ISCTE ⬡ Business School
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THE PORTUGUESE CITIZENS TRUST STATE ON EXISTING

BANKS IN PORTUGAL AND THEIR CONCERNS WHEN

CHOOSING A BANK

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"As my sufferings mounted I soon realized that there were two ways in which I could respond to my situation -- either to react with bitterness or seek to transform the suffering into a creative force. I decided to follow the latter course."

Martin Luther King Jr.

Resumo

Propósito: Esta dissertação pretende apresentar o nível de confiança dos cidadãos Portugueses na banca, reconhecendo os critérios de selecção a quando da escolha dos mesmos. O propósito é promover a discussão sobre a preferência dos cidadãos no tipo de banca. O estudo contribui para a literatura, relativamente às consequências da crise financeira na confiança, apresentando argumentos que potenciam a relevância da banca Cooperativa.

Método: O autor empregou o método quantitativo. Os dados resultam de questionário, analisados no SPSS - Análises das Correspondências Múltiplas e Qui-Quadrado.

Resultados: Os portugueses não confiam na banca, considerando os bancos não estão a agir correctamente. Os cidadãos estão preocupados com a promoção do bem-estar criado pelos bancos em detrimento da maximização dos lucros.

Limitações do Estudo: Este estudo baseia-se na literatura existente e na recolha de dados via telefone (600 Portugueses). Para melhor compreender algumas questões, desenvolver o método qualitativo (*focus groups* e entrevistas) poderia ser relevante.

Implicações Práticas: Num contexto de crise financeira e das consequências na confiança, a população está, em geral, desapontada com os bancos. Os Portugueses começam a procurar bancos preocupados com o ambiente, ética e inclusão social. Outros tipos de bancos devem aparecer e os que existem devem começar a repensar os seus produtos, se querem ganhar a confiança dos consumidores.

Originalidade/Valor: Esta dissertação revela a confiança nos bancos e procura identificar novas características que os cidadãos gostassem de reconhecer nos bancos. Muitas destas características estão directamente relacionadas com o movimento da banca cooperativa, indicando uma potencial oportunidade de mercado.

Palavras Chave: Crise Financeira, Confiança, Banca Cooperativa, Maximização do bem estar.

JEL Classification: G2; P13.

Abstract

Purpose: This dissertation aims to present the Portuguese Citizens trust level on the existing banks, recognizing their criteria when choosing banks. The purpose is to promote the discussion on the type of banks citizens would like to have. It also contributes to literature regarding financial crisis consequences on trust and providing arguments on the potential relevance of Cooperative banks.

Method: The author uses quantitative method. Data is gathered by surveys and analyzed on SPSS - Multi Correspondence and Chi-Square Analysis.

Findings: The research concludes that Portuguese Citizens are not trusting on the existent banks, since they think banks aren't acting correctly. Citizens are also concerned with the well-being promotion that banks create rather than profit maximization.

Research limitations: This research is based on the existing literature and on data gathered by telephone to 600 citizens. To understand some issues, developing qualitative research (focus groups and interviews) could be relevant.

Practical implications: With financial crisis context and its consequences on trust level, the population is generally disappointed with banks. Citizens are starting looking for banks environmental, social and ethical concerned. Other types of banks should appear and the existing ones should start rethinking their products, if they want to gain any kind of trust.

Originality/Value: This paper analyses the existing trust level on banks of Portuguese citizens and tries to identify the new characteristics that these citizens would like to see in a bank. Many of those characteristics are greatly linked to cooperative banking movement which could indicate a market opportunity.

Keywords: Financial Crisis; Trust; Cooperative banks; Well-being maximization.

JEL Classification: G2; P13.

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List of Abbreviations

AIG – American International Group

EACB – European Association of Co-operative Banks

INE – Instituto Nacional de Estatística

MCA – Multi Correspondence Analysis

NCI – Network Central Institution

NEF – New Economics Foundation

SPSS – Software Package for Social Sciences

SRI – Socially Responsible Investment

US – United States

USA – United States of America

1. Introduction

This section introduces the reader to this research area. It starts by presenting the background and motivations beyond the subject, the research main goals, methodology and a briefly overview about dissertation structure. Thesis is also introduced briefly.

1.1 Research Motivations and Background

"The financial crisis, which started as the US sub-prime crisis in 2007, escalated into a full-blown economic crisis and raised significant political challenges in Europe. Although not the only source of problems, the banking sector has been at the heart of this crisis. Significant steps have been taken to improve the resilience of banks, but they remain highly vulnerable to shocks and are still being perceived as too big or too systemic to fail." (Liikanen, 2012:1).

From the citation above is possible to perceive the urgency for action of financial system especially in a crisis context. Crisis 2007/2008 has been discussed on its causes, consequences and further implications. Previous researches (such as Bordo, 2008; Debab and Yateem, 2012) have disclosed the trust and confidence behaviour on financial system after financial crisis, appointing massive negative impacts. At the same time, other researchers have investigated potential solutions on governance (Mehran *et al*, 2011; Kirkpatrick, 2009), regulation (Ingves, 2012; Claessens and Kodres, 2014) and on specific banking models specially on cooperative banking models, aiming to conclude that this type of banks could avoid such financial crisis, by developing their activities based on different values from traditional banks (Bülbül, 2013; Leogrand, 2011; Groenelveld and Vires, 2009).

Regarding the stated background and previous research on cooperative banks solution after financial crisis, the researcher decides to conduct a study on trust level behaviour and on cooperative banks applying to Portugal. The existent literature on Portugal context is poor so, this thesis aims to contribute on this field research.

This dissertation has three main target groups. The first one is the academy because thesis provides new masters students and other related stakeholders a battle of questions to be further investigated. The second target group is marketing and strategy departments as well as board of directors of banks since this dissertation provides conclusions on specific criterias and preferences of Portuguese citizens related to products and values in financial systems. The third target group are investors, which can also consider this master thesis conclusions to

better guide their investments on banking, specially finding the main values that would drive Portuguese Citizens to consumption.

1.2 Research Objectives and Questions

The main goals of this study are to understand the trust behavior on the existent banks as well as perceive the main selecting criterias that Portuguese citizens have when selecting a bank. It aims to conclude about banks presence and behaviors. The two main question researches and respective hypothesis are stated bellow as well as explained the goals behind each hypothesis.

1. What is the Portuguese opinion about the role of the banks in society?

    Hypothesis 1.1: Banks should be concerned in promoting the well-being of society.

    Hypothesis 1.2: Banks should maximize the dividends to the shareholders.

The first question research aims to verify what are the preferences within two types of banking models. The first model, related to hypothesis 1.1 is named by Stakeholders Value Banks model and aims to state that well-being maximization should be the driver. From the hypothesis 1.2, the correspondent model is the Shareholders Value Banks which has as main driver the profit maximization. Moreover, is possible to connect hypothesis 1.1 to cooperative banks and 1.2 traditional retail banks (Ayadi *et al*, 2010; Leogrande, 2011).

2. What type of banks would Portuguese citizens like to have in Portugal?

    Hypothesis 2.1: Portuguese do not trust the existing banks in Portugal.

    Hypothesis 2.2: Portuguese would like to have banks concerned with ethics, environment and social matters.

The first hypothesis aims to verify if Portuguese citizens are trusting the existent banks, because if they are not trusting, the existent banks are not acting or at least satisfying them and so, from the economic point of view, trust is a necessary element for consumption (Mosch and Prast, 2008). Regarding the second hypothesis, the purpose is to understand if after financial crisis, Portuguese citizens start to feel the need to have banks concerned with ethics, environment and social matters.

1.3 Research Methodology and Method

The applied method and methodology of this dissertation is the quantitative method and the deductive approach. It is effectively a top-down approach within a three stage analysis – hypothesis, observation and confirmation. The hypothesis stage is presented above aiming to be statistically tested by inference about characteristics. Observation is related with data

gathering which were ensured by surveys, to a sample of 600 Portuguese citizens, statistically representative of Portuguese Population. Regarding confirmation which is the last step is obtained thought data analysis. Data analysis is related to statistical analysis on SPSS, the Software for Social Sciences and applying specific techniques - descriptive statistics, chi-square procedures and multi correspondence analysis. Descriptive statistics aims to reject or not hypothesis, which is the first input for dissertation results. Chi-square analysis aims to understand thought crosstabs procedures if there is or not a relationship between variables. And finally, multi correspondence analysis aims to identify certain patterns on observations, by statistically mixing variables and categories.

1.4 Research Structure

The present dissertation is fulfilled by four main sections – literature review, methodology and method, results analysis and discussion and the main difficulties and further investigations.

Starting by Literature Review, it aims to provide a background on financial crisis causes so that the reader can follow on trust consequences and on cooperative banking solution. It presents the main values and modus operandi of Cooperative banking solution as well as the main arguments on cooperative banks as a solution to avoid financial crisis.

The next section is occupied by describing all the process and procedures of the present master thesis – methodology and method. The section starts by presenting a literature gap analysis and then is followed by an explanation about the main research questions and hypothesis. After presenting research questions, it is explained how to conduct the analysis.

The analysis goes on with research results and discussion. Firstly, research questions are answered and then it follows on the multi correspondence analysis results. This section is also concerned with presenting the main non-conclusions followed by a discussion on possible causes. To close this section, other relevant findings are presented.

The last section to be presented is the main dissertation difficulties as well as further investigations. This chapter should be consider on the first hand because there are stated lessons learned and then because this research area should be target of future considerations and studies.

2.   Literature Review

The latest financial crisis has been debated on consequences, related not only with the whole financial services stability but also related to consumer behavior after crises. Nonetheless, before starting to explore its consequences, it matters to understand the nature of this financial crisis and when it has started to then understand the consequences and alternative banks if they exist.

According with Gordon (2012) the recent crisis underlines that 'crisis' is a distinctive, unique, unexpected, event that happen after credit booms and involving an exit from bank debt. Many researchers appoint the beginning of the recent financial crisis at different moments in time. According to Groeneveld and Vries (2009) it is hard to pinpoint a starting date for the credit crisis since it was a chain of events in which one shock in the international financial system follows another. However, for the referred researchers, the establishment of the crisis can accordingly be set at middle 2007. Recklies (2009) mentioned "subprime crisis", "US subprime crisis", "banking crisis 2007/2008" and "financial crisis 2008".

The agreement on the principal causes of the financial crisis 2008 is consensual among several authors – excess of liquidity or credit boom, underestimation of risk on the lending process and finally the speculation on the increase visibility of derivatives and specific financial products.

According with Dell'Ariccia et al (2008) and starting by the credit boom, it is stated that is triggered by the delinquency rates. The low interest rates roots the "cheap money" and particulary the loose of monetary policy (Groeneveld and Vries, 2009). Leaven and Valencia (2008) also characterized the circumstance as a low interest rates context and have appointed as the major problematic its effects on the residential demand and investment trends, triggering a significant rise in housing prices. The Federal Reserve data has disclosed the increased house prices. The rose in United States was almost the double by increasing 77% from 1995 to 2006, as can be verified bellow. The low interest rate and the easy access to lending credits origins this phenomenon of house inflation prices in United States.

The urgency to buy homes, stimulated by attractive interest rates and liberal lending terms, intended that home prices would increase to keep pace with rising demand (Obi, 2010). And, also speculators, named by 'home flippers', have made great profit by buying and selling homes always on a larger price, behaving and stressing the trend of home prices as showed

above. While house prices in US were growing, after 2000 the behavior of household debt and disposal income has changed dramatically in US. Thus, with pricing houses increasing and without enough income to cover debt the result was a massive default and the housing bubble burst.

The next identified cause of financial crisis is the underestimation of risk when lending money. Recklies (2009: 15) refers "Due to an increasing level of competition and structural interruptions banks were able to gain or to protect market shares only by accepting profit spreads that did not consider the risk profile of the underlying business completely." Debab and Yateem (2012) have appointed the evidence from subprime suggesting that banks tend to stop asking about risk if the yield remains good. Also refer that shareholders should recognize that banks could not generate extraordinary returns on equity without incurring on significant levels of additional risk. Carvalho (2008) refers the recurrently use of statistical models on credit analysis which were based on time series allowing to calculate the probability of loan success if everything else remains the same, *ceteris paribus*. Thus if the world change, the previous made calculations will not perform the future projection. The second reason was the fact of US unemployment and economic conditions were stable during the period of 1980 to 2006, having suffered only two recessions during that period.

The risk underestimation is called by the subprime mortgage loans, where borrowers were not able to repay the loans due the negative gap between income and debt.

Besides the context of excess liquidity, increased home prices, speculation and risk underestimation there was an additional cause of financial crisis – the extensive trading of financial derivatives is also considered on financial crisis causes. Groeneveld and Vries (2009: 3) refer "Banks were able to continue to finance the accelerating credit growth by partly securitizing mortgages immediately (…)" and "Investment banks played a major part in issuing the mortgages packages (…), as it was a highly lucrative business.", connecting derivatives to "financial innovations". Leaven and Valencia (2008: 26) also agree that securitization have made a crucial role when referring the "originate-and-distribute lending model adopted by many financial institutions during this period". Banks grant loans and then sell them to other financial institutions who will put them to issue asset-backed securities. This is seen as a way to shift risk to the ultimate buyer of the security.

Krugman (2009) also agree that those securities allowed taking more risk unethically by shifting risk to other institutions just to avoid problems on capital requirements. Boatright

(2011: 485) goes further in relation to securities and derivatives – "This risk (systemic risk) is exacerbated by the implicit subsidy that large banks received by being perceived as 'too big to fail' since investors believe, rightly or wrongly, that the government will come to their aid in the event if distress. The result was a substantial moral hazard[1]". Lehman Brothers, used weel-know banks from USA financial markets fail ushered in a sequence of major market disruptions.

Besides the previous described causes of financial crisis are considered crucial, there are also two points to add, the behavior of rating agencies and the second has to do with the role of supervisory entities. Groeneveld and Vries (2009) also mentioned that the responsibility of the high risk tolerance observed is in part due the rating agencies since those entities sometimes wrongly gave high rating to certain securitized products. The high rates had enhanced the issuing of mortgages packs making the business extremely lucrative. The second point has to do with the role of supervisory entities since its role is to oversee and to be aware of potential irregularities on financial system. So, both, financial supervisors' and rating agencies were in charge to recognize the discrepancy of the real assets value and underlying value of those financial products.

Briefly, financial crisis has been originated by a set of circumstances in which are included a massive excess of liquidity associated to low interest rates, triggering the credit boom in US. Home prices had abruptly increased due a higher US home demand and also due the speculators behavior. Loans were granted based on statistical models that induced risk managers to underestimate risk and were called by cheap credit (low interest rates) or easy credit (loans were granted to people who don't have enough income to repay those loans). The excessive use of financial derivatives have unethically transferred and spread out the systemic risk and some financial institution took advantage of leveraged to satisfy capital requirements.

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[1]Holmstrom(1979: 74) refers that "It has long been recognized that a problem of moral hazard may arise when individuals engage in risk sharing under conditions such that their privately taken actions affect the probability distribution of the outcome." and "The source of this moral hazard or incentive problem is an asymmetry of information among individuals that results because individual actions cannot be observed and hence contracted upon." Also regarding the concept of moral hazard, Dow (2000: 16) refers "the importance of two types of moral hazard: (1) The possibility that individual traders will take actions (specifically, excessive risk-taking) at the expense of the firm as a whole. (2) The possibility that bank management will not act in the shareholders' interests.

2.1 Financial crisis consequences on trust and confidence

Under the described context, it matters to understand how financial crisis has evolved. The crash of 2008 was followed by a global crisis on confidence and trust. Obi (2010: 14) stated "(…) the credit risk indicator rose steadily signifying rising default risk. Unfortunately, stock market investors ignored this signal and for that reason, the market risk indicator actually fell prior to the crisis." It originated losses but besides that, investors felt uncertainty due the market volatility (Jo *et al*, 2009). It has result in shortfalls and bailouts such as the collapse of Lehman Brothers (investment bank), AIG.

Boatright (2011) pointed the lack of trust and integrity. According to Debab and Yateem (2012) the uncertainty felt immediately after Lehman Brothers failure lead to a crisis on confidence that had steered to the 'bank runs'[2] phenomenon (a strong demand for liquidity in the main financial centers). Citing Leaven and Valencia (2008: 27) "Commercial banks in U.S. did not seem to have experienced runs among retail customers, but as mentioned earlier, many institutions faced significant stress in wholesale markets". Home prices in US had reached a peak in the middle of 2006 and then started to decline. McKibbin and Stoeckel (2009: 17) also conclude that "Contagion and rising risk premiums everywhere have caused a different scenario."

Furthermore Bordo (2008) also alerts for different consequences. The first one is the negative spiral of dropping home prices followed by foreclosures, deteriorating consumer and producer confidence, increasing defaults on credits, depreciations of credit portfolios in US. It was time for worldwide losses and capital shortages at investment banks and in banks in general, resulting in a completely loss of confidence in financial system. Bordo (2008) and Debab and Yateem (2012) both referred confidence. However, besides confidence, Debab and Yateem (2012: 546) also apply the concept of trust "It is clear that many people all over the world have lost faith and trust in banks and in financial services industry in general".

The Annual Global Study of Edelman Trust Barometer 2013[3] concluded that there were strict falls in trust on banks and financial services over five years. According to the study in 2008 the trust level in United States was about 69% while in 2013 was 49%. The study also indicates that countries such as Netherlands, Germany, United Kingdom, Spain, Ireland,

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[2] Diamond and Dybing (1983: 1) describe that "during a bank run depositors rush to withdraw deposits because they expect the bank to fail. In fact, the sudden withdrawals can force the bank to liquidate many of its assets at a loss and to fail. In a panic with many bank failures, there is a disruption of the monetary system and a reduction in production."

[3] http://www.cipr.co.uk/sites/default/files/2013%20Edelman%20Trust%20Barometer.pdf

Sweden, Poland and South Korea had registered drops in their trust level on banking and financial services. The Annual Global Study of Edelman Trust Barometer 2014[4] provides an analysis on financial services industry presenting the results between 2009 and 2014. It indicates that the same refered countries except South Korea continue to demonstrate a loss in their trust level between 2008 and 2014. Nonetheless, making a global analysis while the first mentioned study shows a decrease on trust level from 56% to 45% (2008- 2013), the second one shows a slightly increase from 47% to 51% (2009- 2014).

Once again Earle (2009: 788) stated "Confidence had been replaced by trust, buoyed by the euphoria of the bubble. Although high profits should signal high risk, high tust produces low perceived risk. When the bubble bust banks started failing, trsut and low perceived risk were rapidly replaced by distrust and panic.".

Other researchers apply the concept of trust such as Boatright (2011), Uslaner (2010) and Simon and Tóth (2010). As there are so many researchers writing about trust and confidence, it matters to understand the difference between those concepts.

2.2 Two different concepts - Trust and Confidence

Mosch and Prast (2008) appointed that confidence and trust are different concepts that are qualitative and based on emotions that "were created and destroyed in different ways" Earl (2009: 786).

Starting by confidence it is about future developments and allows countries build up the consumer confidence indicator (Mosh and Prast, 2008). Earl (2009: 786) states that "confidence is instrumental and calculative" and is a "belief, based on experience or evidence (eg., past performance), that certain future events will occur as expected.".

Additionally, Mosch and Prast (2008: 13) referred "In fact, confidence would appear to be a crucial variable in understanding economic trends. Its determinants include social and demographic variables (…), the perception and assessment of economic and political news in the media, and people's own experiences in terms of prices, inflation and employment.". Additionally there is agreement among several researchers on the confidence impact in economy. Keynes (1936: 148) stated that "If we expect larges changes but are uncertain as to what precise from these changes will take, then our confidence will be weak". Mosch and

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[4]http://www.edelman.com/insights/intellectual-property/2014-edelman-trust-barometer/trust-in-business/trust-in-financial-services/

Prast (2008: 11) refer "Strong confidence in economy implies optimist about the future. Weak confidence, by contrast, points pessimism about the future, and causes spending to fall".

Moving the focus on trust, as Recklies (2009) mention trust has different meanings according to the subject. However, in relation to banks the researchers are mostly consensual. For Earl (2009: 786) trust is "social and relational" and is defined by "the willingness, in the expectation of beneficial outcomes, to make oneself vulnerable to another based on a judgment of similarity of intentions or values.". Schoormann *et al* (2007) and Mosch and Prast (2008: 19) also share that trust is about relationships. Fukuyama (1995: 27) defines trust as "the expectation that arises with in a community of regular, honest, and cooperative behavior, based on common shared norms (…)."

Moreover the supra mentioned researchers bring up the relation between trust and risk by stating "(…) people who trust take the rough with the smooth and accept the risk that is inherent in the unpredictability of others' behavior. It is a double-edge risk, with a potential upside as well as a downside. Confirmed trust in a transaction – economic or otherwise – yields more than no trust and no transaction: the positive risk. By contrast, lost trust often involves a greater loss than any gains arising from confirmed trust: the negative risk.". Following the same rational Boatright (2011) denotes that trust involves two main concepts – reliance that happens when one party allows its future to be decided by another party and risk that is seen as the potential probability to face negative outcomes by being in an untrustworthy situation.

Mosch and Prast (2008) have mentioned two types of trust, the horizontal (relationship between humans) and the vertical one which is about relations quality between people and institutions or organizations such as government, media and banks for instance. In addition, the researcher also made a distinction on the primary and secondary target of trust. The primary one has to do with reputation (based on consistent behaviors in the run time), performance (it has to do with the current results) and finally representation which has to do with identity and personality. The secondary target of trust named by the institution related trust is about the need of testimonials (for instance accountability) to confirm the trustworthiness on a specific institution. Boatright (2011) also applies the concept of trust on organizations by making a distinction between inter-personal trust, inter-group trust and inter-organizational trust. Following the same current, Recklies (2009) identified two layers of trust, the inter-personal and the inter-organizational one.

By the other hand some researchers have been discussed how to restore trust and confidence after the financial cash of 2008. Earle (2009) stated that cooperative action would appear as a guidance to reestablish trust and confidence. Mosh and Prast (2009: 20) also mentioned that trust and adopting trustworthy behaviors are essential to take cooperative actions and to developing partnership, allowing not only for a smoothly life in society but also is a way to encourage prosperity.

Nonetheless, some researchers also appointed that there is not only a lack of trust in the banking system but also on the public trust. For instance Earle (2009) argues that public also are responsible for the house bubble taking in consideration the weak affordability on borrowing.

Furthermore the special report on the Dynamics of Public Trust in Business (2009: 28-30) also gives a set of recommendations on restore trust in general (not only in the banking sector) after financial crisis:

1. "Create a set of values that define and clarify what the enterprise and its people are at root, and work to ensure that these values are adhered to consistently across enterprise" – This has to start by stating a clear mission and values ensuring that stakeholders understands and are able to recognize it in practice. Being committed to an ethical conduct, creating social value and engage employees in a open dialogue are also essential to guaranty that the same values are shared in the whole company.

2. "Build and manage strong relationships based on mutual trust with mediating institutions" – this action have into account not enhancing dialogue by listening and being willing for discussion but also it is expected the creation of partnerships;

3. "Embrace transparency" – This action requires the availability of information about performance, code of conduct, social impact and other information that impacts stakeholders and their perceptions;

4. "Work within your business sector to build trust in the sector" – the idea behind of building trust in the sector and not only on the company basis is that the company reputation will be gathered on a group of companies. Two major advices are gave - develop and monitoring indicators that allow to understanding how are companies creating value and the intentionally adoption of public standards and regulation.

5. "Reinvest in the trustworthiness of your firm by making a commitment to enhance the core contribution the firm makes to society" – the advices are to estimate the societal trends and

linking it with business opportunities allowing and to enhancing value creation. Companies need to be committed with their social responsibility and take the right decision based on negative and positive impact analysis.

Likewise Boatright (2011) also have applied for ethics and morality perspective on restoring financial system after crisis. The researcher pointed that ethics and morality are a guiding of human behavior including in the baking system and so internally employees must be concerned with it and externally, it is recommended the availability of Ethics code, code of conduct and mission.

Moreover some researchers such as Groeneveld and Vies (2009), Groenelveld *et al* (2012), Leogrande (2011), Ayadi *et al* (2010) and Fonteyene and Hardy (2011) have been taking this emphasis on values, mission, code of conduct, social value, performance and reputation to pointed that financial crisis have enhanced the opportunity to cooperative banks. According to them cooperative banks should demonstrate its values and show why they should be the example for financial institutions that have adopted unethical behaviors, having damaged confidence and social and economic environment globally. Cooperative banking models appears as the solution for restoring confidence and trust crisis by being concerned on society interests, protecting customers and making partnerships. Additionally EACB states that cooperatives banks want to be a part of the solution of financial crisis, by driving force to a more sustainable society and economy.

The following analysis provides a deeply study in order to understand the cooperative banking model on its values and propositions, extend why financial crisis is an opportunity to cooperative banks.

2.3 The cooperative banking model – features and opportunities

To better understand the nature of cooperative banks, Ayadi *et al* (2010) clarifies that cooperative banks are "private economic firms, i.e. organisations which use resources to add value in the creation of goods and services." According to them cooperative banks compete with the other types of firms in the market however cooperative banks have different organizational forms, values and goals. Their economic role is different between their competitors. Additionally, the International Co-operative Banking Association comes up with a definition for cooperative bank: "A co-operative banks is a financial entity which belongs to its members, who are at the same time the owners and the customers of their bank. Co-

operative banks are often created by persons belonging to the same local or professional community or sharing a common interest. Co-operative banks generally provide their members with a wide range of banking and financial services (loans, deposits, baking accounts…).”[5]

Moreover not only Ayadi *et al* (2010) but also Leogrande (2011) have made a distinction on two types of banks, the Shareholders Value banks and the Stakeholders Value banks. The two models coexist in the baking system however their have different meanings. The first is concerned with the profit maximization for bank shareholders, maximizing their interests so the line of business is driven by short run profit. The second is worried about how to create value for stakeholders. Cooperative banks adopt the second value model since their focus is the value creation for its main consumers and for regional economy and society. On a cooperative basis, profit continues to be essential since it allows to survive and to expand but they are driven by two different bottom lines, the social maximization and profit generation. Additionally cooperative banks have been concerned about financial stability sustainability by been focused on long run relationships, continuing granted credit, mortgages and other financial services. This explains why they are less likely to suffer in a financial crisis context.

So that recognize the sustainable financial position of cooperative banks, it is required to identify their values and its concept model. Starting by the values, Ayadi *et al* (2010) and the EACB appointed six key values[6]:

1. “Trust: The keystone of co-operative banking” – This value focus the relationship between customers and banks, by having as a major goal serving the customer’s interests and satisfaction;

2. “Governance: Members control their bank” – On cooperative banks the governance structure is completed by its customers and members throughout the presence on boards or councils, allowing to protect customers interests at local and national level and it allows diversity in decision making throughout the consensus driven approach.

3. “Resilience: Solid adapting to changing circumstances” – It has to do with low risk appetite due the low engagement on risky activities and long term orientation, preserving high capital reserves. The focus on local community makes easily to adapt when the

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[5] http://www.icba.coop/co-operative-bank/what-is-a-co-operative-bank.html
[6] http://www.eacb.coop/en/cooperative_banks/key_values.html

context change. In addition, retained profits are not commonly distributed, allowing to collect reserves over time trying to avoid go to market to borrowing.

4. "Proximity: Closest the customers" – The physical proximity on local community is essential to build consistent branches and social networks. Speaking the same language is the way to support locals.

5. "Social commitment: Supporting and operating nearby" – By being physically on local communities cooperative banks contribute for social environment. So, taking initiatives on a small scale (local scale) improves the clients' environment.

6. "Solidarity: Emphasizing the common good of society" – Cooperative banks promote entrepreneurship and the reinvestment of capital at the local level. On the solidarity slop, cooperative banks also made capital available for people and companies that show eminent need, providing mutual guarantees in case of default.

Additionally, according to EACB (2011:11) "Cooperative banks are key players in the area of Socially Responsible Investment (SRI) products. Green finance is increasingly gaining importance and a variety of investment solutions allow the customers of co-operative banks to contribute to the preservation of the environment." Cooperative banks gains particular importance on be concerned about environment, promoting investment solutions on green economy[7].

EACB (2011:15) also emphatises that "Cooperative banks are significant actors for the social microcredit in Europe providing loans to persons and small companies that would otherwise be financially excluded. In the context of the global crisis, they have launched several initiatives to assist members and clients with temporary difficulties. More in general they strive to provide inclusive services also to the more vulnerable segments of the population.".

To understand cooperative modus operandi Ayadi *et al* (2010) give insights about agents on local or regional basis and about the its level for instance NCIs (Network Central Institutions). NCIs had appeared to centralize not only transactions but also to centralize support services as marketing, IT, accounting and so on, allowing benefiting from economies of scale. However, in some cases NCIs ended up to embrace other roles such as manage liquidity, manage the

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[7] Chapple (2008: 1) provides a definition on green economy: "At its most basic level, the green economy is the clean energy economy, consisting primarily of four sectors: renewable energy (e.g. solar, wind, geothermal); green building and energy efficiency technology; energy-efficient infrastructure and transportation; and recycling and waste-to-energy. The green economy is not just about the ability to produce clean energy, but also technologies that allow cleaner production processes, as well as the growing market for products which consume less energy, from fluorescent lightbulbs to organic and locally produced food. Thus, it might include products, processes, and services that reduce environmental impact or improve natural resource use.".

access to capital markets, manage mutual support system, manage product development, risk management and consultancy role. The following figure shows the relation named by "circular authority" between local banks and NCIs in the whole system (Ayadi *et al*, 2010: 23). Note that in order have a simple vision of the cooperative system the following picture does not consider intermediary structures.

Figure 1 Circular authority in cooperative banks. Source: Ayadi *et al* (2010: 23)
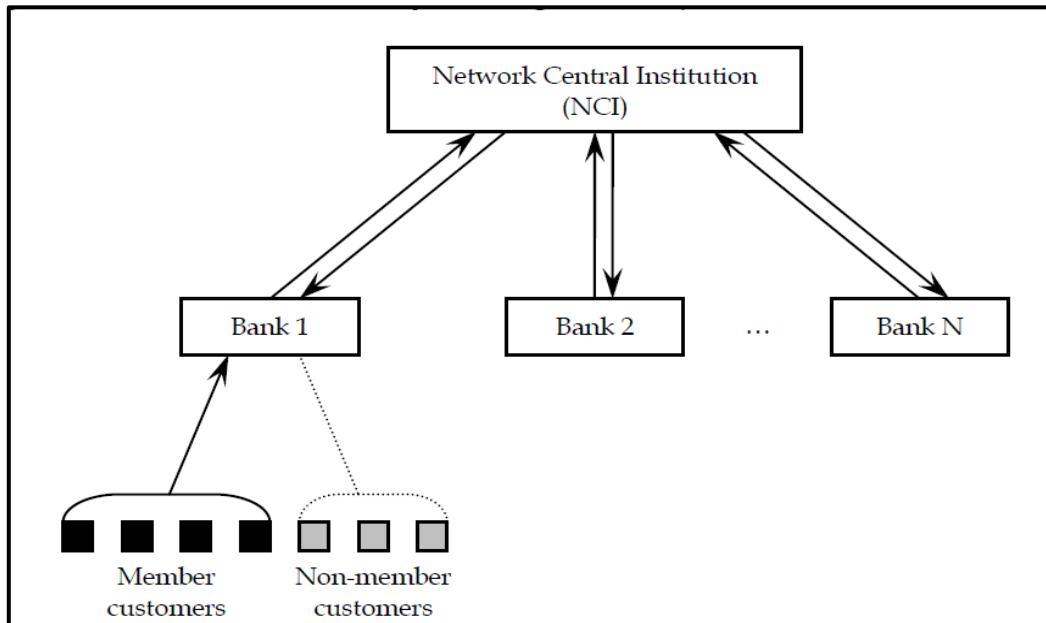
Once the values and the way of working are stated it is the opportunity to develop why financial crisis is considered an opportunity for cooperative banks and the main arguments behind this idea. In this way, it will be considered five main theoretical arguments on the cooperative banks increasing visibility, trying always to link the financial crisis causes and consequences with the cooperative way of business.

The first theoretical argument is introduced by Ayadi *et al* (2010) and is concerned with the access to financial services, allowing individuals with lower income and earnings to engage on a credit process. Cooperative banks engage on this course almost without engaging on collateral due to the physically proximity to its customers. According to Groeneveld and Vries (2009) proximity allows to mitigate risks verified in financial crisis 2008 such as the asymmetric information and the moral hazard problem because on a local basis, cooperative banks can monitor and access the customer context and use enforcement methods if necessarily. By the other hand, Ayadi e*t al (2010)* also mentioned that large financial banks

show fewer abilities on processing and communicate the customer daily information on superior structures, which means that relevant information could suffer losses.

Ayadi e*t al* (2010) exposed the second argument enlightening that is concerned with the regional growth and development. Generally, in the baking system when customers come up to savings, banks mobilize them into a fund and at the same time those funds will be the feeders for the next lending processes. The main feature of cooperative banks is that as they work on a local basis, savings are mobilized to the local funds which will provide credit to local economic agents, which will stimulate employment.

On the third argument Groeneveld and Vries (2009) point out that cooperative banks should demonstrate strong balance sheets and lower credit risks due the its local nature. Ayadi e*t al* (2010) also argument that cooperative banks manage the intemporal risk to reach a smoothly risk smoothly across time allowing to create social value by taking advantage of great times of savings, accumulating reserves perpetually and unlocking them in crisis moments such as the 2008 financial crisis.

The fourth and the last theoretical argument is concerned the long term focus on the customer value also pointed from Groeneveld and Vries (2009). As it is pointed out the customer centricity and the long term focus on relationships are central to cooperative banks. The long term orientation avoids the maximization of the value shares in the short run (Leogrande, 2011) as it can be observed in the Shareholder Value model, leading to anxiety for profit in the short run. Unlykely, cooperative banks work on a healthy profit basis due the reserves accumulation, with lower risk appetite and are primarily focused on the customer' interests instead of being on shareholders' interests. This is the main reason why cooperative banks increases stability in the system.

Groeneveld and Vries (2009) go further on the analysis and stated the major differences between cooperative banks and commercial. Therefore three dimensions will be analyzed - performance, losses, stability. On the first dimension, the researchers consider the tier 1 ratio[8], rating, profitability and efficiency to conclude about performance. So on tier ratio 1 cooperative banks were at reasonably high level of capital due the high capitalization (since cooperative banks are not able to issue shares) and the less involvement on turbulences originated on investment banks which has to do with the retail operations focus. The ratings

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[8] Groeneveld and Vries (2009: 10) defines tier ratio 1 as "The Ratio reflects the amount of equity compared to the risk-weighted assests of a bank".

set by Fitch, Moody's and Standard & Poor's show financial solidity and stability. Profitability as expected reached below average values as its main goal is the customer satisfaction. The studies on efficiency stated that there are little differences between cooperative banks and commercial banks on efficiency however in some cases as the western European cooperative banks works more efficiently. Nonetheless, the return on equity cooperative banks compared with the whole banking system appoints a substantial turning point on trend after 2008, in which cooperative banks have shown a stronger position as it is possible to observe in graph 1.

Graph 1 Return on equity of Cooperative Banks and the whole banking system. Source: Merlin *et al* (2012: 113)
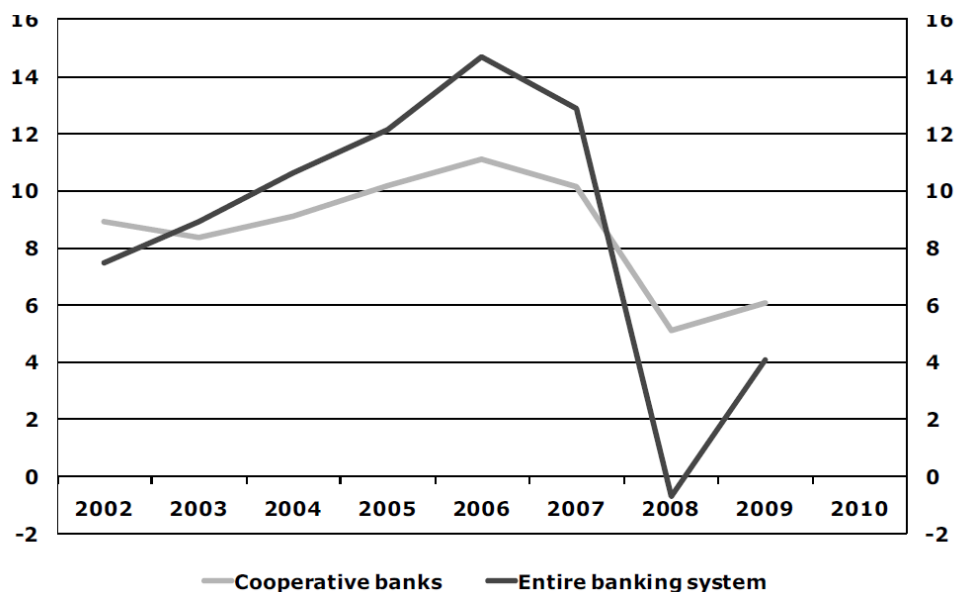
On the financial crisis losses, cooperative banks besides their ethical and moral values have also suffered considerable losses on operations and on structured products since there was a contagious scenario in the whole banking system.

The third dimension has to do with stability which is measure with the Z scores[9]. The study was based on 45 countries (36 commercial banks and 9 cooperative banks) and the results on Z score of cooperative banks are always substantial higher than commercial banks from 2002 to 2007.

The results on dimentions are expected in accordance to cooperative model framework and researcher such as Groeneveld and Vries (2009: 21) appoints that cooperative banks should

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[9] Groeneveld and Vries (2009: 17) explain the Z score as "Z score indicated by how many standard deviations the return on total assets has to change to cause the bank's assets to fall below the value of its debts. The higher the Z value, the more stable the bank".

"continue to steer a steady course and remain close to their core values and to traditional banking.".

Nontheless, "cooperative have been criticised both for being too much like commercial banks, and too little like them. Local branches of cooperative networks, it seems, can struggle to keep their institutions on the straight and narrow" according to NEF[10]. However, the same study reveals that nations that do not have cooperative banks are more available to increase growth, while nations with cooperative banks are more likely to be protected and helped by cooperative banks. Furthermore it appoints that cooperative banks have faced relatively well financial crisis and that they were able to increase market share.

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[10] NEF – Cooperative banks: international evidence.

3.   Methodology & Method

The following chapter provides a three information stages. The first one has to do with the literature gap analysis and aims to identify the lack of existing information about a certain subject and suggest it as further research. The second stage is fully dedicated to explain what are the dissertation main objectives giving two questions research and its respective hypothesis to test. On the last stage, it starts by present the methodology, method and data analysis. Method it will present the three main available methods and the chosen one, establishing the main arguments. Method will be followed by methodology which is the guide to collect data and finally, this chapter will also consider the data analysis procedures, explaining in detail the processes and tools used.

3.1 Gap Literature Analysis

From the Literature Review, it is possible to identify two major gaps. The first one is related with the consumer trust in financial system and the second one is related to cooperative banks awareness. Those gaps are driven mainly from the lack of existing literature applied to Portugal, based on Portuguese scenario.

Considering the first mentioned gap there are several data on Portuguese consumer confidence. INE which is the Portuguese Institute in charge of National Statistics provides a deep analysis on four main sectors which are Industry, Construction and Public Construction, Commerce and Services[11]. Nonetheless the provided data about services does not make an escalated desegregation on the different types of services. Therefore, it is hard to find a source of data on financial system consumers confidence. Nonetheless there is an applied trust barometer for Portugal which results from a partnership between the Edelman Trust Barometer, a consulting company and two Portuguese management universities. But still there is no deeper investigation on Portuguese trust and confidence on financial system as Mosh and Prast (2009) have developed for Netherlands.

Moving the focus for the existing literature on cooperative banking, it is possible to state that the major contributes are on the cooperative bank past history and its values, a comparison between cooperative type of banks and the traditional ones and finally the central arguments on cooperative bank as a solution to restore financial system after the 2008 financial crisis. Nonetheless, the most applied studies on this subject are mainly about European countries

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[11] INE provides reports for media proposes on the environment of Portuguese economy in a monthly basis.

such as France, Austria, Italy, Germany and Spain (Bülbül e*t al*, 2013). The existence of EACB also justifies the increased emphasis of study European countries. In the same current, Fonteyne (2007) presented data about Austria, Finland, Germany, Greece, Italy, Netherlands, Portugal and Spain. However, a further analysis on Portuguese scenario hasn't been provided yet taking in consideration the scientific studies available, unless a study provided by Lima (2012) bring up the subject solvency of cooperative Portuguese banks.

Still on the cooperative banking subject, the voice of consumers and the citizens voice are not considered in the previous analysis since the studies are about financial data such as performance, stability indicators on the internal institution perspective. Moreover, the considered literature in the previous chapter does not apply to the difference between the commercial bank and cooperative bank in the way they behave on the environmental matters.

This thesis contributes to both gaps but in different detail levels. It provides new applied knowledge on Portuguese trust and preference of banks and as well on its awareness for the cooperative banks, which can be seen as a new topic for further investigation.

3.2 Aims and Research Questions

As previously mentioned this thesis aims to identify if Portuguese citizens consider in their choices the values of the different types of banks as well as their awareness to cooperative banks. Furthermore, it also aims to verify if Portuguese citizens considered cooperative banks as the type of bank able to avoid many of the mistakes made by larger private sector institutions (Kodres and Narain, 2010), especially after the 2008 financial crisis.

In order to develop the study the research has developed a two stage analysis by setting two different quantitative questions research with specific related hypothesis to statistically test. Note also quantitative question research refers to the "relationship among variables and pose this in terms of questions and hypotheses" (Creswell, 2003: 8). Both questions research are associated with the Portuguese citizens preference on the values and practices of banks bringing to the study economic, social and environmental matters in the way banks behave.

The first question research intends to point out the role of the banks in society considering to major components – well-being of society and the maximization of dividends. These two subjects appear from the debate between the Shareholder Value Banks and the Stakeholders Value Banks as previously emphasized by Leogrande (2011). The question research and the two related hypothesis are stated bellow.

Quantitative Research Question 1:

What is the Portuguese opinion about the role of the banks in society?

Hypothesis 1.1: Banks should be concerned in promoting the well-being of society.

Hypothesis 1.2: Banks should maximize the dividends to the shareholders.

Hypothesis 1.1 aims to test if Portuguese citizens consider that banks should boost the well-being of society. The well-being of society is one the primary goals of Cooperative banks given the emphasis on relationship trust, governance model, resilience on adapting, customers proximity, social commitment and solidarity, creating value to its stakeholders on a regional economic and social basis according to EACB. Moreover, "Cooperative banks' objective is not to maximize profits, but rather their members' consumer surplus; this is in some cases complemented by additional objectives that seek to contribute to the well-being of stakeholders other than member-consumers, such as employees" (Hesse and Čihák, 2007: 5). Also according with the same researchers "the consumer surplus can be viewed as the first line of defense for cooperative banks, in a similar way as profits are the first line of defense for commercial banks (Hesse and Čihák, 2007: 12). The exposed references are the main reason to link well-being to cooperative banks within the Stakeholders Value Banks model. Nonetheless, Freeman (1984) also suggests that Cooperative Banks should be a proxy to Stakeholders Value Banks model.

By the other hand Hypothesis 1.2 aims to verify if Portuguese citizens consider that banks should be focused on the dividends maximization for its shareholders. This hypothesis is directly concerned with the Shareholders Value Banks, driven by the profit achievement in the short run as mentioned by Leogrande (2011).

Both hypotheses intends to test if portuguese citizens are aware and concerned about the differences between both types of banks (cooperative versus non cooperative banks such as commercial banks) in its values, way of conduct and major consequences for the financial system as a whole and for society as well. As Groeneveld (2011: 12) mentioned in relation to cooperative banks, "unlike with [shareholder owned] banks, profit is not a goal in itself but are necessary for continued growth: they are a 'means to an end' rather than the 'end' itself."

The second and the last research question was created in the same current and is concerned with the three main subjects which are the banks preference of Portuguese citizens when impacting trust, arising of financial crisis and ethics, social and environment matters. This

question research aims to understand if those three topics are considered when Portuguese citizens have to select a bank. The same question is described below with the corresponding hypothesis.

Quantitative Research Question 2:

What type of banks would Portuguese citizens like to have in Portugal?

Hypothesis 2.1: Portuguese do not trust the existing banks in Portugal.

Hypothesis 2.2: Portuguese would like to have banks concerned with ethics, environment and social matters.

Starting by the hypothesis 2.1 and as mentioned before, the emphasis on trust is one of the main principles of Cooperative banks (EACB) by being concerned on society interests, protecting customers and making partnerships. The researcher decided to focus on trust instead of confidence since they are different concepts. The first one is connected with relationships and the second one, confidence, is used to build trends, as it is more calculative and instrumental (Mosch and Prast, 2008; Earl, 2009). Since this thesis aims to catch the citizen perception it makes sense to apply the concept of trust.

This hypothesis gains special relevance after this context of pos 2008 financial crisis (Debab and Yateem, 2012; Bordo, 2008; Jo *et al*, 2009) and aims to test if Portuguese citizens trust in the actual Portuguese banks institutions. By trust it is understand honest and dependable relations (Mosch and Prast, 2008). Furthermore, Boatright (2008) also appointed trust on a relationship basis when describing that a certain future action could be decided by others even facing the risk of negative outcomes, triggered by untrustworthy situations.

By testing this hypothesis is also possible to study what type of values and concerns Portuguese citizens have when considering the different levels of trust. The aim is to find patterns in Portuguese citizens.

Moving the focus for 2.2 Hypothesis, it is concerned with bank behaviors on ethics, social and environmental matters. This hypothesis aims to verify if Portuguese citizens are aware of the differences between cooperative and non-cooperative behaviors since different types of banks have different types of values and different types of engagement in society. Goglio (2013) mentioned the fact of cooperative banking be a solution, fixing social, economic and institutional lacks, encouraging to entrepreneurship, creating and sustaining social netwoks, introducing technology and following on information dissemination. And in this cooperative

banks should stay as co-generators of development, contributing to community creation and local development. So, the purpose on test hypothesis is to understand the awareness about the three topics, trying to identify if those topics are considered when selecting a bank.

3.3 Methodology, Method and Data Analysis

After presented study goals and aims make sense to move the attention for methodology and method. Those are two different concepts thus it matters to first understand them to proceed on the applied study methodology and method.

Methodology is defined as the process of study a certain subject or as a "plan of action that links methods to outcomes-governs our choice and use of methods (e.g. experimental research, survey research, ethnography, etc)" (Creswell, 2003:4). Henning (2004:36) describes methodology as coherent group of methods that complement one another and that have the ability to fit to deliver data and findings that will reflect the research question and suit the researcher purpose. According to Holloway (2005:293) methodology means a framework of theories and principles on which methods and procedures are based.

Still on methodology and according to Burney (2008) there are two main types research approaches – Inductive and Deductive approach. Marshall (1997: 17) explains this two approaches in the following quotes "When researchers first begin to open up any new line of enquiry there will be no useful theories available from which to deduce propositions for testing. Knowledge has to begin with collecting facts and then trying to find some order in them. This is known as induction. Deduction is the technique by which knowledge develops in more mature fields of enquiry. It involves a sort of logical leap. Going a stage further than the theory, data is then collected to test it".

Once stated the methodology, it is crucial to realize how is possible to apply it. The scope is to understand what is the most appropriated design research to engage. According to Creswell (2008) and Harwell (2011) there are three main methods on design research, the qualitative, quantitative and the mixed methods. Creswell (2008) pointed out that "a study tends to be more qualitative than quantitative or vice versa" and that "Mixed methods research (…) incorporates elements of both qualitative and quantitative approaches" Creswell (2008: 3). Moreover, Creswell also describes the qualitative as the research that uses words and the numbers or closed-ended questions to quantitative research. In the same current, "quantitative research is research that aims to measure using numbers. Typical forms of quantitative

research are surveys, in which many respondents are asked questions and their answers are averaged and other statistics calculated; On the other hand, qualitative research most often describes scenes, gathers data through interviews, or analyses the meaning of documents. In both types of research, one is measuring the social world, but in quantitative designs, the aim is to create a numerical description, perhaps through a process of 'coding' verbal or textual data. In qualitative designs, one creates an account or description, without numerical scores" (Gilbert, 2007: 36).

Furthermore there are some researchers such Creswell (2003) and Gelo *et al* (2008) working on research design that developed other relevant concepts within methodology and method concepts. "Philosophically, researchers make claims about what is knowledge (ontology), how we know it (epistemology), what values go into it (axiology), how we write about it (theoric), and the processes for studying it (methodology). Four schools of thought about knowledge claims will be discussed: post positivism, constructivism, advocacy participatory, and pragmatism." (Creswell, 2003:6). Creswell also named the four schools as philosophical worldviews, paradigms, epistemologies and ontologies. By the other hand, Gelo *et al* (2008: 5), has considered just three of the worldviews or philosophical foundations as is possible to observe in the following quote. With reference to quantitative and qualitative research approaches, three main worldviews may be identified: objectivism (…), subjectivism (…) and constructivism …".

Presented the main concepts about design research and study approaches, it matters to understand what and how should those concepts be applied into this dissertation.

At this point, the chosen method is the quantitative one as the researcher strategy is statistically test the hypothesis mentioned before. Taking into consideration the Marshall rational presented above, this dissertation will apply the deductive research approach since the goal is moving from wider generalizations and theories (stated on literature review) to particular observations. Again according to the Burney (2008), it is a top-down approach that follows four main steps linked with theory, hypothesis, observation and confirmation. Moreover, "quantitative methods are frequently described as deductive in nature, in the sense that inferences from tests of statistical hypotheses lead to general inferences about characteristics of a population" (Harwell, 2011: 149).

Having selected the quantitative method it matters to figure out the details behind it, defining and explaining how to use it. According to Harwell (2011:149) "quantitative research

methods attempt to maximize objectivity, replicability, and generalizability of findings, and are typically interested in prediction" and he also stated that "key features of many quantitative studies are the use of instruments such as tests or surveys to collect data, and reliance on probability theory to test statistical hypothesis that correspond to research questions of interest".

Additionally, this thesis will consider the postpositivism worldview of Creswell (2003:7) which is the most appropriated having in mind the quantitative approach and the "need to examine causes that influence outcomes, such as examined in experiments." In addition, the same researcher expressed in relation to postpositivism that it is linked with determination, reductionism, empirical observation and measurement and finally theory verification. Likewise, he stated the following "postpositivist lens is based on careful observation and measurement of the objective reality that exists "out there" in the world. (…) Thus, in the scientific method-the accepted approach to research by postpostivists - an individual begins with a theory, collects data that either supports or refutes the theory, and then makes necessary revisions before additional tests are conducted." Creswell (2003:7).

Moreover, Phillips and Burbules (2000) have developed key assumptions for post positivism and it will be applied four out of five. The first assumption is that is not possible to prove hypotheses since absolute truth cannot be found because research itself is imperfect. The second key assumption is that the most quantitative research starts testing a theory. The third is related with the way of collecting information since the used instruments are based on measures and observations are usually recorded by the researcher. The last one is the necessary objectivity of inquiry, giving no opportunity for bias.

Once stated the methodology and method approaches and the worldview it is missing how to go further on data collection and analysis. The next paragraphs are fully dedicated to explain the details of the data gathering and analysis.

Gelo *et al* (2008) developed attributes for each type of methods, qualitative and quantitative about sampling, data collection and data analysis.

Starting by sampling, "sample is the section of the wider population that will be engaged in the survey and sampling is the process of identifying who you will aim to contact from that population. The word 'population' is used to describe the target group, and while this may be the national population as a whole" (MacDonald and Headlam, 2009: 12). In this thesis, the

considered population is Portuguese citizens and therefore the survey[12] will be applied to a sample of 600 Portuguese citizens[13]. Besides the sample size, the study will not be compromised by the statistical significance, meaning that from the statistical point of view, it is statistically significant. Therefore, the selected sample is representative of Portuguese Citizens as a whole. The response rate was 100% since the survey was implemented using telephone making possible to reach the total aimed number of individual responses. Additionally and applying again to Gelo *et al* (2008) to this study, it is a stratified random sample. The sample was performed by adults, over eighteen years old.

Moving the attention to data collection, the used method was surveys or questionnaires as a primary data to Portuguese citizens which were answered by telephone. Gelo *et al* (2008: 275) also named surveys by standardized questionnaires on data collection, stating that "data collection is attained by using tests or standardized questionnaires (which assess performances, attitudes, personality, self-perception, etc)". In the same current, "Surveys are a popular method of collecting primary data. The broad area of survey research encompasses any measurement procedures that involve asking questions of respondents." MacDonald Headlam (2009: 11). The survey was made in Portuguese Language. It was sponsored by SystemicSphere[14] and for that reason the database is totally confidential, meaning that it is not available for further investigations at this time without considering a previous request to the referred company.

The researcher aimed to have closed questions. Closed questions prescribe the range of responses from which the respondent may choose. Highly structured, closed questions are useful in that they can generate frequencies of response amenable to statistical treatment and analysis. They also enable comparisons to be made across groups in the sample (Oppenheim 1992: 115). The closed questions can take several forms. Nonetheless, in the applied questionnaire it is also considered different question types of closed questions which mean different types of level data gathered.

Note that besides the approach be quantitative, data gathered is considered qualitative, since the values that a variable (question) can assume are codes and not numbers as in the case the quantitative variables. On a qualitative data gathered each code has an attribute or a quality;

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[12] See the applied survey in Annex I.
[13] See Annex II regarding statistical sample characterization.
[14] SystemicSphere is an economic, social and environmental consulting company dedicated to the new economy.

values do not have a numerical meaning and cannot be ordered numerically; it is also named by categorical variable (Nelson, 2009).

Still on data collection, it was collected between in August, 2014. Moreover, according to Gilbert (2007: 36) a survey can be longitudinal (over a period of time, repeatedly observing or interviewing the respondents) or cross-sectional. The implemented survey is considered as cross-sectional since it typical social survey with all the responses at the same time (even in practice, with a few days between the first and the last response). For Cohen et al (2007: 213) a cross-sectional study is one that produces a 'snapshot' of a population at a particular point in time.

To close the three dimensions of Gelo *et al* (2008), it is required to understand the last dimension which is data analysis. In order to analyze the data, it was essential to select a statistical software. In this case the chosen software was the Statistical Software Package for Social Sciences (SPSS). Moreover, the data was properly transformed into codes and each code has a specific attribute. The analysis included Chi- Square distribution analysis which allows to understand the if is possible to state a relationship between variables (which are the survey questions), a statistical descriptive analysis that allows to answer hypothesis directly and a Muiltivariate Analysis linked with Multiple Correspondence Analysis (MCA) which enables to analyze if is possible to identify certain patterns on population.

Besides the tools, on data analysis is not considered the responses of "don't know", "no answer" which are from people that do not have a position on certain subject and for that reason, according to Carvalho (2008) they are considered as missing values. From the SPSS available strategies on missing values the chosen one for this dissertation was to exclude missing values selecting the SPSS mode option, to guarantee no influence of responses.

Starting by Chi-Square, Bryman and Cramer (2005) suggest that for categorical variables it should be applied a non-parametric test within three test options: Binomial test, Chi-Square test for one sample, Chi-Square test for more than one sample. The applied test is the third option as recommended by them in the following statements "If we wanted to compare the frequency of cases found in one variable in two or more unrelated samples or categories of another variable, we would also use the chi-square test." Bryman and Cramer (2005:154).

Chi-Square "can be used to determine if categorical data shows dependency or if the two classifications are independent. It can also be used to make comparisons between theoretical

populations and actual data when categories are used." Ullman (1978: 234). In the same current, Kothari (2004: 237) also referred the use of X^2 (Qui-Square) for independence testing purposes stating "As a test of independence, X^2 test enables us to explain whether or not two attributes are associated".

The researcher aims to apply the Chi-Square test on SPSS and therefore instead of explaining how the test is mathematically computed it will be briefly described how to run the test on SPSS and how to interpret the test result.

Chi-Square test is computed on SPSS through the crosstabs procedure. "Crosstabulation is one of the simplest and most frequently used ways of demonstrating the presence or absence of a relationship." Bryman and Cramer (2005:201). The same researchers also mentioned the existence of null hypothesis concept and its rejection stating "the starting point for the administration of a chi-square test, as with tests of statistical significance in general, is a null hypothesis of no relationship between the two variables being examined. In seeking to discern whether a relationship exists between two variables in the population from which a random sample was selected, the null hypothesis would need to be rejected. If the null hypothesis is confirmed, the proposition that there is a relationship must be rejected." Bryman and Cramer (2005:208).

In other words and giving a practical example, the hypothesis tested by Chi-Square are H0 which is the null hypothesis and H1 which is named alternative hypothesis taking the denomination given by Kothari (2004):

H0: No relationship exists between "X" and "Y".

H1: A relationship exists between "X" and "Y".

After Crosstabs procedures the study continues on interpreting the test results taking in consideration the hypothesis and the significance level (or the α value). Significance level is the likelihood of being incorrect about declaring that a relationship between variables exists and its definition was suggested from Bryman and Cramer (2005). The researcher also suggested to state significant level at 0,05 (5 per cent). Continuing on following the researchers rational, if Chi-Square value is greater than it's critical value[15], the test will give a significance level higher than 5 per cent, then this implies that H0 will be rejected, and so

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[15] Chi-square critical value is given by Chi-Square table where are presented all the critical values for this distribution.

accept that there is a relationship between variables. On the other hand, if Chi-Square test gives a lower significance level than 5 per cent, the H0 should be accepted and should be stated that a relationship between variables exists.

For this study purpose the Chi-Square test is crucial to determine what variables should integrate the MCA. Concluding on Chi-Square, the variables which showed a relationship after computed the Chi-Square were submitted to the MCA.

Descriptive statistics is the second data analysis approach. It allows to "summarise data" and "if large amounts of data can be summarised, it becomes possible to detect patterns and tendencies that would otherwise be obscured." Bryman and Cramer (2005: 86). Concerned with summarise data there are a few procedures such as frequency distributions and the arithmetic mean. Frequency distributions will be further applied, since the idea of a frequency distribution is to state the number of observations in each category. The same researchers stated 'frequency' as is the number of times something happens. Nonetheless, to simplify the analysis is common to compute the relative frequency which means the proportion of cases within each frequency. Frequency distributions allow to show the results in tables and graphs and could be also computed in SPSS on the descriptive analyzes option.

Moving the focus the multivariate approach, it allows to "explore the joint performance of the variables and determine the effect of each variable in the presence of the others." (Rencher, 2002: 15). Anderson (2003) also defines multivariate statistical analysis as a statistical procedure concerned with data measurements on a certain number of individuals.

Carvalho (2008) associate the multivariate analysis to Multi Component Analysis (MCA) since it enables to make an analysis on relationships of more than one variable. "Because MCA has been (re)discovered many times, equivalent methods are known under several different names such as optimal scaling, optimal or appropriate scoring, dual scaling, homogeneity analysis, scalogram analysis, and quantification method" (Abdi and Valentin, 2007:1). Moreover, according the same researcher and applying to practice "each set of discrete variables is often accompanied by some additional information about subjects and/or categories. For example, subjects' demographic information (e.g., age gender, level of education, etc.) and their group membership may be available as auxiliary information. So, this type of analysis enables a further investigation on understanding if certain matters had analogous responses in relation to a set of questions.

Carvalho (2008) suggest that this type of studies should be based on multidimensionality, structural approach and qualitative data. According to the same researcher, MCA procedure will use qualitative data input to a process of quantification. The unleashed transformation aims to estimate optimal quantifications (optimal scaling)[16] for the parameters under consideration: classes and objects.

One of the main potential uses of MCA is the representation of multidimensional space - the space of p categories or the space of n objects – into a graphic, so it is necessary to define (at least) two dimensions. In that way and for this thesis purposes, some questions of the survey were applied in order to proceed on the optimal scaling analysis, which conduces to MCA analysis, in SPSS also. In this dissertation it was applied at a first stage 15 dimensions. By computed the MCA, one of the outputs is a table and present each Inertia[17] and Total (Eigenvalue). Inertia can take values between 0 and 1 and it should be selected two (or more) dimensions with higher inertia values, as close as possible from 1. For this study purposes was selected two dimensions (with the higher possible inertia).

Moving the focus is moved to variables (questions from the survey). Computing again the MCA with the same variables and the two dimensions, the SPSS Output shows a discriminatory measure of each variable within the first and the second dimension[18] and should be selected the variables which shows higher discriminatory dimensions. Continuing on the rational of Carvalho (2008), there is no rule on the number of variables to consider.

Besides the table with dimensions and variables, there are more outputs such "Joint Plot of Category Points", which is a graph with four main quadrants. This graph enables to conclude about Portuguese Citizens patterns based on its responses and preferences. The two dimensions have different means according to the values of each on of them by being below or above zero. Therefore, in order to better interpret the results, a name is given to each dimension giving the type of variables that it include. The further research applies to two types of variables. The first one is named by variables analysis according to SPSS which are the ones directly linked with the study and the second type are the variables that aims to characterize the social space such as age, income level and education for instance.

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[16] According to Carvalho (2008) in MCA the multidimensionality of space does not allow a direct reading and in order to face that problem, MCA applies to low dimensional representations (Gifi, 1996:58).

[17] According to Carvalho (2008) Inertia is a discriminatory measure that allows to explain the variance of each dimension. Inertia can take values between 0 and 1 and it should be selected dimensions with higher inertia values, as close as possible from 1.

[18] Note that according to Carvalho (2008) the sum of discriminatory measure of a certain variable within both dimensions is 1.

The table below describes the features and purposes of the main questions (from the applied survey) considering two different type of information – purpose of the question and analysis conducted on the question. The first type of information provided by the table below is the question purpose since it can be a question that contributes to sample characterization as mentioned before or a question that contributes to the fully research. In last scenario, there are presented the research questions above mentioned as well as the respective hypothesis in order to match what are the main survey questions that will be applied to study the different hypothesis. The second type of information is related with the data analysis of each question. In other words, it pretends to state what were the analysis within Chi-Square analysis[19], Descriptive analysis and MCA[20] that were applied to each question from the survey.

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[19] See Annex III related to Chi-Square analysis to observe the SPSS outputs on Cross-tabulation test.
[20] See Annex IV related to MCA procedures on SPSS.

Table 1 Question purposes and applied data analysis

Survey questions	Question purpose					Type of applied data analysis		
	Questions applyed to the study				Sample characterization questions	Chi-Square Analysis	Descriptive Statistics Analysis	MCA
	Research Question 1 *What is the Portuguese opinion about the role of the banks in society?*		Research Question 2 *What type of banks would Portuguese citizens like to have in Portugal?*					
	Hypothesis 1.1 *Banks should be concerned in promoting the well being of society.*	Hypothesis 1.2 *Banks should maximize the dividends to the shareholders.*	Hypothesis 2.1 *Portuguese do not trust the existing banks in Portugal.*	Hypothesis 2.2 *Portuguese would like to have banks concerned with ethics, environment and social matters.*				
1	X	X					X	
2								
3.1								
3.2			X				X	
3.3			X				X	X
3.4			X				X	
3.5								
3.6								
3.7			X				X	
3.8								
3.9			X			X	X	X
3.10			X				X	X
3.11			X					
4.1								
4.2								
4.3								
4.4						X		
4.5								
4.6								
4.7								
4.8						X		
4.9						X		
4.10						X		
4.11								
4.12								
4.13							X	
4.14				X				
4.15								
4.16								
4.17		X				X	X	X
4.18	X					X	X	X
4.19								
5				X				
6							X	
7								
8								
9								
10								
11								
12								
13			X				X	
14			X				X	
15			X			X		X
16			X			X	X	X
17			X			X	X	X
18								
19								
20								
21								
22								
23					X	X	X	X
24					X			
25					X	X	X	X
26					X	X	X	

4. Results analysis and discussion

This chapter analysis the data obtained, by elaborating on the hypothesis tested and responding to the research questions.

4.1 Research question one: What is the Portuguese opinion about the role of the banks in society?

The first question research aims to understand the Portuguese opinion about the role of banks in society, testing two main hypotheses. The first hypothesis (H1.1) states that Banks should be concerned in promoting the well-being of society and the second hypothesis (H1.2) states that Banks should maximize the dividends to the shareholders. The first one can be linked to cooperative banks and the second to private banks, as seen before in chapter two. So, if H1.1 is accepted, H1.2 should be rejected. Moreover, as it was seen on chapter 3 − 3.2 Aims and Research Questions, H1.1 should be driver to Stakeholders Value Banks model aiming to achieve well-being maximization and H1.2 should be driver of Shareholders Value Banks model, pointing to maximize the dividends to distribute on shareholders.

The results were based the answers of three main survey questions. First it was asked about the role itself. The relative frequency within "Role of banks: Profit maximization" was the second highest by representing 23% against "Role: Protect savings" which has demonstrate 33%. In order to test these hypothesis it was also possible to analyse the questionnaire questions regarding the variable having or not as selection bank criteria "the profit maximization" or "the well-being maximization" as main goals of banks. Thus the relative frequencies were 46,2% for having as a selection criteria a bank which main objective is profit maximization against 53,8% who says that do not have in account. Giving evidence to this data, the selection bank criteria for the banks which have as main goal the well-being maximization of society registered 81,5% against 18,5% for do not have this criteria into consideration. This data shows that Portuguese citizens are concerned about the increased role of banks in promoting the well-being of society. So, H 1.1 is accepted against profit boosting as main role of banks since such concerns are already integrated in their structure and culture.

4.2 Reseach question two: What type of banks would Portuguese citizens like to have in Portugal?

Moreover, as Portuguese citizens consider the well-being of society as main role of banks, the researcher decided to analyse in practice their preferences, asking questions about the type of

banks they would like to have. Would they prefer banks focused on well-being promotion or would they prefer the ones focused on profit maximization? Do they trust on the existent banks? Do they think that banks are acting correctly, considering the well-being promotion? Do Portuguese citizens think that banks should be concerned with environment, ethics and social issues? The built hypothesis and respective tests will answer to these questions..

Beginning by trust, 2.1 hypothesis states that Portuguese citizens do not trust in the existing banks in Portugal. Applying to the survey results and data analysis (mostly descriptive statistics and Chi-Square Analysis), the researcher does not reject this hypothesis.

From the point of view of descriptive statistics and as it can be seen below in the table 2, the response rate for do not trust in the existing banks was 58,4% against to 41,6% who trust, which means that from 570 valid responses, 333 respondents do not trust in the honesty of banks in Portugal.

Table 2 Trust in the honesty of banks in Portugal - a descriptive statistics

Trust in the honesty of banks in Portugal

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Trust Banks: Yes	237	39,4	41,6	41,6
	Trust Banks: No	333	55,4	58,4	100,0
	Total	570	94,8	100,0	
Missing	System	31	5,2		
Total		601	100,0		

Applying to Chi-Square test, it is important to verify the independence between the following variables "Trust in the honesty of banks in Portugal" and "Trust behavior since 2009 in Portuguese banks". In this case, the Chi-Square test significance is lower than 0,05 so a relationship between those two variables exists. The following table 3 enables to analyze the dependence between those variables. It allows to verify that 58,3% of those that trust in the existing portuguese banks consider that their trust level has increased since 2009. On the other hand the 70,3% of the ones that actually do not trust in banks have seen their trust levels decreasing since 2009.

On the Current banks behavior subject, the researcher found that 26,8% of Portuguese citizens considering that banks are not acting correctly against 5.1% who considered banks are acting correctly. However, 36,6% considers that banks are making an effort to act correctly and

31,5% consider that banks are not changing their behavior. Therefore, it should be asked what is the relationship between the current trust level and the current banks behavior, if exists.

In fact there is a relationship between those two variables which is concerned with the fact of those who trust in banks consider mainly that banks are acting correctly (75%) or in some cases that banks are making an effort to act correctly (60,2%). On the other hand, the ones who are not trusting banks consider predominantly that banks are not acting correctly (82,2%) or that banks are not changing their behavior (65,5%).

Table 3 Trust behavior since 2009 in Banks and actual trust level

Trust behavior since 2009 in Portuguese banks * Trust in the honesty of banks in Portugal Crosstabulation

			Trust in the honesty of banks in Portugal		
			Trust Banks: Yes	Trust Banks: No	Total
Trust behavior since 2009 in Portuguese banks	Trust: Has increased	Count	7	5	12
		% within Trust behavior since 2009 in Portuguese banks	58,3%	41,7%	100,0%
	Trust: Has decreased	Count	115	272	387
		% within Trust behavior since 2009 in Portuguese banks	29,7%	70,3%	100,0%
	Trust: Has not changed	Count	113	55	168
		% within Trust behavior since 2009 in Portuguese banks	67,3%	32,7%	100,0%
Total		Count	235	332	567
		% within Trust behavior since 2009 in Portuguese banks	41,4%	58,6%	100,0%

To conclude on 2.1 hypotheses, the researcher has not rejected that hypothesis, which means that it is possible to state that Portuguese Citizens are not trusting in the existing banks and there is an obvious relationship between the ones that do not trust in the existing banks and the ones who have seen their trust level falling since 2009. There also is a relationship between those that are not trusting banks now and the ones that consider that banks are not currently acting correct.

Regarding 2.2 hypothesis it states "Hypothesis 2.2: Portuguese would like to have banks concerned with ethics, environment and social matters.". In order to analyze the referred hypothesis the researcher has consider the willingness to switch to a more ethical, environmental and social bank concerns as well as understand if Portuguese citizens are worried and aware about those three matters, asking them if they consider it as problems and if they consider those matters when selecting a bank.

Starting by environment subject, the researcher investigated the Portuguese citizens opinions on Environmental impact of companies who use banks for financing. The data shows that people are concerned about environment since 75,7% consider that it is a problem and from that percentage, 45,3% consider it as a serious problem, meaning that only 24,3% consider that environmental impact of companies is not a problem. Moreover, almost 80% consider the environmental concerns when selecting a bank. Regarding the willingness to switch to a bank that have into account the environmental issues and concerns, Portuguese citizens show a high willingness to switch, with 70%.

Furthermore looking for the involvement on environmental and social problem solving, Portuguese citizens showed the same results, when 45,8% consider it as serious problem, 27,6% consider it as a not serious problem and only 26,6% consider it a problem. Likewise, 83,4% agree that banks should only lend money to projects which have a positive contribution to society on an environmental and social level. To close environmental matters, it is one of the Portuguese concerns when choosing a bank.

Regarding the social matters, the data is consensual on Portuguese citizens worries. Not only almost 76% consider that the inclusion or exclusion of people and companies from financial system is a serious problem but also 96% consider that household over indebtedness is a serious problem. Likewise almost 92% have as selection bank criteria the social concerns. This means that Portuguese citizens have in mind the social matters when selecting banks since they consider those problems as serious problems.

Furthermore, the ethics matters should also be considered in this analysis. Regarding ethics the researcher considered to bringing up the issues around transparency such as advertising and communication. In addition other issues were taken such as the ethical behavior of banks employees, ethical behavior of presidents of banks and its board and finally the money laundering subject.

Starting by transparency, not only 99% of the inquired consider clear and transparent communication when choosing banks but also almost 70% consider transparency in advertisement a serious problem. Regarding the ethical behavior, almost 50% consider ethical behavior of banks employees as a serious problem as well as 84% consider a serious problem the ethical behavior of banks president and board, which means that in fact, Portuguese citizens are worried about ethics in banks and consider that banks should be also concerned about those subjects.

Regarding general conclusions on this hypothesis it is possible to apply to data that include the ethical, environmental and social dimensions. Applying that data, it enables to present that almost 64% agree on switch to a bank that would guarantee that do not invest in companies that damage the environment, weapon companies or tobacco. Moreover, almost 93% consider that banks should disclose how they incorporate or not in the financial products they sell the environmental, social and ethical concerns. To finish this hypothesis analysis is possible to conclude that Portuguese citizens would like to have banks concerned with social, ethics and environmental matters.

Having stated the main conclusions on both hypotheses, the investigation goes further trying to establish patterns in Portuguese citizens by mixing its responses on some critical variables in this context as well as bringing up questions about the actual role of banks and the actual existing type of banks. The next applied analysis is named by MCA as seen in the Method and Methodology Chapter.

4.3 MCA Results

In order to present the MCA analysis as much clear as possible the researcher decided to present the next two tables which pretend to give information about the variables, legend and details about supplementary variables and the variables from the study.

Table 4 Supplementary variables in the MC Analysis

Variable (Question)	Variable Symbol	Label of the symbol	Response categories of the discret variables (Categories)	Label used in the MCA chart
23. How old are you?	🔶	Age	- < 24 years - 25-34 years - 35-44 years - 45-54 years - > 55 years	- < 24 Years - 25-34 Years - 35-44 Years - 45-54 Years - > 55 Years
25. What is your education level?	🔶	Education level	- Less than 4th grade - Old 4th grade, 6th grade or recent preparatory cycle - Old 5th year or 9th unified year, 10th year, 11º year - Old 7th year, recent 12th year, or intermediate course - University attendance or bachelor degree - University degree, masters or PhD	- < 4th grade - 6th grade - 9th unif year/ 10th year/ 11º year - Recent 12th year/ intermediate course - Univ attend/ bachelor degree - Univ degree/ masters/ PhD

Table 5 Study variables in MC Analysis

Variable (Question)	Variable Symbol	Label of the symbol	Response categories of the discret variables (Categories)	Label used in the MCA chart
3.3 Do you consider as a serious problem, not a serious problem or not a problem the exclusion/ inclusion of most disadvantaged people and companies of financial system?		Inclusion/ exclusion people and companies from financial system	- Serious problem - Not a serious problem - Not a problem	- In/ Exclusion Fin System: SP - In/ Exclusion Fin System: NSP - In/ Exclusion Fin System: NP
3.9 Do you consider as a serious problem, not a serious problem or not a problem the involvement in social and environmental problems solving?		Involvement on social and environmental problems	- Serious problem - Not a serious problem - Not a problem	- Inv SE prob: SP - Inv SE prob: NSP - Inv SE prob: NP
3.10 Do you consider as a serious problem, not a serious problem or not a problem the ethical behavior of Presidents of banks and respective board?		Ethical behavior of banks presidents and respective board	- Serious problem - Not a serious problem - Not a problem	- Ethical board: SP - Ethical board: NSP - Ethical board: NP
4.17 Do you consider as important criteria be a banks which main objective is profit maximization when selecting a bank?		Selecting bank criteria: Be a bank which main objective is profit maximization	- Yes - No	- C: Profit max - NC: Profit max
4.18 Do you consider as important criteria be a bank which main objective is the well-being maximization when selecting a bank?		Selecting bank criteria: Be a bank which main objective is well-being maximization	- Yes - No	- C: Well-being max - NC: Well-Being max
15. In your opinion, since 2009 your trust level in portuguese banks:		Trust behavior since 2009 in Portuguese banks	- Has increased - Has decreased - Has not changed	- Trust: Has increased - Trust: Has decreased - Trust: Has not changed
16. In your opinion, currently banks in Portugal:		Current banks behavior	- Banks are acting correctly - Banks are making efforts to act correctly - Banks are not acting correctly - Banks have not changed their behavior	- Banks act cor - Banks are making an eff act cor - Banks not act cor - Banks not changed beh
17. Do you trust in the honesty of banks in Portugal?		Trust in the honesty of banks in Portugal	- Yes - No	- Trust Banks: Yes - Trust Banks: No

Having the variables from the last table in consideration, they were applied for one dimension within two dimensions according with the SPSS automatic procedure on MCA[21]. Each dimension is fulfilled by variables (variables from the last table which were applied into the survey) and those variables can assume a range of categories (possible answers). So, the categories of each variable can take values below or above zero, having different meanings. The goal of this analysis is establishing a pattern within the first and the second dimension, mixing those variables.

As seen before the Portuguese citizens trust on the existing banks is a critical issue. Therefore, the first considered dimension pretends to specify the current scenario about the Portuguese banks behavior and its consequences in terms of trust trying to establish a pattern. Hence as it can be analyzed from the figure 2 below, the first dimension is named by Trust and Behavior and it includes four different variables.

Figure 2 Dimension 1 within MC analysis
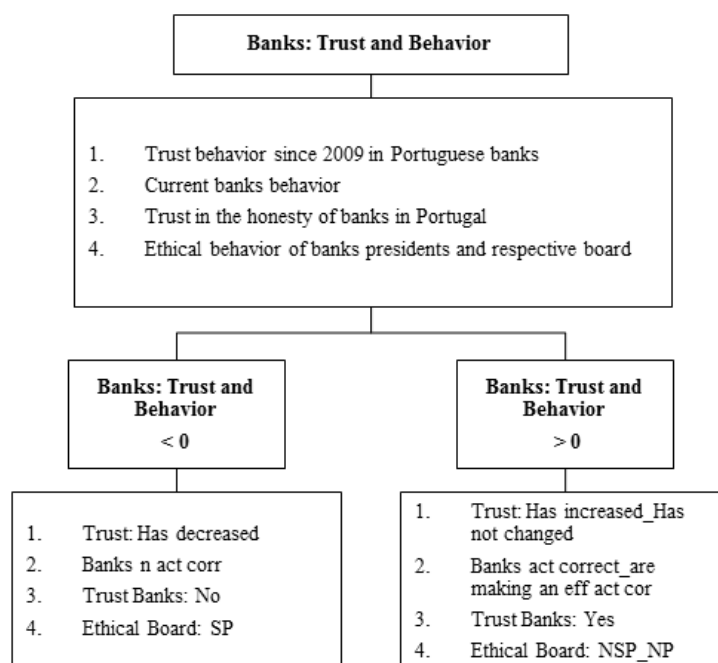
The same happen with the second dimension but this one is related with the type of bank considering a more well-being concerned or less concerned. As seen before Portuguese citizens prefer to have well-being orient banks so for that reason the researcher named this dimension by the willingness to have well-being concerned banks. It also has into account four different variables as it can be seen in figure 3.

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[21] See Annex IV.

Figure 3: Dimension 1 within MC analysis
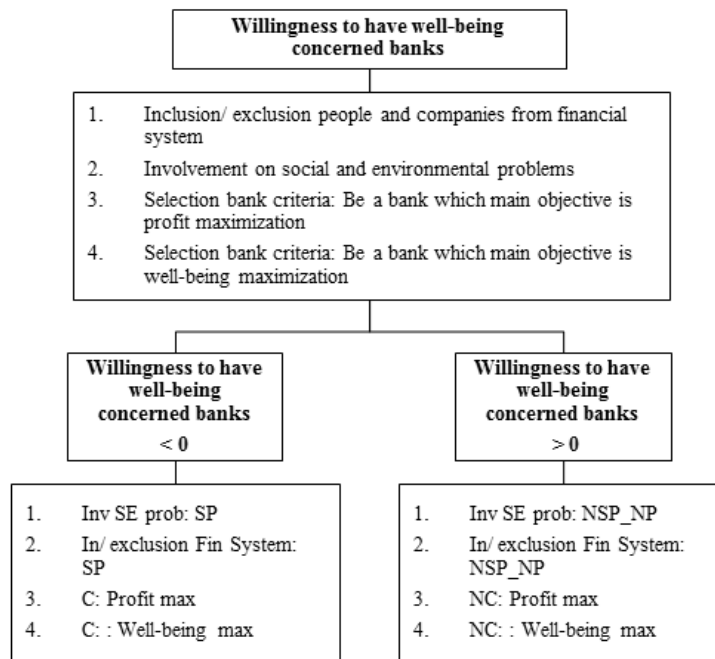
From figure 2 is possible to observe that values behind zero are observations which do consider that banks are not acting correctly and that therefore the trust level is lower. On the other hand, it is also possible to observe that values higher than zero are observations which consider that banks are acting correctly or that they are making efforts to act correctly and so their trust level is higher.

Regarding figure 3 is possible to describe that values below zero are observations which consider more environmental and social problems regarding the preference of banks. Hence this means that they are more well-being oriented than values above zero. In contrast, values above zero are observations which consider that those environmental and social issues are not serious problems as well as are not even problems.

Presented the dimensions and respective variables within its categories, it is possible to go further on a graph analysis which is Graph 4 enabling to understand within each dimension and variable where the categories took place on a for quadrants graph.

However, a step before is required which is the definition of each quadrant applying the concept of MCA graph within method and methodology chapter. Furthermore, as is possible to observe in graph 3, the first quadrant should be for observations less well-being oriented and with higher trust level on banks. The second quadrant intents to be for observations less concerned with both subjects meaning less well-being oriented and with a lower level of trust.

By the other hand the third quadrant ought to have observations more well-being oriented and with a lower trust level. Finally the fourth quadrant meant to be for the ones more well-being oriented and with higher trust.

Graph 2 Quadrants definition applying the MCA to this study
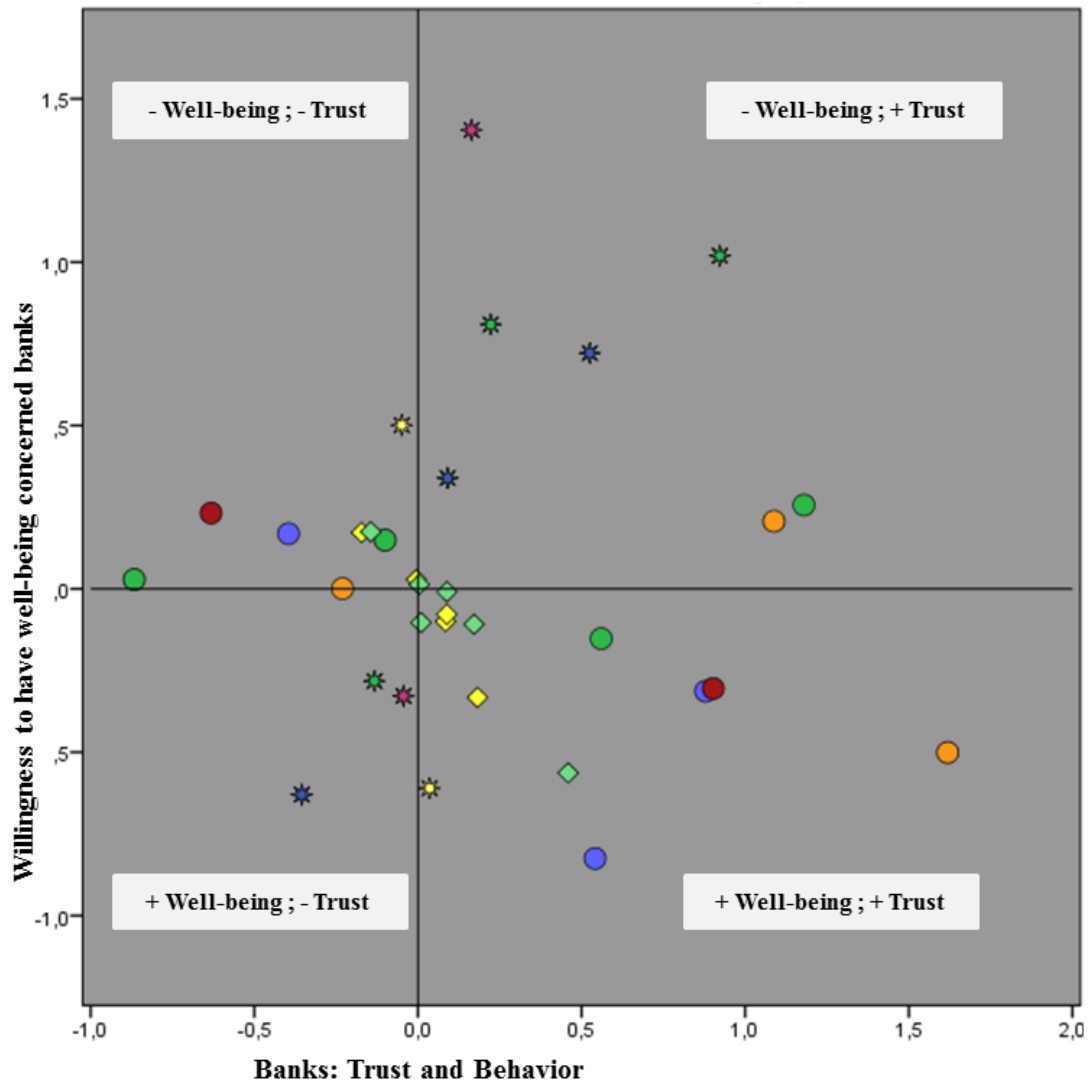
Thus at this instant the researcher is able to analyze graph 4 and observe if the previous quadrants definition fits all categories or not and if not ask questions to consider on future investigations. Likewise could be also possible to identify patterns in those quadrants which is the main goal of the MCA.

The first quadrant has categories such as do not consider as problems the "involvement on social and environmental problems" neither "the inclusion nor exclusion of people and companies from financial system". Also related to these two variables, this quadrant also includes the responses of "not be a serious problem". Additionally, also takes place in the first quadrant "do not consider as a serious problem the ethical behavior of presidents of banks and respective board". Therefore, make sense to have on the first quadrant people who are less well-being oriented. Concluding the first quadrant definition is acceptable.

Graph 3 MCA graph on trust and well-being concerned banks study
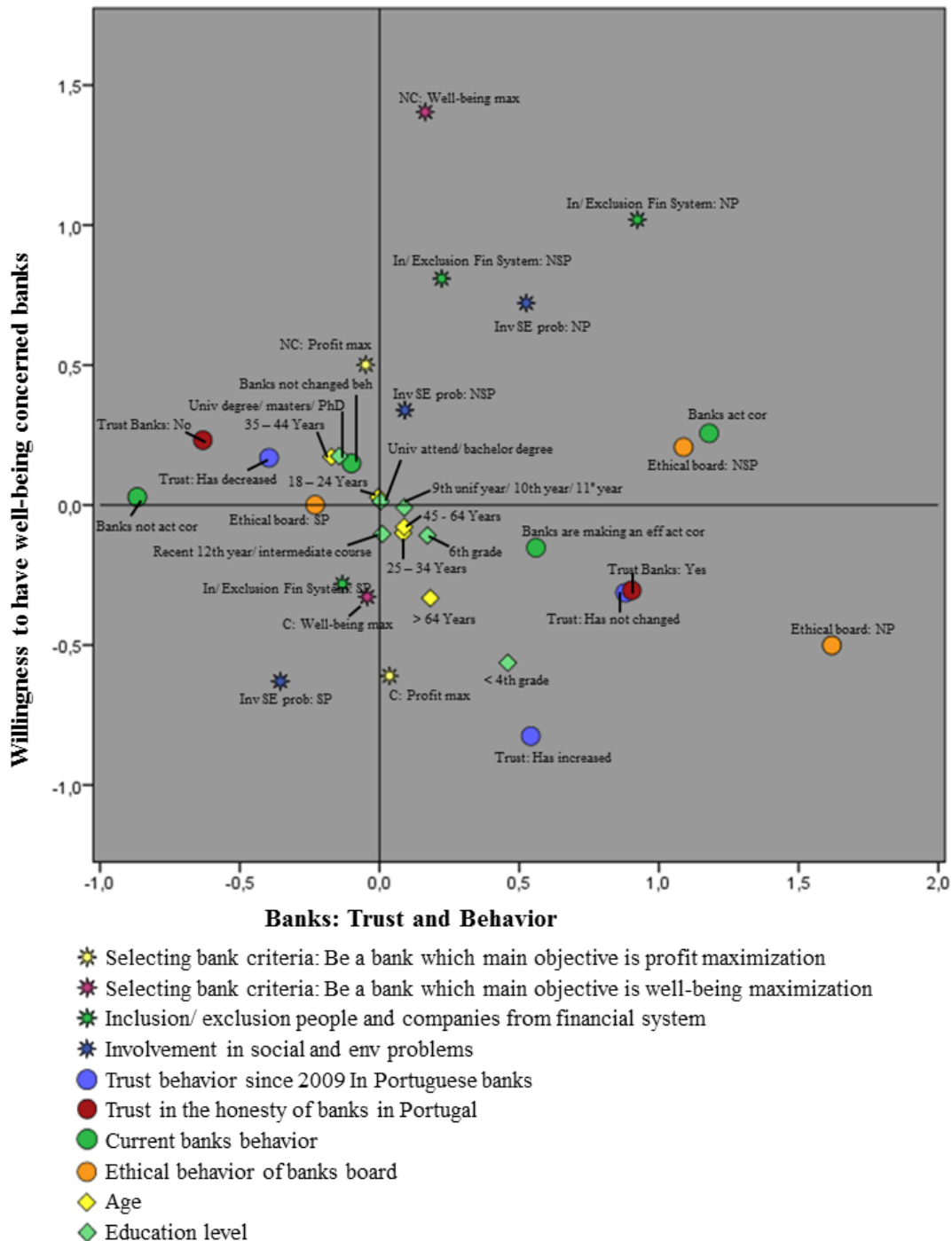
Regarding the second quadrant it is performed by the ones who have seen their trust level decrease since 2009 and actually do trust in the existing banks. Therefore their opinions on banks behavior is about the fact of banks are not acting correctly and the facts of the banks are not changing behavior. These results are expectable however the fact of this quadrant presents the category of "do not has as a selection bank criteria the fact of the bank has as main goal profit maximization" is not expectable at least from the point of the literature view.

This quadrant was supposed to be for the ones which are less well-being oriented and so more profit oriented. Therefore, it should be placed in this quadrant the category of having as a selection bank criteria having a bank which main goal is the profit maximization; nonetheless it is presented on the fourth quadrant, which is concerned with the well-being maximization. However, as was possible to observe on the Chi-Square analysis, even people profit oriented prefer well-being of society.

On the third quadrant expectable results were presented. In fact, these observations do show to be concerned with social and environmental issues by presenting categories such as consider as serious problems the environmental and social problems as well as the inclusion or exclusion of people and companies from financial system. Also as expectable it is present the category of having as a selection bank criteria be a bank which main goal is the well-being maximization.

On the last quadrant, the fourth one, the categories are mainly related with trust for instance the fact of trust has not changed and has increased since 2009 or the fact of people trust in the existing banks. Those observations are also linked with the fact of banks are making efforts to act correctly and the fact of not consider the ethical behavior of banks presidents and respective board as a problem.

By this analysis, it is possible to consider two main patterns in Portuguese society. The first one is performed with the ones which do trust in banks and think they are acting correctly and so are not concerned with social and environmental issues at this place. The second pattern is performed by people who care about the social and environmental problems and are concerned either on well-being maximization.

However, two different issues come up in this stage. The first one is that is not possible conclude about age and education of both patterns since in graph 4 these characterization variables are too close to the origin, which means that in not prudent to conclude on this

point. The second issue has to do with the fact of not be possible by here to conclude about the trust level on the second identified pattern as well, which is one of the main goals of this analysis.

Thus the following chapter aims to clarify and describe results, applying to Chi-Square Analysis to achieve robust conclusions.

4.4 Patterns clarification within Chi-Square Analysis

The first pattern is related to Portuguese Citizens which are not concerned to social, ethics and environmental problems. They do think that banks are acting correctly or making an effort to act correctly. And therefore, they trust in banks or at least their trust level hasn't changed since 2009.

Applying to Chi-Square test between the actual status of trust and age, the conclusion is that there is a relationship between these two variables. In fact, people older than 64 years demonstrate to trust more on the existent banks. Applying the same test within education level and the actual trust status, is possible to state that people with less education trend to rely more on the existent banks, specially people with less than the 6th grade.

As described before, the second pattern is performed by people who care about the social, ethical and environmental problems and are concerned either on well-being maximization. First of all matters to test if the well-being maximization variables are aligned with the mutual bank categories. Applying to Chi-Square Analysis, people who have selected the category "C: Mutual bank" trend to consider more "SP: Involvement on Social and Environmental Problems", so this result is aligned with the existing literature.

Regarding the pattern characterization, after testing on Crosstabs, it is not possible to state relevant relationships between each one of those variables and "Education", "Age" or "Income". In details, neither education, age nor income shows a relationship with well-being maximization nor on involvement in social and environmental problem solving. Moreover, regarding trust, it is not possible to stablish a relationship between trust and mutual bank preferences.

Concluding, the second pattern has values and concerns regarding banking but through this analysis is not possible to find out who are them and their trust level the on existing banks.

However, taking this into consideration, the next chapter will bring other discussion: What are the preferences of the citizens that have a higher education level? Are they concerned about the type of banks available in Portugal? Do they trust on the existent banks? Are they looking for other type of banks?

4.5 Other Relevant Findings

Besides the main results presented within 3.3 and 3.4 Chapters, there are also other relevant findings that should be considered such as:

1. Portuguese citizens are concerned with ethics, environment and social matters when selecting a bank. Is also possible to verify that Portuguese citizens think that banks should disclose how environment, ethics and social matters are incorporated into products, applying transparency. Hence, Portuguese Citizens are looking for how banks are acting concerning those three matters, therefore, banks should start take into account those criterias and acting aligned with Citizens Expectation's.

2. Citizens with higher education level trend to not trust in the existent banks;

3. Applying to cross tabs is not possible to state a relationship between income and the trust level;

4. As the Education level increases (mostly regarding the 12th grade and the university degree, master or PhD), Citizens trend to not consider private and public banks when choosing a bank. The following graph 4 to observe the described situation regarding private banks and graph 5 reflecting public bank.

Graph 4 Education Level and private bank criteria when selecting a bank
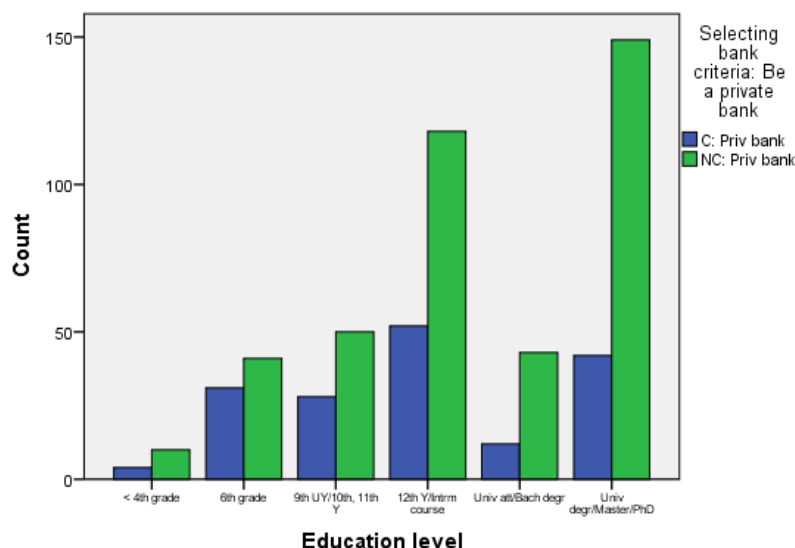
Graph 5 Education Level and public bank criteria when selecting a bank
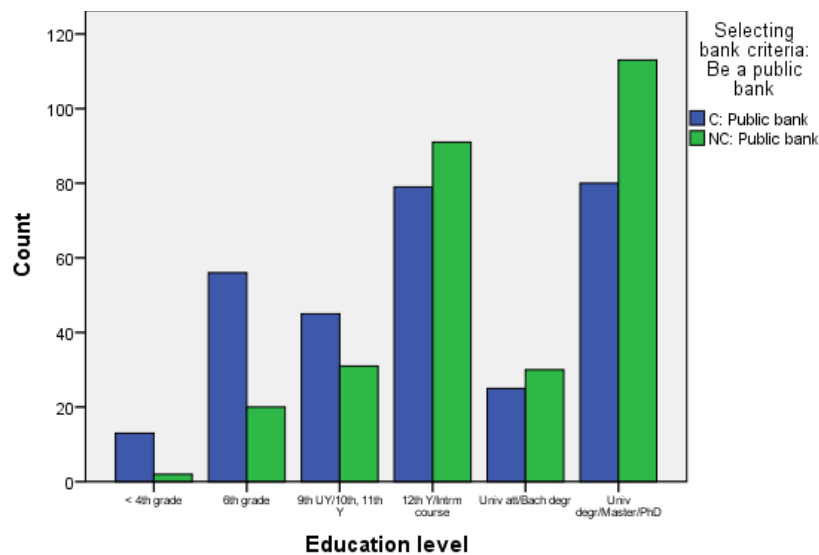
Having made those findings, a further discussion continues on citizens with higher education and income levels. What type of banks are they looking for? In fact multiple responses should be considered.

The lack of variety of banks in Portugal such as ethical banks or even cooperative banks could be one explanation for the question above mentioned. As seen before, citizens well-being concerned are aligned with selecting Mutual Banks, however it was not possible to state that people with higher income and education are looking for mutual banks. A possible reason could be the fact of the poor existence of mutual banks in Portugal. There is only one large cooperative bank which is Crédito Agricola (Neto, 2013) while countries such as France or Italy have a higher presence of cooperative banks according to EACB.

In the same current, according to Fonteyne (2007: 58) "Aggregate data do not reflect the importance of cooperatives in specific market segments. Many cooperative banks have their roots in rural areas, while commercial banks have historically mainly been active in cities. This different geographic orientation still persists to a significant degree. (…) Crédito Agrícola in Portugal are all disproportionately present in the countryside."

Having this results and considerations, the future investigations on cooperative banks area should be aligned with understand if Portuguese Citizens with higher income and education levels could be potential clients. Moreover, if in fact Portuguese Citizens demonstrate to be

interested on cooperative banks, therefore future investigations could also be related with discovering strategies to capture them. Possible strategies would be increase the presence of cooperative banks in Portugal, by open not only branches but also other banks such Crédito Agricola.

5. Dissertation Difficulties and Further investigations

This chapter aims to develop two different areas within this dissertation. The first insight is about the major difficulties and how to face those problems and the second is about further investigations, giving evidence to what should be developed after this dissertation main conclusions. Hence, chapter 5.1 and 5.2 will respectively expose the subjects beyond each insight.

5.1 Dissertation Difficulties

During each step the researcher has found difficulties and limitations.

Starting by literature, in fact there are researches on financial crisis, on the increased importance of trust and confidence and also on cooperative banks features. However, as stated in literature gap analysis, the research on these three main subjects focused in Portugal wasn't deeply developed. Starting by trust on banks, studies are almost always linked with marketing studies like reputation issues impact, preference for on-line banking, etc, meaning that consumer trust level subject was not investigated or at least is not available to access. Regarding cooperative banks it is also hard to find information about Portugal, and is even hardest to find literature applied to Portugal explaining why Cooperative Banks are the ones which should have a bigger presence in Portuguese financial market. In order to face this lack, information was searched and it was applied data from Portugal on global studies for instance on studies from EACB and Edelman Trust Barometer.

Furthermore, on method and methodology, there were also constraints due the nature of the selected method and the data collection process. Starting by method limitations, humans are complex and so it is hard to interpret their experiences, which means that people could answer the same options even having different meanings. Furthermore, people do not have the same notion of concepts and therefore results might be not reliable as desired. These constraints could compromise results, especially because the Portuguese citizens were questioned by telephone. Nonetheless, the researcher followed the procedures from the statistical point of view as recommended by literature.

Further improvements could be done by applying the qualitative approach. It could be an opportunity to better understand some of the issues. Developing focus groups approaches as well as interviews would be techniques to apply.

5.2 Further Investigations

As seen on results chapter, from this dissertation point of view there are other subjects related to Portuguese citizen's preferences on banking system that need to be investigated.

First of all, Portuguese citizens do prefer banks concerned with social and environment matters, having in consideration the well-being of society promotion rather than profit maximization. From results point of view is also possible to describe that Portuguese citizens trust less on the existent banks. However, besides those main conclusions is not possible to describe the preferences of the ones which show a higher income level and a higher education level. Hence, not only is not possible to conclude the type of bank preferences as is also possible to raise questions such as:

- Are banks incorporating the ethics, social and environmental subjects in their products? If so, why do Portuguese Citizens do not trust them and think that banks are not acting correctly?

- Portuguese citizens are considering the different available banks having in consideration their values and mission? At this moment in time is not possible to figure out what are the types of banks that they prefer. What is the reason for that issue? Is Portuguese banking system fragile? Are Portuguese consumers not interested on the different types of banks? Or are they assuming that smaller banks as cooperative banks are acting on the same way of the bigger banks in Portugal and by this point including all in the same bundle?

- Considering literature on financial crisis solution, is it possible to figure out the main arguments on the increased importance of cooperative banks. Is that true in Portugal? Crédito Agricola is the only well know cooperative bank in Portugal. However in Spain, Italy and France for example cooperative banks have higher market share when comparing to Portugal. Should low dimension in Portugal explain why is not possible to state that Portuguese citizens are trusting more on cooperative banks? Are Portuguese citizens aware for the main values of Cooperative banks in Portugal?

Conclusion

This study was set out to explore what Portuguese Citizens do think about the current baking system, evaluating two main elements – trust and criterias to select a bank. Trust appears as a critical variable on consumption and so it is required to understand what has been happening with trust level since financial crisis 2008. On the other hand, this study pretends to perceive the main criterias and values considered by Portuguese Citizens when selecting banks so that banks could adapt to new reality if customers do not show their preferences aligned with banks products and behaviors. It was also a goal of this thesis to understand the Portuguese Citizens perception about cooperative banks, since their main differences to the other banks are about governance models, values, behaviors and drivers. Therefore, this thesis aimed at establishing two links: between the main values of cooperative banks and mutual banks, and between typical values of traditional banks and private or public banks.

This section will synthesize the empirical findings that allow answering two research questions:

1. What is the Portuguese opinion about the role of the banks in society?
   Hypothesis 1.1: Banks should be concerned in promoting the well-being of society.
   Hypothesis 1.2: Banks should maximize the dividends to the shareholders.
2. What type of banks would Portuguese citizens like to have in Portugal?
   Hypothesis 2.1: Portuguese do not trust the existing banks in Portugal.
   Hypothesis 2.2: Portuguese would like to have banks concerned with ethics, environment and social matters.

Starting by the first one, the main conclusion was that Banks should be concerned in promoting the well-being of society, which follows the Stakeholders Value Banks model instead of being focused on profit maximization to further distributions on shareholders accounts. Moreover, on this main question Portuguese Citizens considered that the main role of banks should be protect savings.

From the described conclusions above is possible to state that the well-being maximization and Stakeholders Value Banks model is related to Cooperative banks and its modus operandi, since they are governed based on values such as inclusion, transparency, solidarity and proximity.

Moving the focus to the second question research, as stated, it joins trust levels and preferences about the concerns of banks on ethics, social and environmental matters.

Regarding trust levels, the results indicated that Portuguese citizens do not trust on the existent banks in Portugal. Moreover, the findings were also conclusive on the relation between the actual trust level and the trust level since 2009. Portuguese citizens who have consider that are not trusting on the existent levels, also think that trust level have been decreasing since 2009. Still on trust evidences, the citizens that think banks are acting correctly or making something to act correctly tend to trust on the existent banks. On the other hand the ones who do not trust banks tend to consider that banks are not acting correctly or at least are not changing behavior.

To conclude on trust scenario, Portuguese citizens are not trusting on the existent banks. Therefore banks should think about their behaviors and values in order to align their behaviors with customers' expectations.

Regarding the Portuguese citizens preferences and concerns on ethics, social and environmental matters, it is possible to conclude that Portuguese Citizens do consider those aspects as important when selecting a bank.

Starting by environment, the results indicate that environmental issues are considered as problems or serious problems for banks, being possible to state that Portuguese Citizens are willing to switch to other banks if that bank considers the environmental problems in their business. This indicates that banks should rethink the products they offer if they want to be aligned with Portuguese citizens preferences. The data indicates that in the opinion of the Portuguese citizens, banks should only lend money to projects which have a positive contribution to society on an environmental and social level.

Regarding ethics, the issues analyzed were transparency such as advertising and communication. Starting by transparency, Portuguese citizens do consider transparency and clear communication as relevant subjects as well as transparency on advertisement, for the banking sector. Regarding the ethical behavior of banks employees, it is considered as serious problems as well as thee ethical behavior of banks president and board, which means that Portuguese citizens are worried about ethics in banks and consider that banks should be also concerned about those subjects. To end up this point, the major findings are also linked with

the fact of banks should disclose how they incorporate (or not incorporate) in the financial products they sell the environmental, social and ethical concerns.

On a further stage analysis through MCA, it possible to identify two major findings patterns society. The first one is fulfilled by people older than 64 years and with less educational level (less 6th grade) who demonstrate to trust more on the existent banks. The second pattern is related with people concerns and is associated with people who care about the social, ethical and environmental problems that are also concerned with the well-being maximization duty of a bank. On the second pattern it was not possible to find who those individuals are however it is recommended to be studied on further investigations.

Despite the large sample analyzed it is not possible to state that Portuguese citizens who give importance to social inclusion, ethics and environment do prefer mutual banks, from the statistical point of view, even knowing that those values are related to cooperative banks. Therefore there are a set of questions that could be developed further in future research. Some of those questions are:

Portuguese citizens are considering the different available banks having in consideration their values and mission? Or are they assuming that smaller banks as cooperative banks are acting on the same way of the bigger banks in Portugal and by this point including all in the same bundle?

From the literature on financial crisis solution, is it possible to understand the main arguments on the increased importance of cooperative banks. In Portugal, Crédito Agricola is the only well know cooperative bank in Portugal. However in other countries such as Spain, Italy and France cooperative banks have higher market share when comparing to Portugal. Should low dimension in Portugal explain why is not possible to state that Portuguese citizens are trusting more on cooperative banks?

Regarding Portuguese concerns, if they do not recognize their concerns on ethics, environment and social on cooperative banks values, are they expecting to find other options such as ethical banking?

Those questions should be considered on further investigations, not only to contribute to this field of study but also to orientate the existent and new investors on banks in Portugal.

To conclude, Portuguese Citizens are worried about people inclusion, ethics and environmental problems related with banks behaviors and are willing to switch to banks with which have those concerns also. It also possible to describe the decreased trend on trust related to the existent banks in Portugal.

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Annex I – Applied Survey

Questionnaire about Banks in Portugal

Image, Management and Social and Sustainability Concerns

1. In your opinion what is the main role of a bank? (CHOOSE ONLY ONE OPTION)
   - ☐ Profit maximization for shareholders
   - ☐ Lend Money to financially profitable projects
   - ☐ Protect savings of depositors
   - ☐ Lend Money to families
   - ☐ Borrow as much as possible
   - ☐ Other (say which)
   - ☐ Don't know/ No answer

2. In your opinion, why do banks are important? (CHOSSE ONLY ONE OPTION)
   - ☐ Contribute to economic growth
   - ☐ Can be catalyst of sustainable development
   - ☐ They are financial intermediaries by putting savings available to entrepreuneurs trough loans
   - ☐ Other (say which)
   - ☐ Don't know/ No answer

3. I will read a list of situations related to banking. For each one tell me, please, if you consider it as a serious problem, not too serious or not a problem:

	Serious problem	Not to serious problem	Not a problem
3.1 Quality / Competence of banking sector	☐	☐	☐
3.2 Transparency in banks advertising	☐	☐	☐
3.3 Exclusion/ Inclusion of most disadvantaged people and companies of financial system	☐	☐	☐

3.4 Household overindebtedness	☐	☐	☐
3.5 Financial iliteracy (lack of product knowledge and how interest rates work, maturity, spread, etc.)	☐	☐	☐
3.6 Money laundering	☐	☐	☐
3.7 Environmental impact of companies who use banks for financing	☐	☐	☐
3.8 Concern for customer understanding about all the aspects related to the acquisition of products and services of banks	☐	☐	☐
3.9 Involvement in social and environmental problems solving	☐	☐	☐
3.10 Ethical behavior of Presidents of banks and respective board	☐	☐	☐
3.11 Ethical behavior of banks employees	☐	☐	☐

4. Tell me please, if you consider important or not each of the following criterias when choosing a bank: (READ)

	Yes	No	NK/NR
4.1 Have the most favorable market conditions for the service you want			
4.2 Have a prestigious image			
4.3 Be concerned with environment			
4.4 Be concerned and respect their employees			
4.5 Be one of the largest banks			
4.6 Be a Portuguese bank			
4.7 Have the most competent and skilled employees			
4.8 Be a public bank			

4.9 Be a private bank			
4.10 Be a mutual bank			
4.11 Be a bank that invests in high visibility projects			
4.12 Be a bank that has branch close to my home or to my job			
4.13 Have social concerns			
4.14 Have a clear and transparent communication			
4.15 Be concern about financial health			
4.16 Being financially a solid bank			
4.17 Be a bank which main objective is profit maximization			
4.18 Be a bank which main objective is the well-being maximization			
4.19 Be a bank which main objective is the social and environmental well-being maximization			

5. The fact of knowing that a bank has environmental concerns may make you choose this bank instead of another bank? (CHOOSE ONLY ONE OPTION)
   ☐ Yes
   ☐ In principle yes
   ☐ In principle no
   ☐ No
   ☐ Don't know/ No answer

6. Would you be willing to switch to a bank that would guarantee you that do not invest in companies that damage the environment, weapon companies, tobacco, etc.? (CHOOSE ONLY ONE OPTION)
   ☐ Yes
   ☐ In principle yes
   ☐ In principle no
   ☐ No
   Don't know/ No answer

7. Would you be willing to switch bank if you that that your bank lend Money to companies that manufacture weapons, tobacco and/or develop activities associated to gambling and pornography as well? (CHOOSE ONLY ONE OPTION)
   ☐ Yes
   ☐ In principle yes
   ☐ In principle no
   ☐ No
   ☐ Don't know/ No answer

8. If you saw the news that a company has polluted a river, and that it was your bank that was financing that company, would you switch bank? (CHOOSE ONLY ONE OPTION)
   ☐ Yes
   ☐ In principle yes
   ☐ In principle no
   ☐ No
   ☐ Don't know/ No answer

9. Imagine that when you are looking for a loan for a house, a bank offers you a more attractive spread if you are buying a house that has solar panels, or that is efficient from the point of view of energy. Would you be willing to look for a home with these features? (CHOOSE ONLY ONE OPTION)
   ☐ Yes
   ☐ In principle yes
   ☐ In principle no
   ☐ No
   ☐ Don't know/ No answer

10. Would you be willing to buy an electric or hybrid car, if the loan was cheaper compared to a loan to buy a normal car? (CHOOSE ONLY ONE OPTION)
   ☐ Yes
   ☐ In principle yes
   ☐ In principle no
   ☐ No
   ☐ Don't know/ No answer

11. Imagine that you want to hire a loan. You talk with several banks and find one which has a monthly fee up to 5% more expensive (500 €/month, at a maximum of 25 € more), nut in contracts this bank offers several financial products and actions for the environment preservation. How far willing to choose this service? (CHOOSE ONLY ONE OPTION)
   - Yes
   - In principle yes
   - In principle no
   - No
   - The cheapest service
   - Don't know/ No answer

12. What is your degree of agreement or disagreement with the following statement: "Banks should only lend Money to those projects that meet the minimum environmental, social and ethical standards.": (CHOOSE ONLY ONE OPTION).
   - Agree
   - Disagree
   - Neither agree nor disagree
   - Don't know/ No answer

13. What is your degree of agreement or disagreement with the following statement: "Banks should only lend money to projects which have a positive contribution to society on an environmental or social level." (CHOOSE ONLY ONE OPTION).
   - Agree
   - Disagree
   - Neither agree nor disagree
   - Don't know/ No answer

14. What is your degree of agreement or disagreement with the following statement: "Banks should disclose how they incorporate or not in financial products that they sell (investment funds and others) the concerns about environment, social and ethical levels." (CHOOSE ONLY ONE OPTION).
   - Agree
   - Disagree
   - Neither agree nor disagree
   - Don't know/ No answer

15. In your opinion, your trust level in Portuguese banks since 2009: (CHOOSE ONLY ONE OPTION).
    □ Has increased
    □ Has decreased
    □ Has not changed
    □ Don't know/ No answer

16. In your opinion, currently banks in Portugal: (CHOOSE ONLY ONE OPTION):
    □ Are acting correctly
    □ Are making efforts to act correctly
    □ Are not acting correctly
    □ Have not changed their behavior
    □ Don't know/ No answer

17. Do you trust in the honesty of banks in Portugal?
    □ Yes
    □ No
    □ Don't know/ No answer

18. If your bank had a credit policy that took into account how ethical, environmental and social issues are adressed in projects that apply for a loan at your bank, you: (CHOOSE ONLY ONE OPTION)
    □ Would rely more on your bank
    □ Would rely less on your bank
    □ Would not make difference
    □ Don't know/ No answer

19. If your bank make public the details of how its policy on environmental, social and ethical credit work, and its pratical implications on the approved and rejected projects, you: (CHOOSE ONLY ONE OPION):
    □ Would rely more on your bank
    □ Would rely less on your bank
    □ Would not make difference
    □ Don't know/ No answer

20. If your bank make public the details of how environmental, social and ethical matters are incorporated in its green products, you: (CHOOSE ONLY ONE OPTION).

   ☐ Would rely more on your bank

   ☐ Would rely less on your bank

   ☐ Would not make difference

   ☐ Don't know/ No answer

21. What is the bank you trust more in Portugal?

   [   ]

22. What is the bank you trust less in Portugal?

   [   ]

23. How old are you?

   ☐ < 24 years

   ☐ 25-34 years

   ☐ 35-44 years

   ☐ 45-54 years

   ☐ > 55 years

24. What is your family situation? (READ)

   ☐ Single

   ☐ Married civilly

   ☐ Married by a church

   ☐ Together (living with mate)

   ☐ Separated, divorced

   ☐ Widoed

25. What is your education level?

   ☐ Less than 4th grade

   ☐ Old 4th grade, 6th grade or recent preparatory cycle

   ☐ Old 5th year or 9th unified year, 10th year, 11° year

   ☐ Old 7th year, recent 12th year, or intermediate course

   ☐ University attendance or bachelor degree

   ☐ University degree, masters or PhD

26. Of the following options, could you tell me which answers better match the net monthly income of your entire family (after paying taxes):

☐ Less than 300 Euros (between 0 to 60 Escudos – old portuguese currency)

☐ 301 to 750 Euros (between 60 to 150 Escudos – old portuguese currency)

☐ 751 to 1500 Euros (between 151 to 300 Escudos – old portuguese currency)

☐ 1501 to 2500 Euros (between 301 to 500 Escudos – old portuguese currency)

☐ More than 2500 Euros (about 500 Escudos – old portuguese currency)

☐ Don't know/ No answer

THE QUESTIONNAIRE HAS FINISHED. THANK YOU FOR YOUR TIME!

Annex II – Sample Characterization: Statistical Outputs

The following annex pretends to describe the sample, presenting the outputs related to gender, age, education level and income level. As explained in Method and Methodology chapter, the sample is completely representative of Portuguese Society however, a more consistent analysis is explained bellow.

As it is possible to verify in the table 6, the sample was performed by 601 portuguese citizens, which almost 47% is female and 53% is male. Furthermore, as possible to identify in table 7 more than one third of the respondents have between 45 and 64 years old and 44 respondents are from 18 to 24 Years old, meaning that the most part of respondents are from 25 to 64 years old, performing almost 87% of responses.

Table 6 Sample characterization: Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	282	46,9	46,9	46,9
	Male	319	53,1	53,1	100,0
	Total	601	100,0	100,0	

Table 7 Sample characterization: Age

AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24 Y	44	7,3	7,3	7,3
	25-34 Y	152	25,3	25,3	32,6
	35-44 Y	156	26,0	26,0	58,6
	45-64 Y	214	35,6	35,6	94,2
	> 64 Y	35	5,8	5,8	100,0
	Total	601	100,0	100,0	

Furthermore, assuming the sample is representative of portuguese population, graph 8 which refers to education level allows to perceive that most of portuguese citizens have a low education level. In fact, only 41% (251 in absolute number) have attended to university and from that percentage, only 32% have a university degree, master or PhD.

Graph 6 Sample characterization: Education Level

Education level

Legend:
- < 4th grade
- 6th grade
- 9th UY/10th, 11th Y
- 12th Y/Intrm course
- Univ att/Bach degr
- Univ degr/Master/PhD
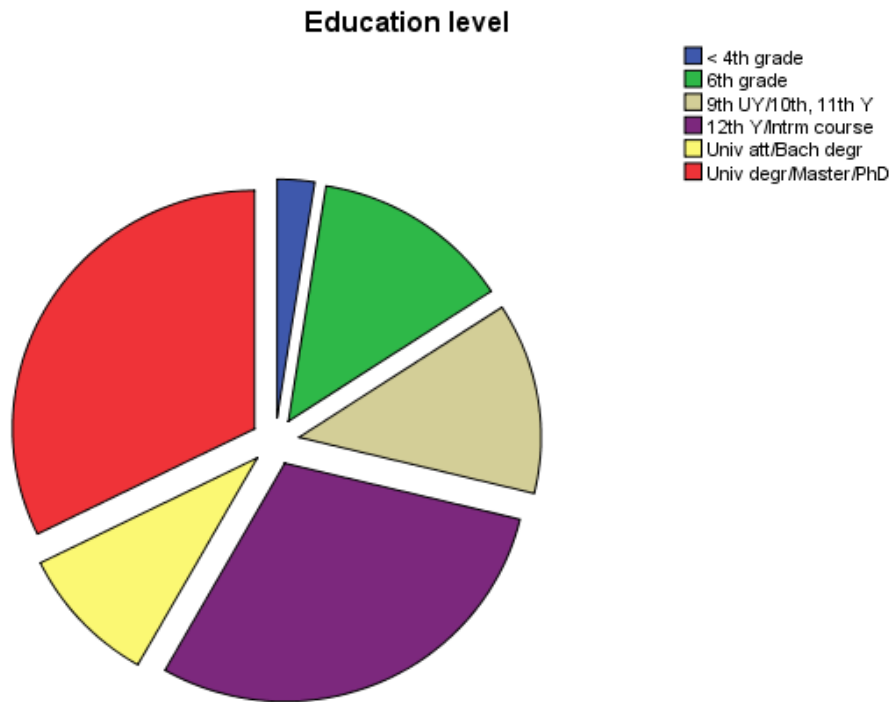
Finally, it is missing to present the family situation and the income level on an aggregate basis, on graph 7 and 8 respectively.

Graph 7 Sample characterization: Family Situation
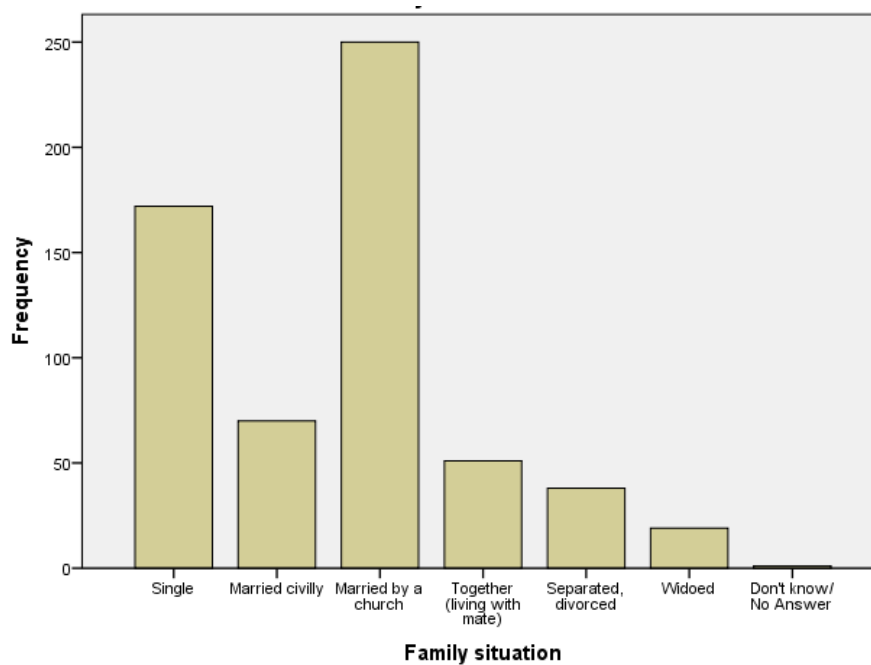
Graph 8 Sample characterization: Income Level
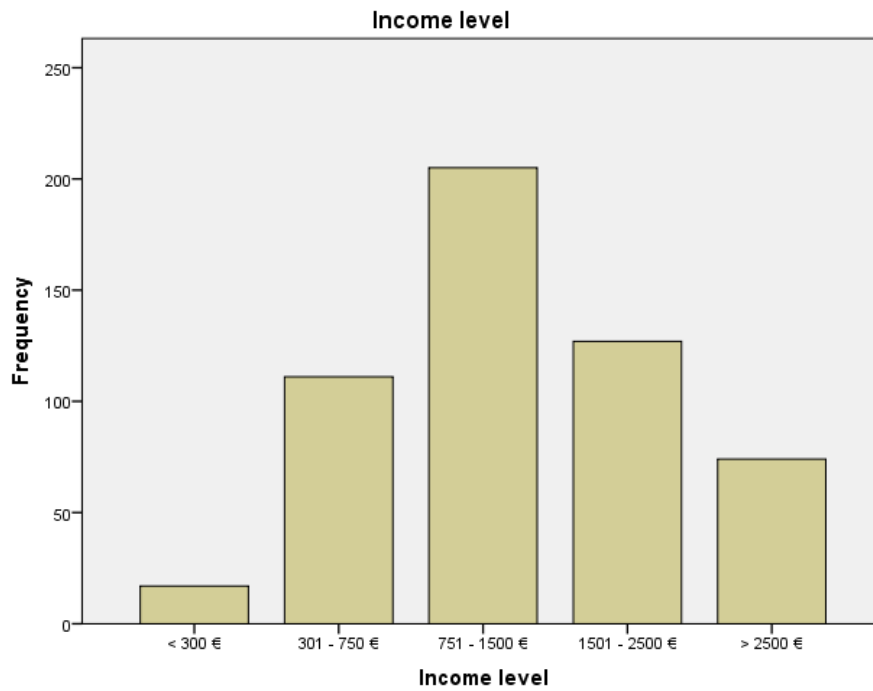
Starting from family situation it is possible to figure out that 250 respondents are married by church while 170 are single. From graph 8 is possible to understand that not only more than 200 respondents earn monthly from 751€ to 1500€ but also that almost 40% of responses earn above 1500 € monthly, on aggregate basis.

Annex III – Chi-Square Tables

This annex pretends to disclose the main Chi-Square tables that have allowed to conclude about this dissertation results. Therefore, the following tables are related to Crosstabs procedure as explained on chapter 2, related to Methodology & Method which also were used among results chapters.

Table 8 Chi-Square: Private Bank Criteria and Education Level

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14,810[a]	5	,011
Likelihood Ratio	14,617	5	,012
Linear-by-Linear Association	12,215	1	,000
N of Valid Cases	580		

a. 1 cells (8,3%) have expected count less than 5. The minimum expected count is 4,08.

Education level * Selecting bank criteria: Be a private bank Crosstabulation

			Selecting bank criteria: Be a private bank		Total
			C: Priv bank	NC: Priv bank	
Education level	< 4th grade	Count	4	10	14
		% within Education level	28,6%	71,4%	100,0%
		% of Total	0,7%	1,7%	2,4%
	6th grade	Count	31	41	72
		% within Education level	43,1%	56,9%	100,0%
		% of Total	5,3%	7,1%	12,4%
	9th UY/10th, 11th Y	Count	28	50	78
		% within Education level	35,9%	64,1%	100,0%
		% of Total	4,8%	8,6%	13,4%
	12th Y/Intrm course	Count	52	118	170
		% within Education level	30,6%	69,4%	100,0%
		% of Total	9,0%	20,3%	29,3%
	Univ att/Bach degr	Count	12	43	55
		% within Education level	21,8%	78,2%	100,0%
		% of Total	2,1%	7,4%	9,5%
	Univ degr/Master/PhD	Count	42	149	191
		% within Education level	22,0%	78,0%	100,0%
		% of Total	7,2%	25,7%	32,9%
Total		Count	169	411	580
		% within Education level	29,1%	70,9%	100,0%
		% of Total	29,1%	70,9%	100,0%

Table 9 Chi-Square: Public Bank Criteria and Education Level

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34,448[a]	5	,000
Likelihood Ratio	36,130	5	,000
Linear-by-Linear Association	28,800	1	,000
N of Valid Cases	585		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,36.

Education level * Selecting bank criteria: Be a public bank Crosstabulation

			Selecting bank criteria: Be a public bank		Total
			C: Public bank	NC: Public bank	
Education level	< 4th grade	Count	13	2	15
		% within Education level	86,7%	13,3%	100,0%
		% of Total	2,2%	0,3%	2,6%
	6th grade	Count	56	20	76
		% within Education level	73,7%	26,3%	100,0%
		% of Total	9,6%	3,4%	13,0%
	9th UY/10th, 11th Y	Count	45	31	76
		% within Education level	59,2%	40,8%	100,0%
		% of Total	7,7%	5,3%	13,0%
	12th Y/Intrm course	Count	79	91	170
		% within Education level	46,5%	53,5%	100,0%
		% of Total	13,5%	15,6%	29,1%
	Univ att/Bach degr	Count	25	30	55
		% within Education level	45,5%	54,5%	100,0%
		% of Total	4,3%	5,1%	9,4%
	Univ degr/Master/PhD	Count	80	113	193
		% within Education level	41,5%	58,5%	100,0%
		% of Total	13,7%	19,3%	33,0%
Total		Count	298	287	585
		% within Education level	50,9%	49,1%	100,0%
		% of Total	50,9%	49,1%	100,0%

Table 10 Chi-Square: Mutual Bank Criteria and Involvement on Social and Environmental Problems

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9,446[a]	2	,009
Likelihood Ratio	9,389	2	,009
Linear-by-Linear Association	9,014	1	,003
N of Valid Cases	547		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 61,02.

Selecting bank criteria: Be a mutual bank * Involvement on social and environmental problems Crosstabulation

			Involvement on social and environmental problems			Total
			Inv SE prb: SP	Inv SE prb: NSP	Inv SE prb: NP	
Selecting bank criteria: Be a mutual bank	C: Mutual bank	Count	159	91	73	323
		% within Selecting bank criteria: Be a mutual bank	49,2%	28,2%	22,6%	100,0%
		% of Total	29,1%	16,6%	13,3%	59,0%
	NC: Mutual bank	Count	87	61	76	224
		% within Selecting bank criteria: Be a mutual bank	38,8%	27,2%	33,9%	100,0%
		% of Total	15,9%	11,2%	13,9%	41,0%
Total		Count	246	152	149	547
		% within Selecting bank criteria: Be a mutual bank	45,0%	27,8%	27,2%	100,0%
		% of Total	45,0%	27,8%	27,2%	100,0%

Table 11 Chi-Square: Well-being Maximization and Profit Maximization Criterias

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	22,953[a]	1	,000		
Continuity Correction[b]	21,945	1	,000		
Likelihood Ratio	23,953	1	,000		
Fisher's Exact Test				,000	,000
Linear-by-Linear Association	22,914	1	,000		
N of Valid Cases	587				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 50,51.

b. Computed only for a 2x2 table

Selecting bank criteria: Be a bank which main objective is profit maximization * Selecting bank criteria: Be a bank which main objective is the well-being maximization Crosstabulation

			Selecting bank criteria: Be a bank which main objective is the well-being maximization		Total
			C: W-being max	NC: W-being max	
Selecting bank criteria: Be a bank which main objective is profit maximization	C: Profit max	Count	244	28	272
		% within Selecting bank criteria: Be a bank which main objective is profit maximization	89,7%	10,3%	100,0%
		% of Total	41,6%	4,8%	46,3%
	NC: Profit max	Count	234	81	315
		% within Selecting bank criteria: Be a bank which main objective is profit maximization	74,3%	25,7%	100,0%
		% of Total	39,9%	13,8%	53,7%
Total		Count	478	109	587
		% within Selecting bank criteria: Be a bank which main objective is profit maximization	81,4%	18,6%	100,0%
		% of Total	81,4%	18,6%	100,0%

Table 12 Chi-Square: Well-being Maximization and Age

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,092[a]	4	,719
Likelihood Ratio	2,113	4	,715
Linear-by-Linear Association	,003	1	,960
N of Valid Cases	593		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,94.

AGE * Selecting bank criteria: Be a bank which main objective is the well-being maximization Crosstabulation

			Selecting bank criteria: Be a bank which main objective is the well-being maximization		Total
			C: W-being max	NC: W-being max	
AGE	18-24 Y	Count	38	6	44
		% within AGE	86,4%	13,6%	100,0%
		% of Total	6,4%	1,0%	7,4%
	25-34 Y	Count	123	28	151
		% within AGE	81,5%	18,5%	100,0%
		% of Total	20,7%	4,7%	25,5%
	35-44 Y	Count	122	34	156
		% within AGE	78,2%	21,8%	100,0%
		% of Total	20,6%	5,7%	26,3%
	45-64 Y	Count	173	37	210
		% within AGE	82,4%	17,6%	100,0%
		% of Total	29,2%	6,2%	35,4%
	> 64 Y	Count	27	5	32
		% within AGE	84,4%	15,6%	100,0%
		% of Total	4,6%	0,8%	5,4%
Total		Count	483	110	593
		% within AGE	81,5%	18,5%	100,0%
		% of Total	81,5%	18,5%	100,0%

Table 13 Chi-Square: Well-being Maximization and Education Level

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,322[a]	5	,803
Likelihood Ratio	2,617	5	,759
Linear-by-Linear Association	,958	1	,328
N of Valid Cases	593		

a. 1 cells (8,3%) have expected count less than 5. The minimum expected count is 2,60.

Education level * Selecting bank criteria: Be a bank which main objective is the well-being maximization Crosstabulation

			Selecting bank criteria: Be a bank which main objective is the well-being maximization		Total
			C: W-being max	NC: W-being max	
Education level	< 4th grade	Count	13	1	14
		% within Education level	92,9%	7,1%	100,0%
		% of Total	2,2%	0,2%	2,4%
	6th grade	Count	64	12	76
		% within Education level	84,2%	15,8%	100,0%
		% of Total	10,8%	2,0%	12,8%
	9th UY/10th, 11th Y	Count	62	16	78
		% within Education level	79,5%	20,5%	100,0%
		% of Total	10,5%	2,7%	13,2%
	12th Y/Intrm course	Count	145	31	176
		% within Education level	82,4%	17,6%	100,0%
		% of Total	24,5%	5,2%	29,7%
	Univ att/Bach degr	Count	45	12	57
		% within Education level	78,9%	21,1%	100,0%
		% of Total	7,6%	2,0%	9,6%
	Univ degr/Master/PhD	Count	154	38	192
		% within Education level	80,2%	19,8%	100,0%
		% of Total	26,0%	6,4%	32,4%
Total		Count	483	110	593
		% within Education level	81,5%	18,5%	100,0%
		% of Total	81,5%	18,5%	100,0%

Table 14 Chi-Square: Well-being Maximization and Income Level

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,547[a]	4	,162
Likelihood Ratio	9,295	4	,054
Linear-by-Linear Association	1,795	1	,180
N of Valid Cases	526		

a. 1 cells (10,0%) have expected count less than 5. The minimum expected count is 2,95.

Income level * Selecting bank criteria: Be a bank which main objective is the well-being maximization Crosstabulation

			Selecting bank criteria: Be a bank which main objective is the well-being maximization		Total
			C: W-being max	NC: W-being max	
Income level	< 300 €	Count	16	0	16
		% within Income level	100,0%	0,0%	100,0%
		% of Total	3,0%	0,0%	3,0%
	301 - 750 €	Count	88	20	108
		% within Income level	81,5%	18,5%	100,0%
		% of Total	16,7%	3,8%	20,5%
	751 - 1500 €	Count	165	39	204
		% within Income level	80,9%	19,1%	100,0%
		% of Total	31,4%	7,4%	38,8%
	1501 - 2500 €	Count	107	20	127
		% within Income level	84,3%	15,7%	100,0%
		% of Total	20,3%	3,8%	24,1%
	> 2500 €	Count	53	18	71
		% within Income level	74,6%	25,4%	100,0%
		% of Total	10,1%	3,4%	13,5%
Total		Count	429	97	526
		% within Income level	81,6%	18,4%	100,0%
		% of Total	81,6%	18,4%	100,0%

Table 15 Chi-Square: Mutual Bank Criteria and Trust Level on Portuguese Banks

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	,362[a]	1	,547		
Continuity Correction[b]	,266	1	,606		
Likelihood Ratio	,362	1	,547		
Fisher's Exact Test				,606	,303
Linear-by-Linear Association	,361	1	,548		
N of Valid Cases	556				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 113,50.

b. Computed only for a 2x2 table

Trust in the honesty of banks in Portugal * Selecting bank criteria: Be a public bank Crosstabulation

			Selecting bank criteria: Be a public bank		Total
			C: Public bank	NC: Public bank	
Trust in the honesty of banks in Portugal	Trust Banks: Yes	Count	122	110	232
		% within Trust in the honesty of banks in Portugal	52,6%	47,4%	100,0%
		% of Total	21,9%	19,8%	41,7%
	Trust Banks: No	Count	162	162	324
		% within Trust in the honesty of banks in Portugal	50,0%	50,0%	100,0%
		% of Total	29,1%	29,1%	58,3%
Total		Count	284	272	556
		% within Trust in the honesty of banks in Portugal	51,1%	48,9%	100,0%
		% of Total	51,1%	48,9%	100,0%

Table 16 Chi-Square: Trust Level on Portuguese Banks and Age

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13,883[a]	4	,008
Likelihood Ratio	13,903	4	,008
Linear-by-Linear Association	6,784	1	,009
N of Valid Cases	570		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 14,55.

Trust in the honesty of banks in Portugal * AGE Crosstabulation

			AGE					
			18-24 Y	25-34 Y	35-44 Y	45-64 Y	> 64 Y	Total
Trust in the honesty of banks in Portugal	Trust Banks: Yes	Count	17	52	49	99	20	237
		% within Trust in the honesty of banks in Portugal	7,2%	21,9%	20,7%	41,8%	8,4%	100,0%
		% of Total	3,0%	9,1%	8,6%	17,4%	3,5%	41,6%
	Trust Banks: No	Count	24	90	100	104	15	333
		% within Trust in the honesty of banks in Portugal	7,2%	27,0%	30,0%	31,2%	4,5%	100,0%
		% of Total	4,2%	15,8%	17,5%	18,2%	2,6%	58,4%
Total		Count	41	142	149	203	35	570
		% within Trust in the honesty of banks in Portugal	7,2%	24,9%	26,1%	35,6%	6,1%	100,0%
		% of Total	7,2%	24,9%	26,1%	35,6%	6,1%	100,0%

Table 17 Chi-Square: Trust Level on Portuguese Banks and Income Level

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,086[a]	4	,193
Likelihood Ratio	6,084	4	,193
Linear-by-Linear Association	,064	1	,800
N of Valid Cases	509		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,28.

Crosstab

			Income level					Total
			< 300 €	301 - 750 €	751 - 1500 €	1501 - 2500 €	> 2500 €	
Trust in the honesty of banks in Portugal	Trust Banks: Yes	Count	6	48	74	61	24	213
		% within Trust in the honesty of banks in Portugal	2,8%	22,5%	34,7%	28,6%	11,3%	100,0%
		% of Total	1,2%	9,4%	14,5%	12,0%	4,7%	41,8%
	Trust Banks: No	Count	9	59	121	62	45	296
		% within Trust in the honesty of banks in Portugal	3,0%	19,9%	40,9%	20,9%	15,2%	100,0%
		% of Total	1,8%	11,6%	23,8%	12,2%	8,8%	58,2%
Total		Count	15	107	195	123	69	509
		% within Trust in the honesty of banks in Portugal	2,9%	21,0%	38,3%	24,2%	13,6%	100,0%
		% of Total	2,9%	21,0%	38,3%	24,2%	13,6%	100,0%

Table 18 Chi-Square: Trust Level on Portuguese Banks and Education Level

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12,658[a]	5	,027
Likelihood Ratio	12,591	5	,028
Linear-by-Linear Association	9,179	1	,002
N of Valid Cases	570		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,24.

Crosstab

			Education level						Total
			< 4th grade	6th grade	9th UY/10th, 11th Y	12th Y/Intrm course	Univ att/Bach degr	Univ degr/Master/PhD	
Trust in the honesty of banks in Portugal	Trust Banks: Yes	Count	10	42	29	71	22	63	237
		% within Trust in the honesty of banks in Portugal	4,2%	17,7%	12,2%	30,0%	9,3%	26,6%	100,0%
		% of Total	1,8%	7,4%	5,1%	12,5%	3,9%	11,1%	41,6%
	Trust Banks: No	Count	5	36	46	97	30	119	333
		% within Trust in the honesty of banks in Portugal	1,5%	10,8%	13,8%	29,1%	9,0%	35,7%	100,0%
		% of Total	0,9%	6,3%	8,1%	17,0%	5,3%	20,9%	58,4%
Total		Count	15	78	75	168	52	182	570
		% within Trust in the honesty of banks in Portugal	2,6%	13,7%	13,2%	29,5%	9,1%	31,9%	100,0%
		% of Total	2,6%	13,7%	13,2%	29,5%	9,1%	31,9%	100,0%

Table 19 Chi-Square: Trust Level on Portuguese Banks and Trust Behavior since 2009

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	69,489[a]	2	,000
Likelihood Ratio	69,666	2	,000
Linear-by-Linear Association	51,291	1	,000
N of Valid Cases	567		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 4,97.

Trust in the honesty of banks in Portugal * Trust behavior since 2009 in Portuguese banks Crosstabulation

			Trust behavior since 2009 in Portuguese banks			
			Trust: Increased	Trust: Decreased	Trust: not changed	Total
Trust in the honesty of banks in Portugal	Trust Banks: Yes	Count	7	115	113	235
		% within Trust in the honesty of banks in Portugal	3,0%	48,9%	48,1%	100,0%
		% of Total	1,2%	20,3%	19,9%	41,4%
	Trust Banks: No	Count	5	272	55	332
		% within Trust in the honesty of banks in Portugal	1,5%	81,9%	16,6%	100,0%
		% of Total	0,9%	48,0%	9,7%	58,6%
Total		Count	12	387	168	567
		% within Trust in the honesty of banks in Portugal	2,1%	68,3%	29,6%	100,0%
		% of Total	2,1%	68,3%	29,6%	100,0%

Annex IV – Multi Correspondence Analysis Procedures

This annex pretends to show the main output when reach the MCA graphs presented on the results chapter. As stated in Method and Methodology chapters, MCA was performed in SPSS, applying Analyze, Dimension Reduction and Optimal Scaling. First, were considered the variables which have stated a relationship between each other applying Chi-Squares Analysis asking SPSS to proceed within 20 dimensions. However, there were a wide range of variables and so, from that group were selected ten main variables within two dimensions, which showed to be enough for this analysis since the values within dimensions were robust. Two out of ten variables were classified by supplementary variables. The ten selected variables demonstrate to be significant from the MCA procedures. The only two supplementary variables were the ones which significance was lower, however, the researcher decided to include in the analysis, to trying to figure out results.

The following tables and graph pretends to state the final MCA procedure, by stating the main SPSS outputs within the process. Note that besides the main graph output is stated on results chapter, it is aligned with next outputs.

Table 20 MCA: Case Processing Summary

Case Processing Summary

Valid Active Cases	532
Active Cases with Missing Values	69
Supplementary Cases	0
Total	601
Cases Used in Analysis	601

Table 21 MCA: Iteration History

Iteration History

Iteration Number	Variance Accounted For		Loss
	Total	Increase	
26[a]	1,644117	,000007	6,355883

a. The iteration process stopped because the convergence test value was reached.

Table 22 MCA: Correlations Transformed Variables

Correlations Transformed Variables

Dimension: 1

	Inclusion/ exclusion people and companies from financial system	Involvement on social and environmental problems	Selecting bank criteria: Be a bank which main objective is profit maximization	Selecting bank criteria: Be a bank which main objective is the well-being maximization	Ethical behavior of banks presidents and respective board	Trust behavior since 2009 in Portuguese banks	Current banks behavior	Trust in the honesty of banks in Portugal	AGE	Education level
Inclusion/ exclusion people and companies from financial system	1,000	,201	-,031	,111	,127	-,002	,020	,035	-,009	-,027
Involvement on social and environmental problems	,201	1,000	-,152	,198	,142	,037	,114	,047	-,089	-,086
Selecting bank criteria: Be a bank which main objective is profit maximization[a]	-,031	-,152	1,000	-,190	,055	,058	-,003	,043	,036	,069
Selecting bank criteria: Be a bank which main objective is the well-being maximization[a]	,111	,198	-,190	1,000	-,033	-,009	,020	-,030	-,059	-,049
Ethical behavior of banks presidents and respective board	,127	,142	,055	-,033	1,000	,167	,112	,198	,079	,096
Trust behavior since 2009 in Portuguese banks[a]	-,002	,037	,058	-,009	,167	1,000	,138	,334	,129	,206
Current banks behavior[a]	,020	,114	-,003	,020	,112	,138	1,000	,348	,015	-,006
Trust in the honesty of banks in Portugal[a]	,035	,047	,043	-,030	,198	,334	,348	1,000	,137	,143
AGE[b]	-,009	-,089	,036	-,059	,079	,129	,015	,137	1,000	,235
Education level[b]	-,027	-,086	,069	-,049	,096	,206	-,006	,143	,235	1,000
Dimension	1	2	3	4	5	6	7	8		
Eigenvalue[c]	1,734	1,447	1,052	,866	,831	,774	,724	,572		

a. Missing values were imputed with the mode of the quantified variable.

b. Supplementary variable.

c. Eigenvalues of correlation matrix excluding supplementary variables.

Table 23 MCA: Discrimination Measures

Discrimination Measures

	Dimension		Mean
	1	2	
Inclusion/ exclusion people and companies from financial system	,081	,246	,164
Involvement on social and environmental problems	,133	,352	,243
Selecting bank criteria: Be a bank which main objective is profit maximization	,002	,302	,152
Selecting bank criteria: Be a bank which main objective is the well-being maximization	,006	,447	,227
Ethical behavior of banks presidents and respective board	,302	,017	,159
Trust behavior since 2009 in Portuguese banks	,340	,062	,201
Current banks behavior	,371	,018	,194
Trust in the honesty of banks in Portugal	,543	,066	,305
AGE[a]	,013	,017	,015
Education level[a]	,017	,022	,020
Active Total	1,778	1,511	1,644

a. Supplementary variable.

Graph 9 MCA: Discrimination Measures
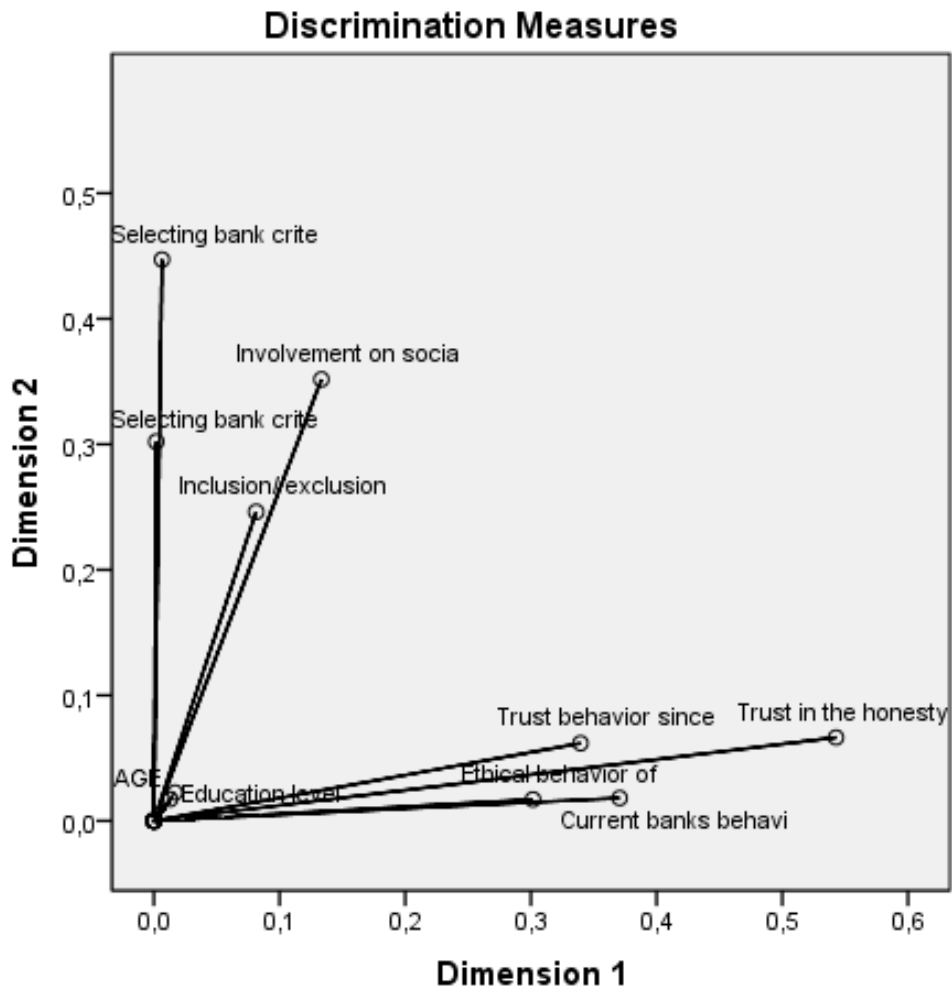
Variable Principal Normalization.