answer (do not read)	5

A10 – How many children in charge do you have?	
Number:	1

B – FINANCIAL INCLUSION

B1 – Do you hold one or more current accounts?		
Yes	\rightarrow Go to B2	1
No	→ Go to B4	2
Does not know	ightarrow End the interview (does not count for the sample)	3
Does not answer (do not read)	ightarrow End the interview (does not count for the sample)	4

B2 – How many current accounts do you hold, in total?	
Number:	1
Does not know	2
Does not answer (do not read)	3

B3 – How frequently do you use your main bank account, including payments by ATM?		
More than once a week	→ Go to B7	1
More than once a month	→ Go to B7	2
Not every month	→ Go to B7	3
Almost never over the year	ightarrow Go to B7 and B8 and sections D and G	4
Never	ightarrow Go to B7 and B8 and sections D and G	5
Does not know (do not read)	ightarrow End the interview (does not count for the sample)	6
Does not answer (do not read)	\rightarrow End the interview (does not count for the sample)	7

B4 – So, please tell me if:		
You have never had a bank account	→ Go to B5	1
You have had in the past, but no longer have a bank account	→ Go to B6	2
Does not answer (do not read)	ightarrow Go to B7 and B8 and sections D and G	3

 B5 – Why have you never had a bank account? (1 answer only) → Go to B7 and B8 and sections D and G 	
Does not have income to justify it	1
Another person's bank account is sufficient	2
The costs of having a bank account are high	3
Another reason. Which?	4
Does not know (do not read)	5
Does not answer (do not read)	6

 B6 – So, please tell me why you no longer have a bank account? (1 answer only) → Go to B7 and B8 and sections D and G 	
No longer has income to justify it	1
Another person's bank account has become sufficient	2
The costs of maintaining a bank account are high	3
Change of family situation	4
Another reason. Which?	5
Does not answer (do not read)	6

B7 – Do you know that there are Minimum Bank Services?		
Yes		1
No	ightarrow Go to C1, or sections D and G for the cases referred to above	2
Does not answer (do not read)	\rightarrow Go to C1, or sections D and G for the cases referred to above	3

B8 – What is required in order to access the Minimum Bank Services?	
Have a low income	1
Be unemployed	2
Not have a bank account	3
Does not know (do not read)	4
Does not answer (do not read)	5

C – BANK ACCOUNT MANAGEMENT

C1 – What are the means of payment you use the most for regular acquisitions of goods and services, in decreasing order of frequency? (Show card) (Multiple answer)					
	1st	2nd	3rd	4th	5th
Cash	1	1	1	1	1
Cheque	2	2	2	2	2
Debit card	3	3	3	3	3
Credit card	4	4	4	4	4
Other. Which?	5	5	5	5	5

C2 –	Which services did you authorise your bank to carry out direct debits from your current
	account(s)? (Multiple answer)

Water	1
Electricity	2
Gas	3
Telephone	4
Internet and/or television	5
Insurance	6
House rent/mortgage instalment	7
Periodic levies	8
Other. Which?	9
None	10
Does not answer (do not read)	11

C3 – What are the two main means of monitoring the movements and balance of your main current account? (Show card)			
	1st	2nd	
Statement sent by the bank	1	1	
ATM	2	2	
Bank booklet (<i>Caderneta</i>)	3	3	
Internet	4	4	
Not usually concerned with this	5	-	
Another. Which?	6	6	

C4 – With what frequency do you monitor the movements and balance of your main bank account?	
Daily	1
More than once a week	2
More than once a month	3
Less than once a month	4
Rarely	5
Never	6
Does not answer (do not read)	7

C5 – How accurately do you know the balance of your main bank account?	
Know with an error of less than 10 euros	1
Know with an error of less than 50 euros	2
Know with an error of less than 100 euros	3
Know with an error of less than 200 euros	4
Know with an error of less than 500 euros	5
Does not know	6
Does not answer (do not read)	7

C6 – Do you read the statement(s) of your current account(s)?	
Yes, in detail	1
Yes, roughly	2
No	3
Does not answer (do not read)	4

C7 – Do you consider that the information presented in your bank statement is sufficient?	
Yes	1
No	2
Does not know	3
Does not answer (do not read)	4

C8 – Nowadays, banks have services available through the Internet which allow you to manage your bank account. Please tell me if you:		
Know about it and use it		1
Know about it, but do not use it	→ Go to C10	2
Do not know about it	→ Go to C11	3
Does not answer (do not read)	→ Go to C11	4

C9 – On average, how frequently do you use this service? \rightarrow Go to C11	
Almost daily	1
At least once a week	2
At least once every fortnight	3
At least once a month	4
Less than once a month	5
Does not answer (do not read)	6

C10 – What is your main reason for not using the homebanking service?	
Does not have regular access to the Internet	1
Has difficulty in dealing with technology	2
Does not trust its security	3
Prefers personal contact / branch	4
Prefers using ATM	5
Does not know (do not read)	6
Does not answer (do not read)	7

C11 – What is the main reason for the choice of the bank where you have your main current account? (Show card)		
Recommendation from a family member or friend	1	
It is the bank where the mortgage loan or other loan was taken out	2	
It has low commissions/fees/costs	3	
The account is better remunerated	4	
The employer entity requires having an account in this bank	5	
Proximity to home or the workplace	6	
Other reason	7	
Does not answer (do not read)	8	

C12 – Over the last 5 yea (even if the previo	ars, have you changed your current account to another bank ous account(s) has (have) not been closed)?	
Yes	→ Go to C15	1
No		2
Does not answer (do no	t read)	3

C13 – Have you ever considered changing your main current account to another bank?

Yes		1
No	→ Go to C15	2
Does not answer (do not read)	→ Go to C15	3

C14 – Why have you not changed bank?	
Has high costs	1
Requires a lot of time to proceed with the change	2
Considers that the duration of the relationship with the current bank is important / is use to the current bank way of operation	ed 3
Uncertainty regarding the benefit of the change	4
Does not answer (do not read)	5

C15 – Do you know the commissions/fees charged by the bank for your current account?	
Yes	1
Yes, approximately	2
No	3
Does not answer (do not read)	4

C16 – Do you know w	vhat are bank overdrafts?	
Yes		1
No	ightarrow Explain what they are, but count as "No"	2
Does not answer (do not read)	ightarrow Explain what they are, but count as "Does not answer"	3

Bank overdraft: A bank overdraft is the situation where the book value balance of a current account is negative, that is, it is in debt.

A bank overdraft thus constitutes, for all effects, a loan which is granted by the bank to the holder of the current account. This may be:

- Authorised, if its occurrence has been authorised beforehand, generally through the negotiation of an overdraft ceiling, as if it were a credit line;
- Not authorised, in the case of its occurrence even without prior authorisation, however, with the consent of the bank (otherwise the operation which generates the negative balance could be rejected). In this case, it may also happen that the bank charges extra commissions/fees due to the occurrence.

C17 – Does your main b	pank account enable the use of a bank overdraft?	
Yes		1
No	→ Go to D1	2
Does not know	→ Go to D1	3
Does not answer (do not read)	→ Go to D1	4

C18 – How frequently do you use bank overdrafts?	
Various times over the month	1
At the end of the month, very frequently	2
At the end of the month, but not frequently	3
Rarely used	4
Never used	5
Does not answer (do not read)	6

C19 – Do you know the interest rates and/or commissions/fees charged by your bank for overdrafts?	
Yes	1
Yes, approximately	2
No	3
Does not answer (do not read)	4

D – PLANNING OF EXPENSES AND SAVINGS

D1 – Do you consider that it is important to plan your household budget, that is, your for revenues and expenses?	uture
Very important	1
Important	2
Not very important	3
Not at all important	4
Does not know / Does not answer (do not read)	5

D2 – How frequently do you plan your household budget, that is, your future revenue and expenses?	
Daily	1
Weekly	2
Monthly	3
Annually	4
In a non-regular manner	5
Does not do it	6
Does not know / Does not answer (do not read)	7

D3 – Do you usually save?		
Yes, regularly		1
Yes, irregularly (holiday allowance, Christmas allow	ance or other bonuses)	2
No	→ Go to D6	3
Does not answer (do not read)	→ Go to D6	4

D4 – What do you usually do with the money you save?	
Spend it immediately	1
Leave it in the usual current account, to spend at a later date	2
Leave it in the usual current account, to make a term deposit or other financial invest- ment at a later date	3
Make a term deposit or other financial investment immediately	4
Other. Which?	5
Does not answer (do not read)	6

D5 – What is the main reason that leads you to save? (1 answer only) \rightarrow Go to D7	
To take advantage of tax benefits	1
For non-regular subsequent expenses (holidays, travel)	2
For the acquisition/replacement of durable goods (larger house, furniture, domestic elec- trical appliances, means of transport)	3
For children education and to help them in the beginning of their active life	4
To meet unforeseen expenses	5
To use in retirement	6
Other. Which?	7
Does not answer (do not read)	8

D6 – Why do you not save? (1 answer only)	
Your income does not allow it	1
Not considered a priority	2
You make unplanned expenditure – purchases by impulse	3
Other. Which?	4
Does not answer (do not read)	5

D7 – Have you ever resorted to loans to acquire something that you later considered was really that necessary?	not
Yes, this has happened	1
Never happened	2
Does not know (do not read)	3
Does not answer (do not read)	4

D8 – Please tell me how frequently do you identify yourself with the following statements that
I am about to read (on a scale of always/almost always, sometimes, never/rarely):

	Always/ Almost always	Sometimes	Never/ Rarely	Does not answer
To buy something, I would rather save first	1	2	3	4
When I want to buy something, I immediately resort to credit	1	2	3	4
I tend to buy things in an impulsive manner	1	2	3	4

E – CHOICE OF BANKING PRODUCTS

E1 – What financial products do you hold? Multiple answer (Show card)			
Shares		1	
Bonds		2	
Investment funds		3	
Insurance (e.g. life, heal	th, multi-risk, automobile)	4	
Saving certificates		5	
Saving plans (e.g. housir	ng, retirement)	6	
Term deposits		7	
Mortgage loan			
Other credit (e.g. personal, car, home credits)		9	
Credit card		10	
Bank overdraft		11	
Other. Which?		12	
None	→ Go to F1	13	
Does not know (do not read)	→ Go to F1	14	
Does not answer (do not read)	→ Go to F1	15	

E2 – What made you choose the products you hold? Indicate the three most important factors, in decreasing order of importance. (Show card)

	1st	2nd	3rd
Advice at the bank branch where the account is held	1	1	1
Advice of family members/friends	2	2	2
Advice of specialised entities (other than a bank)	3	3	3
Information on TV, miscellaneous advertising	4	4	4
Information on the Internet	5	5	5
Comparison between various products of the same bank	6	6	6
Comparison between various products of different banks	7	7	7
Other. Which?	8	8	8
Does not answer (do not read)			9

E3 – Which criteria (choosing 3) are of greatest importance in your choice of financial investments, in decreasing order of importance? (Show card)			
	1st	2nd	3rd
Product yield	1	1	1
Easy liquidity, i.e. easily redeemable	2	2	2
Low risk and high safety	3	3	3
Tax benefits	4	4	4
Guaranteed total repayment	5	5	5
Management commissions/fees	6	6	6
Lack of penalisation for early withdrawal	7	7	7
Other. Which?	8	8	8
Does not answer (do not read)			9

E4 – Do you know the value of the interest rates of term deposits or other savings products you have at the bank?	
Only for those who have answered 6 or 7 in Question E1	
Yes, always and to the exact value	1
Yes, always and to the approximate value	2
I seek information only when I have savings to invest	3
No	4
Does not answer (do not read)	5

E5 – And do you compare interest rates before investing in a term deposit or other savings product? Only for those who have answered 6 or 7 in Question E1	
only for those who have answered o of 7 in Question ET	
Yes, between the banks where I am a customer	1
Yes, between the banks where I am a customer and those offered by others	2
No, I always use my bank	3
No	4
Does not answer (do not read)	5

E6 – Do you know the value of the interest rates of loans you pay at your bank? Only for those who have answered 8, 9 or 10 in Question E1	
Yes, always and to the exact value	1
Yes, always and to the approximate value	2
I seek information only when I need to take out a loan	3
No	4
Does not answer (do not read)	5

E7 – And do you compare interest rates before taking out a loan? Only for those who have answered 8, 9 or 10 in Question E1	
Yes, between the banks where I am a customer	1
Yes, between the banks where I am a customer and those offered by others	2
No	3
Does not answer (do not read)	4

E8 – Do you have an idea of how much the service of loans represent on your monthly income?	
Only for those who have answered 8, 9 or 10 in Question E1	
Less than a quarter (25%)	1
Less than half	2
More than half	3
Does not know (do not read)	4
Does not answer (do not read)	5

E9 – Before investing in a saving product or taking out a loan do you read the information given by the bank on the conditions of the products?	
Yes, I read it in great detail	1
Yes, I read it in some detail	2
Yes, I read it, but not in great detail	3
I don't read it, I trust what the branch employee conveys to me verbally	4
I don't read it, I don't consider it very important	5
Does not answer (do not read)	6

E10 – Do you read the contracts of the products in which you invest your savings or of the loans taken out?

Yes, I read them in great detail	1
Yes, I read them in some detail	2
Yes, I read them, but not in great detail	3
I don't read them, I trust what the branch employee conveys to me verbally	4
I don't read them, I don't consider it very important	5
Does not answer (do not read)	6

E11 – Do you have a	mortgage loan?	
Yes	ightarrow Confirm that code 8 was answered in E1	1
No	→ Go to E20	2
Does not answer (do not read)	→ Go to E20	3

E12 – What type of instalment is associated to your loan?	
Constant instalments	1
Mixed instalments	2
Increasing instalments	3
Does not know (do not read)	4
Does not answer (do not read)	5

E13 – Have you ever transferred your mortgage loan to another bank?	
Yes	1
No	2
Does not answer (do not read)	3

E14 – The interest rate of your m	ortgage loan:	
Varies with the 3 month Euribor	→ Go to E16	1
Varies with the 6 month Euribor	→ Go to E16	2
Varies with the 12 month Euribor	→ Go to E16	3
It is a fixed rate		4
Other situations	→ Go to E16	6
Does not know (do not read)	→ Go to E16	7
Does not answer (do not read)		8

E15 – Does the value of your instalment never vary?	
No, it's always the same	1
Varies periodically	2
Does not know (do not read)	3
Does not answer (do not read)	4

E16 – Do you know what spread the bank applies to your mortgage loan?	
Does not know	1
Has an idea of its value	2
Knows exactly	3
Does not answer (do not read)	4

E17 – What is the main reason for the choice of your mortgage loan, in decreasing order? (Show card)	
Value of the instalment	1
Interest rate	2
Annual Percentage Rate of Charge (APR)	3
Repayment period	4
I went to my usual bank	5
I followed the bank's advertising	6
Other. Which?	_ 7
Does not answer (do not read)	8

E18 – Have you ever made early repayments of your mortgage loan, and with what frequency?		
Every or almost every year	→ Go to E20	1
Sporadically over the years	→ Go to E20	2
Never		3
Does not know (do not read)	→ Go to E20	4
Does not answer (do not read)	→ Go to E20	5

E19 – Why do you never make early repayments of your mortgage loan?	
No available money	1
Does not consider it a priority	2
Does not see the advantage	3
Does not know	4
Does not answer (do not read)	5

E20 – How many loan Overdrafts)?	s do you have (excluding	Mortgage Loans, Credit Cards and Bank	
Number		Confirm that code 9 was answered in E1	1
None	ightarrow Go to E24		2
Does not know (do not read)	→ Go to E24		3
Does not answer (do not read)	ightarrow Go to E24		4

E21 – From which entity(ies) was(were) this(these) loan(s) taken? (Multiple answer)		
From your usual bank	1	
Through the firm which sold the product or service	2	
From an institution specialised in consumer credit	3	
From another bank	4	
Other entity. Which?	5	
Does not answer (do not read)	6	

E22 – For what purpose was(were) this(these) loan(s) obtained? (Spontaneous – Multiple answer)	
Purchase of a car	1
Purchase of products for the home (furniture, domestic electrical appliances)	2
Payment of education	3
Health expenses	4
Travel	5
Clothes	6
Other	7
Does not answer (do not read)	8

E23 – What is the main reason for the choice of the bank/entity where this(these) loan(s) was(were) obtained, in decreasing order? (Show card)	
Value of the instalment	1
Interest rate	2
Interest rate plus all the other charges of the loan (APR)	3
Repayment period	4
I went to my usual bank	5
I followed the bank's advertising	6
Convenience of obtaining the loan from the entity supplying the product	7
Other. Which?	8
Does not answer (do not read)	9

E24 – Have you ever c Only for those v	hanged the conditions of any of your loans with the bank? vho have answered 8, 9 or 10 in Question E1	
Yes		1
No	→ Go to E27	2
Does not answer (do not read)	→ Go to E27	3

E25 – Was the objective of this change the reduction of the monthly instalment(s)? Only for those who have answered 8, 9 or 10 in Question E1	
Yes	
No	
Does not answer (do not read)	

E26 – What did you change in your contract(s)? (Multiple answer)	
Reduction of the spread	1
Extension of the loan repayment period	2
Change of the interest rate regime (fixed/variable)	3
Loan consolidation	4
Other	5
Does not answer (do not read)	6

E27 – Have you ever taken out a loan to pay for the costs of another loan?	
Yes	1
No	2
Does not answer (do not read)	3

E28 – What is the payment scheme you usually use for your Credit Card? (Only for those who have answered E1=10)	
Pay in full the following month	1
Pay partially, over time	2
Does not answer (do not read)	3

E29 – Do you know the interest rate and other charges associated to your credit card? (Only for those who have answered E1=10)	
Yes, exactly	1
Yes, roughly	2
No	3
Does not answer (do not read)	4

E30 – Do you use your credit card to pay current expenses (e.g. food, clothing)?	
Yes, frequently	1
Rarely	2
No	3
Does not answer (do not read)	4

F – CHOICE AND KNOWLEDGE OF SOURCES OF INFORMATION

F1 – On which three products would you like to have more information, in decreasing order of importance? (Show card)

	1st	2nd	3rd
Demand deposits	1	1	1
Term deposits	2	2	2
Savings accounts (housing, education, retirement)	3	3	3
Mortgage loan	4	4	4
Other credit (e.g. personal, automobile, home)	5	5	5
Credit card	6	6	6
Bank overdraft	7	7	7
Other. Which?	8	8	8

F2 – What entities do you think should provide you with this information, in decreasing order of importance? (Show card)

of importance, (show cardy				
	1st	2nd	3rd	4th
Your bank	1	1	1	1
The Banco de Portugal	2	2	2	2
Consumer associations	3	3	3	3
Other entity. Which?	4	4	4	4

F3 – How would you like to receive this information, in decreasing order of importance? (Show card)

	1st	2nd	3rd	4th	5th
Booklets / leaflets	1	1	1	1	1
Internet	2	2	2	2	2
Written press	3	3	3	3	3
Other media (TV, radio,)	4	4	4	4	4
Other. Which?	5	5	5	5	5

F4 – What type of information do you follow regularly?		
	Yes	No
General news about economy	1	2
Evolution of interest rates	1	2
Banking product legislation and regulations	1	2

F5 – Conhece o Portal do Cliente Bancário?	
Yes, I have already consulted it	1
Yes, but I have never consulted it	2
I don't know it	3

F6 – What entity would you consult, or have you consulted, in the event of a disagreeme misunderstanding with your bank? (Spontaneous – Multiple answer)	nt/
The Banco de Portugal	1
Courts	2
Consumer associations (e.g. Deco, Sefin, etc.)	3
Ministry of Finance	4
Other. Which?	5
Does not know	6
Does not answer (do not read)	7

F7 – What entity would you consult, or have you consulted, in the event of inability to pa the instalments of your loans? (Spontaneous – Multiple answer)	у
Family	1
Your bank	2
The Banco de Portugal	3
Consumer associations (e.g. Deco, Sefin, etc.)	4
Ministry of Finance	5
Other. Which?	6
Does not know	7
Does not answer (do not read)	8

G – FINANCIAL UNDERSTANDING

G1 – For most mortgage loans, the interest rate paid to the bank is indexed to a reference which is normally the "Euribor". Please tell me if the Euribor:	rate,
Is a rate defined by the Portuguese Government	1
Is a rate defined by the Banco de Portugal	2
Is a rate defined by the European Central Bank	3
Is a rate resulting from the loans made amongst a group of European banks	4
Does not know (do not read)	5
Does not answer (do not read)	6

G2 – Do you know what the "spread" is?				
Does not know	→ Go to G4	1		
Is the total interest rate charged by	your bank on loans	2		
Is the increase established by your vary amongst customers	bank in relation to a reference interest rate, which may	3		
Is the increase established by your the same for all customers	bank in relation to a reference interest rate, which is	4		
Is an interest rate defined by your	bank according to the amount of the loans	5		
Other. Which?		6		
Does not know (do not read)		7		
Does not answer (do not read)		8		

G3 – Do you know how the bank defines the spread in mortgage loans (3 most important)? (Show card)

	1st	2nd	3rd
Depends on the value of your bank account	1	1	1
Depends on your salary	2	2	2
Depends on the ratio between the loan amount and the value of the house	3	3	3
Depends on the contracting of other products	4	4	4
Depends on whether you have always paid your loans promptly	5	5	5
Depends exclusively on your capacity to negotiate and convince the bank that you are a good customer	6	6	6
Other. Which?	7	7	7
Does not know (do not read)			8
Does not answer (do not read)			9

G4 – Classify, on a scale ranging from 1 to 3, the following financial products by degree of risk, related to the chance of getting back the invested money. (1 low, 2 average, 3 high)				
	1 Low Risk	2 Average Risk	3 High Risk	Does not know
1. Shares	1	2	3	4
2. Bonds	1	2	3	4
3. Saving certificates	1	2	3	4
4. Investment funds	1	2	3	4
5. Equity funds	1	2	3	4
6. Retirement savings plans	1	2	3	4
7. Term deposits	1	2	3	4

G5 – If a term deposit has an interest rate of 3% and inflation is 4%, do you consider the received a positive yield on your savings? (Spontaneous)	at you
Yes	1
No	2
Does not know	3
Does not answer (do not read)	4

G6 – If you take out a loan together with another person (e.g. spouse), who is liable to the bank for the payment of this loan?	
Each is liable for half the debt	1
Both are liable for the entire debt	2
Depends on the income of each of the debtors	3
Does not know	4
Does not answer (do not read)	5

I am going to ask you to look at the following statement of a current account. (Show card)

BANK ABC, SA

Current account – Account statement as at 20 April 2009		E	EUR	
Date	Description	Amount	Balance	
	Previous balance		110.00	
24/03/2009	ATM withdrawal	-60.00	50.00	
30/03/2009	Transfer of salary	1,200.00	1,250.00	
02/04/2009	Mortgage loan collection	-525.00	725.00	
03/04/2009	Mobile telephone	-40.00	685.00	
08/04/2009	Supermarket	-210.00	475.00	
12/04/2009	Electricity	-60.00	415.00	
13/04/2009	Restaurant	-45.00	370.00	
15/04/2009	Fashion Boutique	-115.00	255.00	
16/04/2009	Cheque	-70.00	185.00	
18/04/2009	ATM withdrawal	-50.00	135.00	
20/04/2009	XPT petrol station	-35.00	100.00	
	Available balance		100.00	
	Authorised balance		1,060.00	

G7 – According to this statement, what is the balance of the current account that, as at 20 April 2009, can be used without the use of a bank overdraft? (Spontaneous) 110 euros 1

100 euros	2
1,060 euros	3
1,160 euros	4
Does not know	5
Does not answer <mark>(do not read)</mark>	6

G8 – Suppose that the insurance of your car in amount of 150 euros will be debited on 21 April 2009. Is the balance of the account sufficient to meet this payment?

No	1
Yes, but the account will remain with an overdraft of 50 euros	2
Yes, the account is duly provisioned, therefore it is not necessary to use an overdraft	3
Yes, but the account will remain with an overdraft of 150 euros	4
Does not know (do not read)	5
Does not answer (do not read)	6

G9 – How do or did you consider yourself in terms of a student of Portuguese?	
Good	1
Sufficient	2
Weak	3
Does not know (do not read)	4
Does not answer (do not read)	5

G10 – How do or did you consider yourself in terms of a student of Maths?	
Bom	1
Sufficient	2
Weak	3
Does not know (do not read)	4
Does not answer (do not read)	5

G11 – In what range is your net monthly income?	
Without income	1
Up to 500 euros	2
Between 500 and 1,000 euros	3
Between 1,000 and 2,500 euros	4
Over 2,500 euros	5
Does not know (do not read)	6
Does not answer (do not read)	7

This ends your interview. Thank you for your collaboration.
