

# CORPORATE GOVERNANCE STRUCTURES IN THE CONTEXT OF COOPERATIVE BANKING

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## Abstract

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This study aims to investigate the constraints of corporate governance structures, in the context of cooperative banking. That is, it will try to identify the factors that are the basis of the practice of corporate governance of cooperative banking, such as organizational performance, relationships of trust on the part of customers and the community in general, the image of the competition and to the regulator and the remuneration of the management team. In order to test the hypotheses, a questionnaire was carried out with the administration of the different cooperative banks, obtaining a sample of 58 banks, representing 67% of the total universe. The results point to the existence of a causal relationship between financial performance and corporate governance practices, specifically at the level of cooperative rights and at the level of relationship with clients, society and fiscal council activity. With the adoption of cooperative governance practices, the relationship between the return of cooperators and these practices has not been proven, the same happened with the relationship between the remuneration of managers and the adoption of these practices.

**Keywords:** Legal Certification of Accounts, Statutory Auditor, Financial Auditing, Corporate Governance, Firm Performance

## 1. INTRODUCTION

Corporate governance comprises the set of instruments related to the life of organizations involving, in particular, control mechanisms, forms of financing, application of savings and structural design of the organization, being defined as a set of rules, relations and internal processes, by which the authority is exercised in organizations. Otherwise, corporate governance is a set of authority and oversight structures, with the purpose of ensuring that society establishes and effectively and efficiently performs contractual activities and relationships consistent with the purpose for which it was created.

This study assumes that cooperative banking performance depends on a set of variables, such as customer trust, image before markets, Bank of Portugal and government, organizational performance, compensation of senior management, or confidence of the community in general. We address the issue of the efficiency of corporate governance structures, which entail a separation of ownership and control on Portuguese cooperative

banks. Institutional restrictions make the ownership structures of these cooperative banks essentially exogenous.

It is globally recognized that credit cooperatives can play an important role in the growth of economic non advantaged regions. Traditionally, credit cooperatives are seen as filling a market niche of low-income and small executives, or farmers, who need credit but who have mainly no collateral with to secure a loan (Cabo et al., 2006). Some studies, show the role of credit institutions in rural poverty improvement (Singh et al., 2007), or how financial activity promotes the developing of cooperative (Gagliardi, 2007).

Cooperatives banks are in the present moment, a reality in the majority of European countries affecting the economic and social life of several economic sectors (Karafolas, 2005; Palomo, 2002; Usai & Vannini, 2005). One important feature is that cooperative banks shares can only be traded with the cooperative itself and then only at face value, that is, there can be no hostile takeovers of these firms. In addition, votes cannot be accumulated into blocks, since regardless of the amount of stock

owned, each person receives one vote. There can be no monitoring by block shareholders, since block shareholders cannot exert their voting power.

Cooperative banks are particularly interesting is that the degree of separation between ownership and control is indexed by the number of cooperative members and hence, is easily measured. Therefore, we can conclude about the way the degree of separation of ownership and control affects firms' performance in cross-section. According to Berle and Means hypothesis, as the number of cooperative shareholders rises, the size of the agency cost should increase.

Cooperative banks are found in both rural and urban areas. The former is assigned responsibilities for providing institutional credit to agricultural and related activities in the rural areas. It is only recently that the policymakers have begun to focus on aligning the operations and governance of the cooperative banking sector with current and prospective internal and external environment facing the cooperative sector in particular.

In addition, cooperative banks can cooperate with commercial banks for mutually beneficial business niches. This can be through marketing the products and services of commercial banks, co-financing, co-branding, focusing on fee-based income, etc. In general, the cooperative banks have a different cost structure and lending rates, which are not in alignment with those of commercial banks.

Reorganizing cooperative banks business would enable them to collaborate with commercial banks better in co-financing SME sector, trade, business, agro related activities, etc. They can also act as collection and distribution points for pension, insurance and mutual fund products and commercially associate with micro finance activities and institutes.

From the financial stability perspective, in order to cooperative banks play a relevant role in the future, it is important to encourage market players with different investment horizons, time horizons and objectives. This reduces homogeneity in the market. Developing and strengthening institutions like cooperative banks, assumes fulcrum importance in maintaining national financial stability in a global market.

The cooperative banks need to fully exploit economies of scale requiring restructuring and mergers. With restructuring and mergers, the number cooperative banks meeting the eligibility requirements for accessing the facilities of the Bank of Portugal, will increase, which could also improve their supervision and oversight. The cooperative banks can exploit many new opportunities to expand the scope of their services and can contribute to the goal of financial inclusion, while enhancing their commercial viability.

By tradition, cooperative banks offered credit only to their members. Nowadays, apart from a few institutions that still specialize in certain specific client groups, cooperative banks have no restrictions with respect to their customers. In addition, members are usually clients, but not all clients are members. Cooperative banks offer the wide range of commercial and investment banking services, making them universal banks. Nevertheless, their main line of business remains that of financing small manufacturing businesses and farmers.

Their concentration in rural areas and their small size, give cooperative banks a bias towards commercial banks. In spite of that, nevertheless, even small institutions hold equity positions in companies. Some of these positions are explained to their own nonbanking business and, in some circumstances, they are a consequence of joint ventures with other cooperative banks. In other cases, these equity positions, resulted from financial restructuring of distressed borrowers.

The relevance of this article comes to consolidate the study of the corporate governance structures constrains, in the area of cooperative banking. In other words, we identify the possible reasons that explain some practices of corporate governance, in the context of cooperative banking. Among those reasons, we analyse the organizational performance, the relationships of trust with customers and the community in general, the image towards the regulator and towards the competition, the remuneration of the management team, etc. This article is structured as follows: in first place, we present the introduction; in second place, a critical review of the literature will be done, dealing with reference bibliography in the area of corporate governance and cooperative banking. This review will serve as a basis for the identification of variables and the structuring of research hypotheses. In third place, the methodology will be presented, considering the research design, the definition of the objectives and the hypotheses, as well as the conceptual model. It will also be presented the operationalization of the variables and the way the data were collected, as well as the universe and the sample used in the investigation. In fourth place, the data and results of the statistical treatment will be analyzed, testing the hypotheses and removing the appropriate interpretations. In fifth place, the conclusion is presented. Finally, we present the limitations and indication of future lines of research.

## 2. LITERATURE REVIEW

### 2.1. Corporate governance and cooperativism

There are two competing views on cooperativism and corporate governance: on the one hand, the view of market-based governance models based on distinctive features such as the existence of an independent board, dispersion of ownership, transparency in disclosure, and well-developed legal infrastructure; on the other hand, the vision that highlights the values of an internal management framework, a property structure focused on the limited disclosure of information and confidence in the finances of the family and the banking system.

Cooperativism emerges as a different way of dealing with the same problem of relationship with society and other interest groups. The "importance of cooperation is steadily increasing". Everyday, there are new developments in cooperation between individuals and companies (Greve, 2002, p. 7). Cooperation emerges as a way for the company to interact with other stakeholders and to improve its competitiveness, as it ensures the link between at least two entities through value-added activities, sharing strategic objectives without necessarily linking them of capital (Greve, 2002).

In this way, cooperation can be understood as a hybrid structure situated between a market situation and relational contracts. In this context, cooperation can be considered as any form of relationship between these two extremes, "and can not be confused with mere negotiating contracts or the aggregation of resources under a single command" (Greve, 2002, p. 8).

## 2.2. The cooperative banking in Portugal - The agricultural credit

Grupo Crédito Agrícola is composed of 82 Agricultural Credit (CCAM), Caixa Central de Crédito Agrícola Mútuo (CCCAM) and specialized firms (CA Consult, CA Gest, CA Seguros, CA Vida, CA Serviços and CA Informática). This group forms the Integrated Mutual Agricultural Credit System (SICAM). The Boxes belonging to SICAM are affiliated to the National Federation of Mutual Agricultural Credit (FENACAM). There are also CCAM outside SICAM. These banks already have a medium size, which allows them to develop banking operations largely authorized by the Bank of Portugal.

Crédito Agrícola has more than 700 branches spread all over the country, with the exception of the Madeira Archipelago. In 250 villages, the CCAM is the only banking institution present. It has more than 400,000 associates (cooperators) and 1,200,000 clients. It is a centennial cooperative institution that has been modernizing and that tries to distinguish itself from the banking in general for being banking of relation and proximity. It also provides insurance services. The Agricultural Boxes have their own management bodies, are autonomous in relation to CCCAM. Its mission affirms itself as business and strongly social.

## 2.3. The cooperator and the profitability

This point seeks to understand the role of the organization's profitability and the cooperative of a credit cooperative. This is obviously a central aspect, since there is a share of capital which, although minority, is not insignificant, given the nature of the owners (usually farmers and other landowners).

The nature of the problems of corporate governance differs according to the existence or not of a controlling shareholder (Bebchuk and Hamdani, 2009). In the case of one or more controlling shareholders, corporate governance assumes a central role in the protection of minority shareholders (La Porta, Lopez-de-Silanes and Shleifer, 1999, Silva et al., 2007).

Dittmar and Mahrt-Smith (2007) concluded that the return of an invested dollar is lower if a company follows a weak performance in corporate governance. On the other hand, these authors also concluded that companies with better governance were able to strengthen their competitive position and were able to apply their capital surpluses in a more profitable way. Companies with a weak level of corporate governance squander their capital surplus, destroying the value of the company. Even these results tend to persist when these companies control the management of other companies with capital surpluses (Dittmar & Mahrt-Smith, 2007, p. 629).

When we focus the analysis on credit cooperatives, there is a specificity of these

companies compared to others. Thus, cooperatives' intention is to promote the well-being of their members (value to members), but not necessarily to maximize investor outcomes or value (Greve, 2002). According to these authors, this situation occurs because:

- The clients of cooperatives are, at the same time, their owners (principle of identity);
- The members of cooperatives have equal voting rights, regardless of their capital involvement, as well as the opportunity to take part in the decision-making process (principle of democratic administration).

For Gorton and Schmid (1999), in the early versions of cooperative banking, co-workers had strong incentives to monitor company performance, given the evolution of these structures for large firms transacting with many borrowers who are not cooperative members managed by professional managers. In this way, it can be seen that the members of the cooperative are not able to control the members of the supervisory board and the board of directors. In order to protect themselves against opportunistic situations, members have to control the bank on which they depend. In this way, the members own the cooperative bank and have several rights to supervise it.

Thus, an element of the hierarchy becomes part of the governance structure (Greve, 2002) and all decision-making bodies were reserved for members, who work in a paid way and are able to assess the quality of decisions taken on the basis of personal experience (Bonus, 1994). The only professional was the manager, accumulating the bank's administrative activities and supervised by the regional audit association (Bonus, 1994).

This historical analysis presented by Bonus (1994) reflects the importance of the participation of cooperators in the activities and control of cooperative banking. More recently, Dittmar and Mahrt-Smith (2007) have corroborated this important role, taking into account the existence of attention by the cooperators in the control activities of capital surpluses. These authors concluded that corporate governance increases the value of the company by optimizing the use of cash reserves.

Dittmar and Mahrt-Smith (2007) also provided new perspectives on the role of corporate governance in cash surplus management policy. They have found that the impacts of corporate governance on investment and operational decisions (such as using money) are greater than those found in financing decisions related to cash policy (accumulation of money).

Cooperative banks seek to bring together the competencies of a bank, thus competing in a market context, with a corporate governance structure in which cooperators can play a relevant role. Thus, cooperative banks can be considered as hybrid structures because they bring together characteristic features of markets and a hierarchy (Greve, 2002). On the one hand, members of credit unions operate in the market independently, for example, as farmers, artisans or traders.

Loans and other financial services - which are important factors of production - can be obtained under more favorable conditions, minimizing transaction costs through established cooperation among its members, allowing them to participate in

the hierarchy (Greve, 2002) , always conditioned by the issues of specificity referred to in Bonus (1994) and to which we refer in the previous section. In other words, cooperative members are legally and economically independent (market perspective), except for the business relationship with the credit union (hierarchy).

The participation of co-workers in the corporate governance of cooperative banking, which Gorton and Schmid (1999) call endogeneity of ownership structure is also a problem, especially in the advantage of company performance. This problem is associated with plasticity (Bonus, 1994), a characteristic of cooperative banking. Gorton and Schmid (1999) argue that increasing the size of the firm helps advantage by reducing the inefficiencies resulting from the separation of ownership and control. However, these authors suggest that this is not always the case when owners participate in management. Rasmusen (1988), for his part, argues that a cooperative does not have shareholders effectively, and it may happen that manager's act in a context with reduced supervision.

This section discusses the importance of cooperators and corporate governance mechanisms in the company's profitability. From the initial corporate banking models evidenced by Bonus (1994) to the work on the investment decisions presented by Dittmar and Mahrt-Smith (2007), which highlights the importance of cooperators as key elements in corporate governance elements of corporate banking . There seems to be a consensus on the need for cooperators to participate in corporate governance mechanisms as guarantor of their own investment in society. The paradigm with which the first cooperative banks, based on facilitating access to credit for small landowners and merchants, has been put in question. Increased competition has led other banks to diversify and broaden their customer base, seeking to win customers to the cooperative banking, taking advantage of its disadvantages.

In the case of cooperative banking, given that it is natural to have situations where clients are simultaneously cooperative, attention to the activity of the company is of particular importance. In this context, if banking in general, it is necessary to bet on showing the solidity of the institution towards its clients and society in general, in the cooperative banking, due to the particularities presented, this concern is even more pressing.

As a way of increasing this credibility and image towards clients and society, Greve (2002) recommends that cooperatives support their activity in the hybrid structure described above, in which opportunism is greatly reduced. Opportunism may also arise on the initiative of managers. For example, Holmstrom and Kaplan (2003) consider that top managers may be slow to respond to opportunities to increase the firm's value, especially if pay incentives are not the most attractive (eg limited ownership of shares). Thus, the relationship with other stakeholders can be compromised, especially if there is an understanding that growth and stability are the most appropriate corporate goals. Therefore, market reactions may be negative.

For Greve (2002) there may be advantages and disadvantages in a credit union. As an advantage, the strength of credit cooperatives lies in their small

size, which makes it easier to obtain specific information about customers, allows for quicker decisions and allows for operations that are more flexible.

On the other hand, this small size can be disadvantageous in cases where a client needs a high credit that exceeds the capacity of the local credit union, a client wants to be supported in his internationalization process and the cooperative bank intends to offer a wide range of specialized financial products and services. In this case, local cooperative banks have to work together with larger banks or specialized finance companies.

As stated by Moir (2001), corporate governance practices can not be separated from their corporate responsibility performance, which makes them more comprehensive in an increasing range of issues, such as "factory closures, labor relations, rights human, corporate ethics, community relations and the environment "(p.2). In this sense, the performance of companies and their practices of corporate governance should consider guidelines related to the workplace (employees), the market (customers, suppliers), the environment and the community in general.

#### 2.4. Cooperative banking and financial performance

Kaplan and Rauh (2010) argue that, while there are opinions that managers' remuneration is excessive, the definition of efficient compensation structures has a significant impact on performance. Along the same lines, Edmans, Gabaix and Landier (2009) seek to present an ideal remuneration model, linked to the performance of the organization. However, there is a risk that the incentive system will be excessively focused on rewarding short-term results (Bebchuk & Fried, 2004).

On the other hand, the structure of capital ownership is another essential aspect with implications for performance. There is a broad framework in the theory around this aspect. La Porta et al. (2002), remuneration for external directors (Bhagat, Carey, & Elson, 1999), shareholder activism (Karpoff, Malatesta & Walking, 1996) and legal regulations (Sundaramurthy, Mahoney & Mahoney, 1997), studied investor protection. Gompers, Ishii and Metrick (2003) found that companies with lower shareholder protection rights have lower valuations and lower returns.

Another important aspect is related to the effect of shareholder activism on performance. The key question is whether this activism produces value for the companies and, consequently, for the other shareholders or if, on the contrary, it harms them. Activism often reveals itself in the influence of the way the company is managed or in order to pressure the acquisition of the company by third parties (Bebchuk & Weisbach, 2010). In this regard, Becht, Franks, Mayer and Rossi (2010), when analyzing the management of the British Telecom Pension Scheme fund, found that activism leads to significant changes in company strategy, focus on core business and shareholder return. They also verified situations of influence in the change in executive management and in the replacement of CEO's. The authors estimate that about 90% of the above-average returns generated by the fund are due to the activism program.

Due to the growing importance of the quality of information, in order to avoid scandals that have occurred in the last decade, such as Enron, new information providers have emerged whose role is to advise companies on issues of corporate governance and to evaluate the quality performance in this field (Brown & Caylor, 2006).

According to Joh (2003), other factors affect the profitability of a company, namely financial structure, size, market share and business strategy. The behavior of the industry and the economy in general are also included. Regarding corporate governance practices, this author considers the following performance constraints:

## 2.5. The cooperative banking system

In most of European countries, the cooperative banking groups are comparable to other financial groups. Credit cooperatives are a reality in the majority of European Union countries and affect the social and economic life of the various economic sectors (Karafolas, 2005; Palomo 2002; Usai & Vannini, 2005). Cooperative banks have no option but to compete with these highly professionalised institutions in providing rural credit to the farmers (Bhagwati, 2005).

The number of articles that establish the link between corporate governance and cooperative banking is very small. Most of the studies are focused on the study of the German case (Bonus & Schmidt, 1990; Lang & Welzel, 1996; Greve, 2002; Guinnane, 1997). For example, Bonus and Schmidt (1990) recognize the importance of combining, through cooperation, the advantages of a large number of small local banks over a large group. However, this research presents an empirical study still based on the economy of the former West Germany.

The investigation is not only focused on the German case. Indeed, Freeman and Lomi (1994), whose work focused on the Italian cooperative rural banking, concluded the importance of the institutional environment in the creation and development of this type of institutions and their demographic implications.

A research paper in Spain (Gual & Moya Clemente, 1999) shows that larger cooperative banks are more efficient than smaller ones, suggesting that the most appropriate strategy is to increase the size to reduce inefficiencies.

These studies analyze the cooperative phenomenon in banking, not necessarily the issue of corporate governance. In fact, only Gorton and Schmid (1999) deal with this problem without properly revealing important conclusions, but they point to the existence of a gap in research, which is the basis of this article. Gorton and Schmid (1999) based on existing studies (Berle & Means, 1932) to analyze the inefficiency of corporate governance, which results from the separation of ownership and control of the organization. Although the authors' conclusions do not allow the relationship to be clearly established, they point out that the dispersion of the existing powers in the cooperative banking is associated with lower levels of performance, which is in line with the proposals of Demsetz and Lehn (1985), argue that the company's

performance is correlated with the ownership structure.

## 3. METHODOLOGY

This article is based on normative research aimed at identifying the various dimensions that influence corporate governance activities. For this, a critical review of the literature was developed which allowed the identification of several dimensions associated to the importance that the main stakeholders may have in the referred corporate governance activities.

The investigation, when analyzing the specific case of cooperative banking, takes into account a form of a typical organization in the context of the banking sector. In fact, the ownership structure is quite different from other financial entities, and the partners are often clients or collaborators of the organization.

### 3.1. Research design

The research question underlying this study is as follows: What is the influence of the various stakeholders and the corporate governance activities in the cooperative banking as a multidimensional construct?

The objective is to take an approach to the alignment defined for the achievement of the objectives of this research. The following methodology is essentially hypothetical-deductive, which is based on a deductive logic based on a review of the relevant theory as a preliminary step for prediction. This is materialized using testable hypotheses (Barker, Pistrang, & Elliot, 2002).

Specifically, this approach uses two methodological levels. First, the nature of the data is of the quantitative type, resulting from aggregation of the level of corporate governance practices, usually cumulative, or collected in the form of Likert scales. The data referring to the financial performance will still come from accounting information. Second, the techniques of analysis are also of a quantitative nature, based on the statistical treatment of the data.

This study may be classified as non-experimental. Considering that the objective is based on the identification of a cause and effect relationship between the variables under study, we intend to analyze the effects, not the causes. In this sense, we will determine which of the independent variables will have a significant influence on the outcome of the dependent variable. We will adopt this nomenclature in order to facilitate the understanding of the relations between the variables under study because, strictly speaking, the independent variables are not, since they were not manipulated in order to perceive their action in the dependent variable. We could also name them variables of study or variables selected by the researcher.

In short, with this design of the research, an attempt was made to establish a plan of action that clarifies how the obtained results were obtained (Kumar, 2014). This section was also intended to ensure that the selected procedures are best suited to obtain valid answers.

### 3.2. Definition of research questions

The empirical validation of the theoretical model is based on a quantitative approach, which seeks to answer the following research questions:

- What is the influence of the stakeholders in the practices of corporate governance, in the cooperative banking?
- Which stakeholders most influence corporate governance practices in cooperative banking?
- How do stakeholders and the various dimensions of corporate governance relate to cooperative banking?

Based on these questions, we will establish the research objectives, which will be presented in the next section.

### 3.3. Definition of objectives

This study aims to understand the constraints of corporate governance structures, in the context of cooperative banking in Portugal. Specific objectives include:

- Evaluate how organizational performance conditions corporate governance practices;
- Determine the implications of customer trust and image versus competition in corporate governance practices;
- Understand how community trust and image in markets conditions corporate governance practices;
- To know the implications of the image before the Government, the Bank of Portugal and the Central Bank in the practices of corporate governance;
- Study how the compensation and motivation of senior management affect corporate governance practices.

### 3.4. Hypotheses and conceptual model

We developed the theoretical support of the hypotheses, which allow us to construct the model that considers the influence of various stakeholders (competitors, regulators, clients, society, etc.) and of the organization itself, in corporate governance practices, which are divided into cooperative rights, CA structure, CA, audit, fiscal council and other elements.

In this model, seven hypotheses are considered. Since each can result in different measurements (since they have more than one associated variable), and to the extent that the dependent variable is operationalized in six aspects, the assumptions will unfold into sub-assumptions. The hypotheses are presented in Appendix.

### 3.5. Definition and operationalization of variables

In this section, we intend to identify and define the variables, as well as how they will be operationalized. This operationalization was a challenge, insofar as it intends to measure the performance of different stakeholders.

#### 3.5.1. Independent variables

Independent variables are the image of the company, the image of the competitors, the relationship of

trust with the clients, the image of the regulator, the return of the cooperators, the remunerations of the managers and the financial performance of the organization.

Among the original items proposed by the authors, it is considered, for example, the provision of the annual report of the current year and previous year or the provision of current quarterly reports. In particular, it was considered that the relationship with society contemplated the aspects of Social Responsibility and the actions of the CCAM in transparency with society.

The image vis-à-vis competitor was operationalized through the Return on Equity (ROE) ratio, since it is based on this indicator that the efficiency and effectiveness of the use of equity are analyzed. In relation to the image vis-à-vis the regulator, the solvency ratio TIER I was used, the indicator par excellence used by the Bank of Portugal to monitor the performance of banking entities and which follows from the norms established in the Basle agreement and which establishes the ratio between the Bank's equity (such as equity, reserves, non-redeemable preferred shares, among others) and assets weighted by credit risk. The latter correspond to the total assets held by the bank, but a credit risk weighting is considered, which the Bank of Portugal provides.

The return of the co-workers was measured in two ways. On the one hand, an attempt was made to evaluate the company's practices regarding the protection of owners of capital, using Brown and Caylor's (2004) proposal, which is based on the assessment of the management principles of top form managers to ensure a transparent and supportive role for investors. On the other hand, in a quantitative perspective, business profitability and efficiency in the management of human resources (personnel costs) were evaluated. The remuneration (unitary) of the managers was calculated based on the declared values of remuneration of the CA to be divided by the number of members of the same body.

Finally, to measure the financial performance of the organization, the Return on Assets (ROA) ratio and the bank efficiency ratio were used. These are commonly used indicators to evaluate and compare the financial performance of banking entities. The first translates the relation between the performance of the investments in the asset measured by the ratio between the net results for the year and the total assets. The second indicator is measured by the ratio between the entity's structure costs and its banking product.

#### 3.5.2. Dependent Variables

To measure the dependent variables, we sought to determine the most relevant practices of corporate governance in cooperative banking based on the literature review. Thus, six practices were identified, namely:

- Right of the cooperators;
- CA structure;
- CA procedures;
- Audit;
- Supervisory board;
- Other elements.

With regard to the cooperators' rights, there is a set of regulations, such as recording ownership of shares, such as obtaining relevant and timely information about the company, participation in general meetings, issuing opinions on the remuneration policy of managers and principal executives and protection against abusive actions.

Concerning CA, regarding structure, although there is not an ideal form, there are recommendations that should be taken into account, such as (Silva et al., 2006):

- Executive Committee, in which non-executive directors must be in a number clearly superior to the number of members of the Executive Committee;

- There should be directors who are independent of both the executive directors and the main shareholders of the company;

- The Board of Directors should reflect the shareholder structure, providing it in accordance with the interests of the majority shareholders, the minority shareholders with relevant positions and the remaining shareholders.

In relation to the audit, the audit committee should be composed exclusively of non-executive directors, where the majority should be independent directors. Currently, it is discussed whether this body should replace the fiscal council, at least in the larger companies. At the external level, through the audit firms ensures the effectiveness and independence of the management team control, functioning as a validation of the quality and credibility of the information that the company publishes.

In order to measure each of these practices, Brown and Caylor (2004) initially resorted to adapting the items to match the specificities of the study object. Thus, in the questionnaire to measure, the aspects related to the cooperators' rights, 5 items were considered, with questions such as: is postal voting allowed? The Board of the General Meeting chooses the date of the meetings so as not to overlap the dates of other assemblies.

For the structure of the CA, are also considered 5 items, with questions such as: Does Caixa have at least 50% of administrators without exclusive dedication? Is the President an Executive? Or: The chairman of the Board of Directors and the general coordinator are different people?

Regarding the CA procedures, there were 15 items; using questions, such as are executive directors present at least 75% of the meetings, on average? Are the individual positions on each item on the order of business recorded in the minutes of the meetings of the Management Board? Or: There is an evaluation system for executive directors.

For the audit question, it was decided to analyze only the audit committee, since it was the most appropriate for the CCAM. It was studied based on eight items, such as: Are executive directors present at least 75% of the meetings, on average? Are the individual positions on each item on the order of business recorded in the minutes of the meetings of the Management Board? Or: Is there an evaluation system for executive directors?

For the Fiscal Council were considered 10 items, resorting to questions such as: Is there a regulation for the Fiscal Council? Does the Fiscal Council include more than one expert in accounting, law, management or economics? Does the Audit

Committee recommend to the General Meeting the statutory auditor (ROC)?

Finally, for the other elements, 14 items were used, addressing issues such as: Does Caixa have the German governance model, i.e., does it have a General and Supervisory Board, an Executive Board of Directors and a General Assembly (GA)? Does Caixa follow a traditional or Latin governance model, i.e., Board of Directors, Fiscal Council, General Assembly and statutory auditor? Or: Do members of the Board of Directors respond to members' proposals within 3 months after General Assembly?

### 3.6. Population and sample

#### 3.6.1. Population definition

At the level of the observations, this paper assumes an intersectional design (Babbie, 1989), since it intends to analyze the determinants of corporate governance practices in the context of Mutual Agricultural Credit banks, thus obtaining a general overview at the time of analysis (Kumar, 2014).

For Gorton and Schmid (1999), cooperative banking provides a useful sample to study. First, the institutional characteristics of the structures of ownership of these cooperative banks are essentially exogenous, resorting here to the nomenclature used by these authors and previously referenced. Second, an important institutional feature is that the cooperative's equity securities can only be traded with the cooperative itself and only at nominal value. That is, there can be no hostile takeovers from these companies. Third, another important characteristic is that the votes cannot be proportional, since each cooperator is worth one vote.

Of the cooperative banking universe, in addition to the Central Bank, there are 87 associated cooperative banks, with FENACAM as its top. In this universe, there are more than 400,000 members. It has more than 700 branches throughout the country, employing around 5000 people. In terms of business, it manages assets in excess of 20 billion euros, has one million and 200 thousand customers and has own funds greater than one billion euros.

#### 3.6.2. Characterization of the sample

In the scope of this research, the total of the CCAM universe was sought, i.e. the 77 Mutual Agricultural Credit Banks (CCCAM), which are part of the Integrated System of Mutual Agricultural Credit (SICAM) plus 5 CCAM independently. The questionnaire was then sent to all, by mail, and a sealed envelope was sent in response to the same route. In a first phase, 46 valid answers were obtained. After telephone or email insistence, 17 more answers that are valid were obtained. Accordingly, we obtained a sample of 58 banks, which represent 67% of the universe, and it can be considered a representative sample. This sample is characterized by some heterogeneity of values. For example, although the average size of the CA is four elements, we found that some banks have only three and eight others.

### 3.6.3. Instruments

Several sources were considered to obtain the data, according to their nature. The financial data were collected from the reports and accounts of each bank for the year 2013. In order to obtain the number of members of the board of directors, the same documents were analyzed and, in the case of cooperative banks, that did not submit this information, recourse was to the telephone contact in order to obtain the missing values. For the remaining variables, the questionnaire that materialized the operationalization of the variables previously described was performed.

The purpose of the questionnaire was to gather information on corporate governance practices implemented in CCAM. Confidentiality of the responses was ensured, indicating that the information provided was confidential and that the data would be used for statistical purposes only and presented in aggregate form. The response was encouraged by offering a document containing the main findings of the survey. Suggestions for completing the questionnaire were also presented.

In addition to an initial section concerning the indication of the Cashier and the respondent, the questionnaire contains nine sections, which are indicated below:

- Section I – Cooperators' rights (associates)
- Section II – Structure of the Board of Directors
- Section III – Procedures of the Board of Directors
- Section IV – Audit
- Section V – Fiscal Council
- Section VI – Relationship with Cooperators (associates)
- Section VII – Board of Directors - Other Topics
- Section VIII – Relationship with society in general and with clients
- Section IX – Social Responsibility

Sections VI and I refer to instruments for the protection of rights and relations with co-workers. Sections II to V and V, VII and IX were intended to evaluate corporate governance practices. Finally, Section VII was intended to measure the relationship mechanisms with society in general and with clients.

The questionnaire, in its final version, consisted of 91 items, with a nominal dichotomous response (YES/NO), and the possibility of a Non-Applicable answer in all items was offered. The sum of the items allowed obtaining a score for each variable under study.

## 3.7. Procedures

### 3.7.1. General procedure

After the literature review and subsequent construction of the data collection instrument, with the mentioned alterations already mentioned, the answers were obtained. It was intended that the respondent of the questionnaire had a comprehensive view of both the institution and its context. In this sense, we understand that the most appropriate person would be the president of the CA of each of the Boxes.

### 3.7.2. Procedures for processing and analyzing data

Data were analyzed using the SPSS-Statistical Package for Social Sciences software from IBM. Descriptive statistics were used, namely minimum, maximum, mean and standard deviation, median, asymmetry and flatness. To test the adherence to the normality of the distributions of the variables, we used the Kolmogorov-Smirnov test.

In the case of confirmation of non-adherence to the normal distribution ( $p < .05$ ), non-parametric hypothesis tests, specifically the Spearman correlation ( $\rho$ ), were used to quantify the association between two quantitative variables.

In the case where the normality assumption was verified, simple and multiple linear regression analyzes were used to estimate the value of one (dependent) variable from the values of other variable (s) (is independent or predictive).

When it was not possible to develop non-parametric regressions, it was decided to apply, when the data were adequate, the logistic regression, and ordinal regression. In all analyzes, a level of significance ( $\alpha < .05$ ) was established, indicating the rejection of the null hypothesis ( $H_0$ ).

## 4. ANALYSIS AND DISCUSSION OF RESULTS

The presentation of the results obtained will follow the order of the hypotheses. After the presentation of the analysis associated to the determination of the scores that quantify each of the variables, namely those that are part of the applied questionnaire, will be presented the descriptive statistics of all the variables under study and, finally, we will proceed to the application of statistical analysis techniques that decision on the assumptions made.

### 4.1. Determination of items by variable

For each of the variables that result from a sum of items, an inter-item correlation was developed, in order to verify its independence. In situations where two items had a significant negative association between them, one of them was withdrawn.

The variables that were subjected to this analysis are: Profitability (VI), trust (VI), relationship (with society) (VI), cooperative rights (VD), Board of Directors structure (VD), Administration (VD), Audit (VD), supervisory board (VD) and Other elements (VD).

In all but one, the items were found to be independent of each other, or to have significant positive correlations. In the "Other elements" variable, it was necessary to withdraw three items (G1: "The Caixa has the German governance model, that is, it has a General and Supervisory Board, an Executive Board of Directors and a General Assembly"; G8: "The commercial (non-credit) business between Caixa and any of its directors is publicly disclosed "; G11: "The duties of the general coordinator and the chairman of the Board of Directors are separate", since they demonstrate significant negative associations with other items. The final score was thus the result of the sum of 15 items, instead of the 18 originally planned.

## 4.2. Descriptive statistics of variables

We present the descriptive statistics of the variables under study, namely minimum, maximum, mean and standard deviation (Table 1). These values may

convey an idea of the distribution of the variables, although they are not comparable with each other, as they result from a diverse number of financial items and indicators.

**Table 1.** Descriptive statistics (minimum, maximum, mean, and standard deviation) of independent variables (VIs) and dependent variables (RVs)

<i>VIs</i>	<i>Indicator</i>	<i>Mín.</i>	<i>Máx.</i>	<i>M</i>	<i>DP</i>
Yield	Yield	1.00	3.00	1.81	0.47
	Profitability employed	63371.30	236913.00	115233.83	31673.82
	Cost with staff	0.20	0.55	0.38	0.08
Confidence		0.00	6.00	3.59	0.93
Company Relationship	Relationship I	0.00	4.00	3.32	0.91
	Relationship II	1.00	12.00	4.37	2.47
Image on the market		-3.36	1.28	0.02	0.48
Image to customers		0.00	0.63	0.22	0.12
Remuneration		15635.00	396981.00	118052.03	87006.56
Financial performance	Return on Assets	-2.41	0.03	-0.03	0.30
	Efficiency ratio	0.30	1.02	0.66	0.16
<b>VDs</b>					
Cooperators' law		2.00	5.00	3.71	0.81
Structure of CA		1.00	4.00	2.30	0.59
CA Procedures		3.00	10.00	6.86	1.74
Audit		0.00	10.00	5.93	2.79
Supervisory board		3.00	10.00	5.80	1.38
Other elements		2.00	8.00	5.76	1.42

Note: Based on the questionnaire, the responsibility with society is measured through section IX, referring to Social Responsibility, which we will call "Relationship I". In the same way, we will call "Relationship II" to the indicator composed by questions H7 to H18 of section VIII of the questionnaire, aimed at measuring the aspects related to the transparency practices of CCAM to society in general.

Regarding the profitability practices, the values show little variability, which is also reflected in personnel costs. In terms of confidence, the mean is high, with little dispersion, while in the relationship two distinct movements are observed: in relation I, the mean is high and there is little variability, indicating a negative asymmetry ( $g_1 = -1.47$ ), with flattening leptocúrtico ( $g_2 = 2.16$ ). The median value ( $Mdn = 4$ ) shows that this concentration occurs at the maximum end of the distribution, where 50% of the participants are located. In relationship II, the mean decreases, although the dispersion remains reduced. However, the concentration of values lies at the lower end of the distribution, which is also leptokurtic ( $g_2 = 0.66$ ) and positive asymmetric ( $g_1 = 1.04$ ).

The practices associated with the image in the market present a positive average, with values very close to zero, in the majority (leptokurtic distribution, asymmetric negative); ( $g_2 = 2.17$ ) and positive asymmetry ( $g_1 = 1.12$ ), with most of the

observations being in the lower values of the distribution.

Regarding the remunerations, there is a concentration of observations at the lower values (positive asymmetry,  $g_1 = 1.52$ ), with a median value ( $Mdn = 100000$ ), lower than the mean. There are some outliers at the upper end of the distribution. Financial performance practices are mostly close to zero (ROA), with only four observations with different values. The efficiency ratio, on the other hand, is very close to normality.

Regarding the dependent variables, the median ( $Mdn = 4$ ) is higher than the average, indicating that 50% of the observations are close to the maximum of the distribution. Concerning the structure of the CA, the "movement" is opposite, since 50% of the observations ( $Mdn = 2$ ) is below the average.

As for the practices related to the audit and the fiscal council, the distributions approximate normality.

**Table 2.** Results of the Kolmogorov-Smirnov (KS) test, for each of the variables under study

<i>Indicator</i>	<i>KS (D)</i>
Yield	<i>D = 0.44, p &lt; .001</i>
Profitability employed	<i>D = 0.09, p = .20</i>
Cost with staff	<i>D = 0.11, p = .07</i>
Confidence	<i>D = 2.06, p &lt; .001</i>
Relationship (partnership) I	<i>D = 2.48, p &lt; .001</i>
Relationship (society) II	<i>D = 1.67, p &lt; .001</i>
Image on the market	<i>D = 3.00, p &lt; .001</i>
Image to customers	<i>D = .908, p &lt; .30</i>
Remuneration	<i>D = 1.35, p = .05</i>
Return on Assets	<i>D = 4.03, p &lt; .001</i>
Efficiency ratio	<i>D = 0.75, p &lt; .62</i>
Cooperators' law	<i>D = 2.04, p &lt; .001</i>
Structure of CA	<i>D = 2.89, p &lt; .001</i>
CA Procedures	<i>D = 0.99, p = .28</i>
Audit	<i>D = 1.29, p = .07</i>
Supervisory board	<i>D = 1.19, p = .12</i>
Other elements	<i>D = 1.50, p = .02</i>

Note: D - Statistical value of the KS test; distributions that resemble the normal distribution are marked in bold

The negative values obtained in the ROA indicator, reflect the crisis that the country and, in particular, the banking sector have been going through. At the level of corporate governance, practices there are also some interesting values. Firstly, the results on the average of the Cooperators' Rights, which are proportionally higher than the values obtained in the other practices, which would be inexcusable, given that these are companies whose focus focuses on the cooperators themselves.

Another medium value with particular relevance refers to the CA procedures with an average of 6.86 evidencing a concern in structuring the performance of this body. However, it is equally interesting that other corporate governance practices have lower average values, namely the audit and the fiscal council.

Finally, we present the results of the Kolmogorov-Smirnov test, which confirm (or not) the

adherence of the variables to the normal distribution (Table 2). This information is decisive for selecting the most appropriate hypothesis tests.

#### 4.3. Corporate governance performance and practices (H1 of the model)

The first hypothesis was to measure the impact of profitability practices (operationalized on the variables profitability, employee profitability and personnel costs) in corporate governance practices (operationalized in the six dependent variables, namely cooperators' law, CA structure, CA procedures, audit, fiscal council and other elements).

First, we analyze the correlations between variables. We used non-parametric correlation of Spearman (rho) due to the existence of distributions without adherence to normality. The results are presented in Table 3.

**Table 3.** Spearman correlation values, and their significance, between the variables of profitability and the RVs

	<i>Rend</i>	<i>RE</i>	<i>CP</i>	<i>DC</i>	<i>ECA</i>	<i>PCA</i>	<i>AUD</i>	<i>CF</i>	<i>OE</i>
Yield	1.00	-.12	.07	-.13	-.11	.21	-.32*	.20	.22
Profitability employed		1.00	-0.65**	.25*	.12	-.02	.11	-.07	-.13
Cost with staff			1.00	-.32*	-.03	-.17	-.03	-.05	.12
Cooperators' law				1.00	.01	-.06	.21	.20	-.05
Structure of CA					1.00	-.07	.10	-.08	-.10
CA Procedures						1.00	-.30*	.41**	.34**
Audit							1.00	-.33*	-.13
Supervisory board								1.00	.34**
Other elements									1.00

Note: Spearman's rank correlation coefficient (Spearman's rho), \* $p < .05$ ; \*\*  $p < .01$

The values demonstrate the existence of a small number of associations, as well as a strong negative association between two of the independent variables (employee profitability and personnel costs). There is a weak negative association between profitability and auditing, a weak positive association between employee profitability and cooperative entitlement, and a weak negative association between employee profitability and employee costs.

The linear regression performed to quantify the relationship between profitability and audit is significant ( $F(1, 42) = 4.59$ ,  $p = .038$ ,  $B = -1.90$ ,  $SE = 0.89$ ,  $\beta = -.314$ ).

After determining the regression coefficients, it is necessary to validate the assumptions of the model. The value of the Durbin-Watson test ( $d = 2.30$ ) is very close to 2, which confirms the independence of the residues. However, the hypothesis of the normal distribution of residues ( $d = 1.38$ ,  $p = .04$ ) is rejected, which invalidates the procedure. The analysis of the variables shows that the profitability variable presents a reduced amplitude ( $A = 2$ ), which limits the robustness of the test, influencing in a determinant way the distribution of the residues. We cannot, therefore, consider profitability as a predictive variable of corporate governance practices related to auditing.

Regarding the relationship with the cooperators' right, since it is not possible to perform a non-parametric regression (through the SPSS constraints), we have chosen to transform the variable into a dichotomous variable, and to develop a logistic regression. If there are other variables that

are significantly associated with the same variable, we will develop a multiple logistic regression.

#### 4.4. Trust and Corporate Governance Practices (H2 hypotheses)

Regarding the practices related to trust, there is no significant correlation with the dependent variables, specifically cooperative rights ( $\rho = .22$ ,  $p = .08$ ), the CA structure ( $\rho = -.12$ ,  $p = .37$ ), the Board of Directors procedures ( $\rho = .06$ ,  $p = .64$ ), the audit ( $\rho = -.19$ ,  $p = .23$ ), supervisory board ( $\rho = .18$ ,  $p = .16$ ), and other elements ( $\rho = .11$ ,  $p = .41$ ). This absence of significant associations refers to the independence of this variable.

#### 4.5. Relationship with society and corporate governance practices (H3 of the model)

The relationship practices are operationalized by two variables, Relationship I and II, showing a weak positive significant correlation between them. The results of its association with dependent variables are shown in Table 4.

These values show that the Relationship variable I is not statistically associated to any of the variables of corporate governance practices. However, Relationship II presents values with statistical significance as regards their association with cooperators' law, fiscal council and other elements related to the practices of the institutions.

**Table 4.** Spearman correlation values, and their significance, between the relationship variables and the RVs

	<i>RI</i>	<i>RII</i>	<i>DC</i>	<i>ECA</i>	<i>PCA</i>	<i>AUD</i>	<i>CF</i>	<i>OE</i>
Relationship I (RI)	1.00	.31*	.23	-.13	.22	-.15	.22	.21
Relationship II (RII)		1.00	.29*	.01	.21	-.26	.37**	.25*
Law Cooperators (DC)			1.00	.01	-.06	.21	.20	-.05
CA Structure (ECA)				1.00	-.07	.10	-.08	-.10
CA Procedures (PCA)					1.00	-.30*	.41**	.34**
Audit (AUD)						1.00	-.33*	-.13
Fiscal Council (CF)							1.00	.34**
Other elements (OE)								1.00

Note: Spearman's rank correlation coefficient (Spearman's rho), \* $p < .05$ ; \*\*  $p < .01$ .

This positive association indicates that an increase in practices related to Relationship II corresponds, to a certain extent, an increase in practices associated with cooperators' law, the supervisory board and other elements.

We proceeded to a linear regression to establish the relationship between Relationship II and the fiscal council, (given the normal distribution of this variable). The resulting model is significant ( $F(1, 59) = 15.37$ ,  $p < .001$ ,  $B = 0.26$ ,  $SE = 0.07$ ,  $\beta = .455$ ). The validation of the assumptions of the model, namely the Durbin-Watson test value very close to 2 ( $d = 2.04$ ) - which testifies to the independence of the residues - and the normal distribution of residues ( $d = 0.77$ ,  $p = .56$ ) - attests to the appropriateness of the procedure, so it is possible to consider the practices related to relationship II as a predictor variable of corporate governance practices related to the fiscal council.

Since the variable, "Other elements" does not present a normal distribution, in the impossibility of developing a nonparametric regression, we recode it as dependent to make it an ordinal variable, and we can apply the ordinal regression.

However, the values resulting from the ordinal regression with Link logit function show that the model is not adjusted [ $G^2(1) = 1.84$ ,  $p = .18$ ], as well as not statistically proving the predictive power of the variable in the model [ $\chi^2_{Wald}(1) = 1.79$ ,  $p = .18$ ] other functions were considered, namely the complementary log-log, but the results presented worse statistical significance. Since the initial correlation value indicates a weak association ( $\rho = .25$ ), this may explain this absence of prediction function.

#### 4.6. Image in the market and practices of corporate governance (H4 of the model)

The fourth hypothesis we formulated was based on the influence of image practices in the market (operationalized, as we mentioned above, by the return on capital), on corporate governance practices. The results obtained show that this image

does not present significant correlations with the dependent variables (calculated using Spearman's correlation), namely cooperative law ( $\rho = -.06$ ,  $p = .66$ ), CA structure ( $\rho = .001$ ,  $p = .99$ ), CA procedures ( $\rho = .04$ ,  $p = .76$ ), audit ( $\rho = .16$ ,  $p = .30$ ), supervisory board ( $\rho = .06$ ,  $p = .64$ ), and other elements ( $\rho = -.11$ ,  $p = .38$ ).

#### 4.7. Customer image and corporate governance practices (H5 model)

Image practices towards clients are associated with the "behavior" of the dependent variables, given that there are no statistically significant results: namely cooperative law ( $\rho = .11$ ,  $p = .38$ ), CA structure = .13,  $p = .30$ , the CA procedures ( $\rho = -.13$ ,  $p = .31$ ), audit ( $\rho = .08$ ,  $p = .61$ ), supervisory board ( $\rho = .13$ ,  $p = .33$ ), and other elements ( $\rho = -.01$ ,  $p = .96$ ).

#### 4.8. Corporate governance remuneration and practices (H6 of the model)

Regarding practices related to remuneration, and its relation to corporate governance practices, again the values obtained by Spearman's correlation are indicators of a lack of significant associations with the dependent variables, as shown: correlation with the law of the cooperators ( $\rho = -.02$ ,  $p = .89$ ); correlation with the CA structure ( $\rho = .07$ ,  $p = .57$ ); correlation with CA procedures ( $\rho = -.07$ ,  $p = .61$ ); correlation with the audit ( $\rho = .16$ ,  $p = .30$ ); correlation with the supervisory board ( $\rho = -.02$ ,  $p = .86$ ); correlation with other elements ( $\rho = -.16$ ,  $p = .21$ ).

#### 4.9. Financial performance and corporate governance practices (H7 of the model)

Finally, we present the results of the association (through Spearman's correlation) between financial performance variables (ROA and efficiency ratio) and dependent variables (Table 5).

**Table 5.** Spearman correlation values, and their significance, between the variables of financial performance and the RVs

	<i>ROA</i>	<i>RE</i>	<i>DC</i>	<i>ECA</i>	<i>PCA</i>	<i>AUD</i>	<i>CF</i>	<i>OE</i>
ROA	1.00	-.27*	.08	.11	-.01	.17	.07	-.14
Efficiency Ratio (RE)		1.00	-.39**	-.05	.02	-.08	-.11	.14
Law Cooperators (DC)			1.00	.01	-.06	.21	.20	-.05
CA Structure (ECA)				1.00	-.07	.10	-.08	-.10
CA Procedures (PCA)					1.00	-.30*	.41**	.34**
Audit (AUD)						1.00	-.33*	-.13
Fiscal Council (CF)							1.00	.34**
Other elements (OE)								1.00

Note: Spearman's rank correlation coefficient (Spearman's rho), \* $p < .05$ ; \*\*  $p < .01$

The results show that ROA does not correlate significantly with other variables, with the efficiency ratio showing a moderate negative significant correlation with cooperative law practices, indicating that, when the efficiency ratio decreases, the to a certain extent

#### 4.10. Relation between independent variables and cooperators' rights

There were four variables that were significantly associated with co-workers' rights (efficiency ratio, profitability per employee, personnel costs and Relationship II), and we performed a multiple logistic regression. We recoded the Variable Cooperators Rights into two categories, given their small breadth and frequency discrepancy.

The first analysis (introduction of the three independent variables by the Enter method) revealed the adequacy of the proposed model [ $G^2(4) = 11.67$ ,  $p = .02$ ]. There is, therefore, at least one variable in the model with predictive power over the right variable of the cooperators.

The Hosmer & Lemeshow adjustment tests confirm the fit of the data to the model [ $\chi^2_{HL}(8) = 4.25$ ,  $p = .83$ ]. The Wald test demonstrates that only the efficiency ratio variable has a statistically significant effect on the Logit probability of increasing cooperative law practices [ $\chi^2_{Wald}(1) = 3.02$ ,  $p = .08$ ], contrary to the variable profitability per employee [ $\chi^2_{Wald}(1) = 0.001$ ,  $p = .97$ ], personnel costs [ $\chi^2_{Wald}(1) = 0.12$ ,  $p = .73$ ] and relationship II [ $\chi^2_{Wald}(1) = 2.59$ ,  $p = .13$ ].

Thus, by using the Forward method: LR (selects only the variables with statistical significance) a new, statistically significant model was fitted [ $G^2(1) = 8.91$ ,  $p = .003$ ;  $\chi^2_{HL}(8) = 11.47$ ,  $p = .18$ ], with a predictive variable - efficiency ratio (b efficiency ratio = -5.60;  $\chi^2_{Wald}(1) = 7.12$ ,  $p = .008$ ).

## 5. CONCLUSION

This work points to a set of conclusions. In the course of the research objectives and from a theoretical point of view, the generalization of the results should take into account its sectorial application (banking), the particular type of corporate form (Cooperative entities) and the particularization of a particular brand (agricultural sector) which, as will be further elaborated below, forms a network of small-scale societies. From this point of view, the results obtained, follow in line with the literature, about the dubious character of each one of the independent variables with respect to the ability to influence corporate governance practices. The results obtained are quite different from the hypotheses we formulated, since they reveal, in most situations, the inadequacy of the independent variables as predictors of the dependent variables. Only the variables Relationship II and Efficiency Ratio are predictive variables of the dependent variables supervisory board and Cooperators' Rights, respectively.

Firstly, in the case of image, the lack of statistical causality between the image that the CCAM have both in relation to the other players in the sector and in relation to the sector, does not allow to conclude that there is no relation. As it is a sector highly controlled by CCCAM, the regulator,

the market itself and, judging by recent events, the community in general, CCAMs, like other industry players, should adopt only high corporate governance procedures, as well as acting to have the ratios studied in accordance with the rules of the Bank of Portugal.

Second, the data points to an influence of financial performance in corporate governance practices, more specifically at the level of cooperative rights. This is a very interesting result in that it contributes to the discussion about this causal relationship. Indeed, due to the characteristics of cooperative societies, the phenomenon of control of the CCAM by cooperators falls under the designation of 'control by minority shareholders' proposed by Bebchuk et al. (2000), it being verified that the ownership structure influences the value of the company, which is in line with the results achieved by Black, et al. (2006). On the other hand, the results suggest that long-term return can be optimized by adopting corporate governance practices (see, for example, Dittmar and Mahrt-Smith, 2007).

Third, the role of the supervisory board, according to the data, is very relevant in relation to society, which contributes to the understanding evidenced in the bibliography and recommendations in the codes of good corporate governance practices of which the transparency, quality and reliability of the information emanated by the company contribute to the protection of the interests of the various stakeholders around the company. On the other hand, this result also allows us to perceive that there is an idiosyncrasy to which Alchian and Woodward (1987) refer when describing the plasticity of the relations (their complexity and specificity), as a result of the local influence of each of the 880 CCAM branches, which certainly contributes to greater proximity to customers and society in general.

Fourth, in this investigation it was also verified that the return of the cooperators did not show any relation with the practices of corporate governance. The fact that there are dominant shareholders or at least a significant stake in the company leads to the maximization of the return in the present. Thus, there may be efforts to condition investment policies, even if this is detrimental to the interests of minority shareholders. What happens in cooperative banking is that the owners of capital (cooperators) are, by inherent to the type of society, all minority. In this sense, conditioning investments and management practices may not have direct repercussions on shareholder returns, hence the inexistence of a relationship. This situation may lead to a different interpretation in the case where the cooperators act on a block.

Fifth, the relationship between managers' remuneration and the adoption of corporate governance practices has not been proven. In the bibliography, the importance of having a remuneration system that facilitates the alignment of managers with the shareholders' interests is defended. The recommendations of the Portuguese Corporate Governance Institute (Silva et al., 2006) state that there may be factors that lead to an inadequate way of calculating managers' incomes, since, as a rule, they are delegated to a committee of Remuneration, usually composed of members who

may not have enough information or training to be able to establish the remuneration rules in full. On the other hand, it is important not to forget the particularities of this type of companies and the sector in question, and corporate governance practices are essential for the transparency and permanence of banking entities in activity. From this, it follows that there need not necessarily be a relation.

In summary, the fact that some of the hypotheses have not been validated is related to a particularity. As a rule, Portuguese companies adopt the continental corporate governance system based on defending the interests of minority shareholders. It is recalled that this system is adopted in continental Europe and Japan, since there is a high percentage of companies controlled by majority shareholders.

In this view, cooperative banking cannot be understood as belonging to the group of companies controlled by majority shareholders, although it adopts the practices advocated in this system. In fact, the participation of capital in the form of one person, one vote, presupposes the absence of dominant shareholders, at least from a financial point of view.

## 6. LIMITATIONS OF THE WORK

As a unique work in Portugal, encompassing two specific themes, namely cooperative banking and corporate governance, the aim was to bring light to the way stakeholders influence these practices. However, considering that we are dealing with a type of atypical society, reflection on the results obtained, should consider the fact that the same person can be client, supplier, collaborator and owner of capital. This aspect also tends to be boosted by the fact that most of the credit banks integrated in SICAM are inserted in rural and, consequently, small ones.

Despite the limitation presented in the previous point, this work is of particular importance, as mentioned, because it addresses a theme little worked from an academic and professional point of view. Thus, the results extracted here point to lines of research that can be explored by researchers. Firstly, it is important to understand to what extent

this customer/supplier/employee/cooperator ambiguity, affects both the CCAM's own relations with stakeholders and corporate governance practices. It is an investigation that would cross-fields such as anthropology, sociology and psychology, but that would allow us to observe in detail this network of connections.

Second, the lack of clarity in the bibliography about some of the relationships evidenced in our hypotheses, coupled with the non-validation of some of them, necessarily points to the existence of moderating variables that will be exploited. First, the dimension appears as a possible candidate, since the majority of the banking societies is of great size, compared to each one of the CCAM. In fact, if you consider the total number of employees (around 5000), if you deduct that a part of them is in the central departments and associated companies, it is noted that, on average, each company will have fewer than 50 employees, a small company. We can also count that each of the 688 branches will have, on average, less than 6 employees. All this in an average universe of 4705 associates by Caixa. In this context, we are faced with a type of banking entity that is great for the network that has, but small at the level of each Caixa, small in what concerns to the adoption of mechanisms of corporate governance that are generally apantage of the great societies.

Third, it would be interesting to expand this study with variables of a strategic nature, knowledge management, since this type of corporate structure with network collaboration allows a high degree of decentralization, where local, and a central management raises problems of articulation and strategic alignment.

Fourth, according to the explanations given about the non-validation of some of the hypotheses, the cooperators' performance in a block could lead to the results obtained in this investigation could be different. In other words, cooperative actions together may alter their inherently minority condition, leading to more evident interests and acting to condition the strategic, investment and operational objectives defined by the management team. For future researchers, this possible meeting of interests may be a moderating variable in the model proposed here.

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## APPENDIX

Table 1. The hypotheses

H1. The return of the cooperators (return, return with employees and personnel costs) influences the practices of corporate governance in cooperative banking, specifically:	
	H1a: The return of the cooperators influences the practices of corporate governance in the cooperative banking, namely those that relate to the right of the cooperators H1b: The return of cooperators influences corporate governance practices in cooperative banking, namely those related to the structure of the Board of Directors H1c: The return of the cooperators influences the practices of corporate governance in cooperative banking, namely those that are related to the procedures of the Board of Directors H1d: The return of the cooperators influences the practices of corporate governance in the cooperative banking, namely those that relate to the audit H1e: The return of cooperators influences the practices of corporate governance in cooperative banking, namely those that relate to the fiscal council H1f: Cooperators' return influences corporate governance practices in cooperative banking, especially those related to other elements
H2. The client's trust relationship with cooperative banking influences corporate governance practices in cooperative banking, i.e.:	
	H2a: The client's trust relationship with cooperative banking influences its corporate governance practices, particularly those related to the structure of the Board of Directors H2b: The client's trust relationship with cooperative banking influences its corporate governance practices, namely those related to the Board of Directors' procedures H2c: The client's trust relationship with cooperative banking influences its corporate governance practices, especially those related to auditing H2d: The client's trust relationship with cooperative banking influences its corporate governance practices, especially those related to the fiscal council H2e: The client's trust relationship with cooperative banking influences its corporate governance practices, particularly those related to other elements.
H3. The relationship of the community in general with cooperative banking contributes to influencing corporate governance practices in cooperative banking, insofar as:	
	H3a: The relationship between the general community and cooperative banking contributes to influencing corporate governance practices, particularly those related to the structure of the Board of Directors H3b: The relationship of the general community with cooperative banking contributes to influencing corporate governance practices, particularly those related to the procedures of the Board of Directors H3c: The relationship of the general community with cooperative banking contributes to influencing corporate governance practices, especially those related to auditing H3d: The relationship of the general community with cooperative banking contributes to influencing corporate governance practices, particularly those related to the fiscal council H3e: The relationship between the general community and cooperative banking contributes to influencing corporate governance practices, particularly those related to other elements
H4. The image of cooperative banking vis-à-vis other banking institutions influences corporate governance practices in cooperative banking:	
	H4a: The image of cooperative banking vis-à-vis other banking institutions influences corporate governance practices, particularly those that relate to the structure of the Board of Directors H4b: The image of cooperative banking vis-à-vis other banking institutions influences corporate governance practices, particularly those that relate to the procedures of the Board of Directors H4c: The image of cooperative banking vis-à-vis other banking institutions influences corporate governance practices, particularly those related to auditing H4d: The image of cooperative banking vis-à-vis other banking institutions influences corporate governance practices, particularly those related to the fiscal council H4e: The image of cooperative banking vis-à-vis other banking institutions influences corporate governance practices, particularly those that relate to other elements
H5. The image of cooperative banking before the banking regulator influences corporate governance practices in cooperative banking, insofar as:	
	H5a: influences corporate governance practices that relate to the structure of the Board of Directors H5b: influences corporate governance practices that relate to the procedures of the Board of Directors H5c: influences corporate governance practices that relate to auditing H5d: influences corporate governance practices that relate to the fiscal council H5e: influences corporate governance practices that relate to other elements
H6. The level of remuneration of managers has implications for corporate governance practices in cooperative banking, that is:	
	H6a: The level of remuneration of managers has implications for corporate governance practices in cooperative banking, specifically those related to the structure of the Board of Directors H6b: The level of managers' remuneration has implications for corporate governance practices in cooperative banking, specifically those related to the procedures of the Board of Directors H6c: The level of managers' remuneration has implications for corporate governance practices in cooperative banking, specifically those related to auditing H6d: The level of managers' remuneration has implications for corporate governance practices in cooperative banking, specifically those related to the fiscal council H6e: The level of managers' remuneration has implications for corporate governance practices in cooperative banking, specifically those related to other elements
H7. The degree of performance of the cooperative banking has implications in the practices of corporate governance in the cooperative banking, since:	
	H7a: has implications for corporate governance practices that relate to the structure of the Board of Directors H7b: has implications in corporate governance practices that relate to the procedures of the Board of Directors H7c: has implications for corporate governance practices that relate to auditing H7d: has implications for corporate governance practices that relate to the fiscal council H7e: has implications for corporate governance practices that relate to other elements