

Good and bad *Banks*? Governance, Chairmen's human capital and performance

Miguel García-Cestona^{a,*}, Marti Sagarra^a

^a *Department of Business Economics, Universitat Autònoma de Barcelona, Spain*

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Abstract

Spanish savings banks (*Cajas*) and commercial banks have experienced very different fates. Before the crisis both bank types shared, almost equally, the Spanish market and *Cajas* were performing well. Nowadays, the soundest *Cajas* have been forced to transform themselves into commercial banks, while the poor-performing ones have been either absorbed or rescued by the Government. Meanwhile Spanish commercial banks have performed reasonably well through the crisis. Our goal is to assess if such different outcomes are related to their governance practices and the human capital of their top managers. Most of the previous debate has focused on the political affiliation of *Cajas*' managers. Some authors have pointed out that neither the composition of the different governance bodies, nor the role played by politicians can explain these banks' results. Using an extended period data, covering both a boom period and a period of crisis, and a more complete description of chairmen's human capital (previous banking experience, formal education, and political background), we find significant differences in banks' performance during the boom and the crisis periods, as well as differences in performance and risk between commercial banks and *Cajas*. Governance features (such as board composition and politicization) and human capital also play a role in the heterogeneous performance observed among the *Cajas*.

Keywords: corporate governance; financial crisis; financial risk; human capital; Spanish banks

JEL Classification: G21; G32; G33; G34

* Corresponding author: Miguel García-Cestona, Department of Business Economics, Faculty of Economics and Business Studies, Universitat Autònoma de Barcelona, 08193 Bellaterra (Cerdanyola del Vallès), Spain. E-mail: Miguel.Garcia.Cestona@uab.es

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1. Introduction

The Spanish savings banks (*Cajas de Ahorros*, or *Cajas*) have been so heavily affected by the 2007–2008 financial crisis that most of them have already disappeared by the end of 2012. This collapse was preceded by similar problems in other countries (Ahrens et al., 2011; Erkens et al., 2012). Nevertheless, there were important differential elements in the Spanish case. First, savings banks enjoyed an apparent great shape previous to the crisis, and, second, they constituted half of the financial system. Out of 45 entities present in 2008, only 12 of them remained by the end of 2012 (see the Appendix 1). Many *Cajas* merged with other banks or had to be rescued and, finally, the remaining ones, had to transfer their business to newly created (commercial) banks, while transforming themselves into financial foundations that owned those new commercial banks. It is important to mention that this transformation has occurred even for those Savings banks that performed well. Furthermore, it seems this process may not be finished yet (Sagarra et al., 2013a) with some additional mergers in the waiting list. Although the *Cajas* transformation in commercial banks has a precedent in the Italian savings banks privatization twenty years ago (see Carletti et al. (2005) for a comprehensive survey), it presents new elements and it can serve as a role model or, at least, as an element of debate for other countries.

In contrast with the *Cajas* description, most Spanish commercial banks have withstood the crisis in a successful way. Appendix 1 shows a summary on the restructuring of the Spanish banking sector between 2008 and 2012. The table shows that the restructuring involved 43 out of the 45 *Cajas*. Paradoxically, only the two smallest ones, Caixa Ontinyent and Caixa Pollença, were not involved in any restructuration process and they have maintained their own autonomy and their previous legal form. On the other side, among the eight largest Spanish commercial banks only three of them were absorbed (i.e., Banco de Valencia, Banesto and Banco Pastor). Traditionally, Spanish commercial banks have been a more concentrated group than *Cajas*. Although the regulator considers 150 banks (Bank of Spain, 2011), in nominal terms, once we eliminate subsidiaries and very small banks, numbers fall significantly. During the 2000–2009 period, less than 20 entities kept assets above 3 billion Euros,

and only 9 surpassed the 10 billion Euros of assets in 2004, just in the middle of that period. In any case, it is important to mention that each type, *Cajas* and commercial banks separately, accounted for about half of the Spanish credit market during the decade 2000–2009.

Although these two types of banks shared the market in similar terms, they have experienced very different outcomes after the crisis. Our aim is to assess if this difference responds to governance practices and/or the human capital of their chairmen. First we test if there are differences in terms of the *Cajas*' performance with respect to banks, and also among themselves. Some authors (García-Marco and Robles-Fernández, 2008; Cuñat and Garicano, 2010; García-Meca and Sánchez-Ballesta, 2012) have pointed out that neither the formal governance institutions (i.e., the composition of the different governance bodies) nor the real governance (i.e., the role played by politicians) explain these differences in banks' results. To carry out our analysis we make use of both an extended period data, covering both a boom period and a period of crisis, and a more detailed description of the human capital of the chairmen. In particular, we consider their previous banking experience, formal education, and their political background to get a better grasp of these important issues. History seems to matter and the use of a better organizational capital of the chairmen, and the stakeholder composition can help us to get clearer results.

To test our goals we make use of a dataset containing 42 *Cajas* (while previous studies compared only 30 *Cajas* on average in the) and 16 commercial banks for the period 2004–2009, covering a period of boom and also of crisis. This means practically the whole universe of *Cajas* (42 out of 45 *Cajas* for that period, with the only exception of the three smallest *ones*: Caixa Ontinyent, Caja Jaén and Caixa Pollença for which there was no available data), and the relevant Spanish commercial banks, those with at least 3 billion Euros of total assets.

Concerning the effect of governance structure on financial firms' performance there are some interesting and recent references (e.g., Adams and Mehran, 2012; Pathan and Faff, 2013) conducting the analysis in different countries. Although this helps us to better appreciate the differences and commonalities among banks, one important problem with these international comparative studies (i.e., cross-country studies) comes from the fact that they cover several countries and large geographic areas (e.g., Iannotta et al., 2007; Girardone et al., 2009; Erkens et al., 2012; Ferri et al., 2012). To achieve that, they only take into account the largest and/or the listed banks, introducing a bias that may offer an incomplete picture of the sector. In other studies, banking reality is oversimplified due to the inclusion of heterogeneous countries, or the joint analysis of many different types of financial firms. Through our emphasis on the Spanish *Cajas*,

banks with specific corporate governance and risk features, and its comparison with the rest of Spanish commercial banks, we think we can go deeper in the analysis of these two organizational forms. And still, we think some important lessons can be extracted for other countries where some type of non-commercial bank is competing in the banking sector.

We find that commercial banks were, in general, more profitable than *Cajas*, although they incurred in more risk during the boom period. However, during the crisis period commercial banks have shown a better performance, apparently because they managed to control their own risks in a better way than *Cajas*. Although many *Cajas* performed well, on average they did not, and these results would be coherent with the subsequent restructuring of the whole sector, confirming the different risk-taking behaviour models between commercial banks and *Cajas*, or at least with some of them.

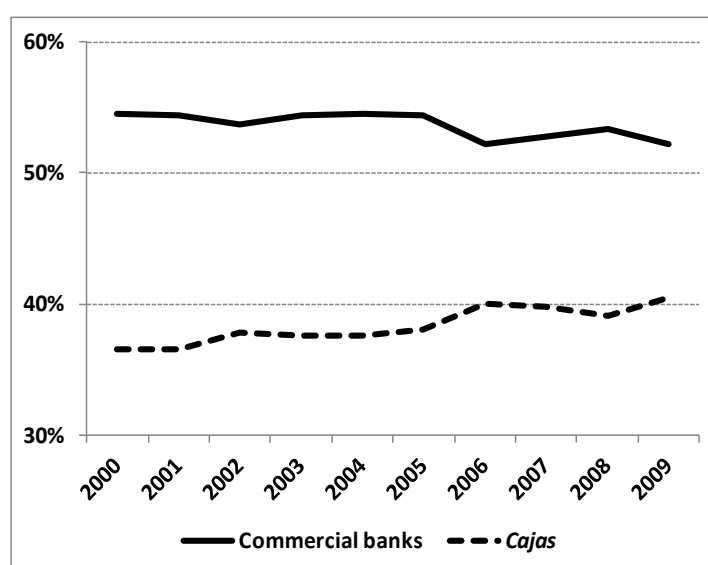
Our paper contributes to the very scarce literature assessing the relationship between the human capital and governance dimensions and the banks' performance, while establishing additional knowledge about the reasons for the collapse of an important number of Spanish financial institutions. On the one hand, we find that those banks with a chairman that had more years of previous banking experience, more years spent in the entity and a top degree in their education, performed better than banks without such chairman's profile. On the other hand, and focusing on the effects of the level of politicization of *Cajas* governance, we find evidence that a major presence of politicized seats in the governing bodies implied a better profitability combined with higher risk, at least in boom periods. Due to these results, we believe this paper have important implications for banking regulators and future supervisory policies, and not only for the case of Spain. Other countries with important shares of non-shareholder-oriented institutions should also consider these findings.

After this introduction, Section 2 provides an overview of the evolution and restructuring of the Spanish financial sector, especially for the case of *Cajas*. We also include a section (Section 3) describing the Spanish banks governance and our hypotheses, focusing mainly in the *Cajas*. In this section we show our measures of the chairmen's experience and human capital. Section 4 describes the collected data and the statistical methodology. Finally, section 5 presents the empirical findings, and the paper ends with a section containing conclusions and future challenges.

2. Evolution and restructuring of the Spanish financial sector

There are three traditional players in the Spanish banking sector have been commercial banks, *Cajas* (Spanish savings banks), and credit cooperatives. During the decade 2000–2009 both the commercial banks and the *Cajas* accounted for about one half of the Spanish credit market, while credit cooperatives held a residual share, approximately 10% of the market (Bank of Spain, 2011). Figures 1 and 2 show the evolution of the assets and the loans held by *Cajas* and commercial banks as a percentage of the total credit for the period.

Figure 1. Assets (% over banks' total assets)



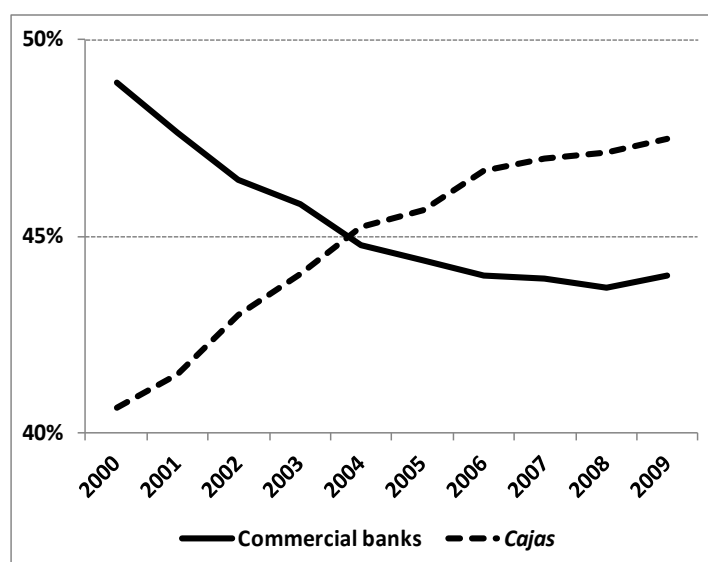
Source: own elaboration from Bank of Spain data.

Although many *Cajas* had a long history dating back to the late XIX and early XX centuries, it was in 1977 when an important series of reforms launched the process of liberalization of the Spanish financial system (Royal Decree 2290/1977). The *Cajas* were no longer publicly managed and highly controlled institutions, and started to compete directly with commercial banks. Previous to these legal changes, their activity was mainly focused on attracting deposits, but with the liberalization they competed with commercial banks to provide credit in different forms. By 1988 this trend was further strengthened. Until that year, the *Cajas* were geographically constrained to specific regions, something that was often reflected in their name but, after some important attempts by the largest savings bank, *La Caixa*, a 1988 Royal Decree (Real Decreto 1582/1988) allowed the *Cajas* to open branches beyond their historical territories. Since that moment, the *Cajas* began to expand geographically and even displaced commercial banks from their traditional markets and businesses, especially in retail banking (Azofra and Santamaría, 2004). Meanwhile, the Spanish commercial

banks were more involved in their international expansion across South America first and later in Europe.

As a result, the commercial banks strategy closed almost 4,000 branches in Spain during the 1990s while, at the same time, they strengthened their international areas of business (where *Cajas* could not compete). Due to these strategic interactions with the commercial banks, the *Cajas* multiplied their presence opening new branches all over the country. In less than 25 years the *Cajas* doubled their numbers, from 12,547 branches in 1985 to 24,985 branches in 2008, the year in which they reached the peak (Sagarra et al., 2013a). From a strategic point of view, this territorial expansion of *Cajas* was based in their choice of a proximity banking policy, oriented to attract and enhance the loyalty of the small customers, focusing on mortgage lending as a pivotal product. Furthermore, the peculiar legal form and ownership structure of the *Cajas* prevented their acquisition by larger commercial banks as we will explain later.

Figure 2. Loans (% over banks' total loans)



Source: own elaboration from Bank of Spain data.

The arrival of the 2007–2008 financial crisis and the subsequent burst of the Spanish real state bubble changed the whole picture. Many *Cajas* and some commercial banks fell into severe financial distress, setting the whole financial system at risk. At the beginning, during 2008, 2009 and early 2010 the regulatory authorities invoked the traditional ways of overcoming problems in previous episodes (Crespí et al., 2004). That is, the regulator facilitated the use of mergers among banks, and it encouraged well-managed *Cajas* to merge with those in difficulties, after some financial help, in order to achieve larger and healthier institutions. But the depth of the crisis and the limitations of this early approach became soon evident. By 2010, further legislative

reform was introduced (Royal Decree-Law 11/2010) paving the way to a dramatic change in the Spanish financial sector. The reasons behind this change are complex and go beyond the scope of this paper. Nevertheless, we would like to point out that several international institutions, like the IMF, and the regulator were often uneasy, when not critical, concerning the organizational form of the *Cajas*, and its governance peculiarities respect the commercial banks. In any case, the reform did require the *Cajas* to transfer their financial activity to a newly created banking entity (this time a corporation, an SA, not a foundation) transforming their legal form (Sagarra et al., 2013b). This change had important consequences and it has allowed commercial banks to takeover *Cajas*, something that was not possible previously.

While Spanish commercial banks were shareholder-oriented and strongly controlled corporations, the *Cajas* had specific governance arrangements. As it has been already mentioned earlier, they were stakeholder-oriented organizations, not controlled by a formal owner. They could be considered as non-for-profit commercial institutions in the sense of Hansmann, 1996. They had a general assembly and a board which were made up of representatives from the different stakeholder groups (i.e., founding entities, depositors, employees, and local and/or regional public authorities). Although this peculiar organizational form facilitated the involvement of other stakeholders such as customers, employees and local entities, it also had important implications in terms of raising capital and control. This same nature aggravated their difficulties to raise capital (they could not issue capital) to sustain their increasing credit activity and, furthermore, it led them to a higher risk of politicization and mismanagement (Crespí et al., 2004). We will explore next these specific features and problems.

3. Corporate governance and human capital of the Spanish banks

3.1 Spanish commercial banks and Cajas

Commercial banks in Spain are privately owned, profit-maximizing, shareholder-oriented and strongly controlled corporations because of their concentrated ownership structure (for instance, Azofra and Santamaría (2011) find evidence that 96% of Spanish commercial banks have an ultimate controlling owner). Under a simplified point of view, we could say that shareholders are their sole owners, profits are distributed only among shareholders, and the agency relationship between shareholders and managers is well defined.

Quite different was the governance of the Spanish savings banks, or *Cajas*. Ayadi et al. (2009) offer a detailed comparative review over the savings banks from different European countries, including the Spanish *Cajas*. The *Cajas* could be considered as non-for-profit commercial institutions in the sense of Hansmann (1996). They are private credit institutions with a foundational nature, with a lack of formal owners (i.e., shareholders), and where their principal governing bodies were the general assembly, which is analogue to the general meeting of shareholders from commercial banks, and the board of directors, which can delegate many of its functions to an executive commission. The chairman, who officially represents the bank, and the CEO, who is the responsible to execute the board resolutions, are elected by the board. In some *Cajas* the chairman has executive functions all together with the CEO. Both the general assembly and the board are made up of representatives of various stakeholders (i.e., depositors, employees, local and/or regional public authorities, and founding entities, which can be government-related, civic or religious institutions). These stakeholders have different, although sometimes interrelated, goals. More specifically, these goals have been described as follows: the universal access to financial services, promote competition and prevent monopoly abuse, make a contribution to social welfare and wealth distribution, make a contribution to regional development, and also contribute to profit maximization (García-Cestona and Surroca, 2008). Not only that, the *Cajas* should invest part of their profits in social and cultural programs (around 25% of their net profits) and retained the rest as reserves. Therefore, rather than only pursuing profit maximization, as it is the clear objective for commercial banks, the *Cajas* goal was to maximize the value or the utility of their stakeholders, a mission somewhat wider and more abstract than the one pursued by commercial banks. The controlling bodies of the *Cajas* did not pressure managers to seek profits because they would themselves benefit little from it (Ferri et al., 2012). For instance, the depositors group was usually formed by small and uninformed investors without sufficient incentives to monitor the *Cajas* activities (Freixas and Rochet, 1997). In more general terms, the wide range of missions from the dispersed stakeholders which induced to usual conflicts of interest among themselves, and the *Cajas* immunization to market corporate control (except from takeovers by other *Cajas*), gave managers a wide freedom of action, inducing the *Cajas* to undertake more risk (García-Marco and Robles-Fernández, 2008).

In summary, coalitions of different stakeholders were formed, and they were more interested in achieving their own goals than seeking an efficient allocation of resources. This justified suboptimal investment policies and the obligation to participate in alleged covert strategic projects for the state or community of origin. Regarding the internal supervision, this was assigned to the so-called control commission, but it ended up being worthless from the moment that replicated the same composition of other organs of government, and just ratified the decisions taken by the board of directors (Azofra and Santamaría, 2004).

Financial institutions are not an exception on which the above described agency conflicts apply (Fama and Jensen, 1983), but there are some reasons for which banking sector governance issues may differ from that of unregulated, non-financial firms (Adams and Mehran, 2003; Mehran et al., 2011). First, the business of banks is opaque and complex and can shift rather quickly. Secondly, the higher number of stakeholders (i.e., investors, depositors, regulators, among others) involved in financial institutions, thus complicating the governance of such banks. It is precisely the prominence of these parties with a stake, or groups of interest, or “*any group or individual who can affect or is affected by the achievement of an organization's purpose*” (Freeman, 1984), either in the shareholder-oriented banks (e.g., Spanish commercial banks) in general or in the stakeholder-oriented banks (e.g., *Cajas*) in particular, which motivates the analysis of such institutions under alternative theories. For instance, while agency theory motivates an analysis for which the different governance mechanisms contributes on the general objective of maximizing the shareholder value (i.e., it is a shareholder-oriented theory), the *stakeholder theory* (Freeman, 1984; Clarkson, 1995) questions the firm value maximization as the objective function of the firm, substituting it by the welfare maximization of all the stakeholders. The presence of externalities (e.g., the managerial decisions effects on specific stakeholders’ welfare) implies that the pursuit of particular interests in the firm does not necessarily results in collective efficiency.

Tirole (2001) points out that the shareholder-oriented approach provides a too-narrow view for an economic analysis of corporate governance (for instance, it is assumed that natural stakeholders such as employees, suppliers, customers and others, are protected by very powerful contracts or laws that force controlling investors to perfectly internalize their welfare). He also mentions that, unfortunately, there is little formal analysis of the economics of the stakeholder approach to articulate the basic ideas of this approach. Jensen (2002) makes a great criticism to the stakeholder theory, arguing that it is impossible to maximize in more than one objective at the same time, because multiple objectives (e.g., to maximize current profits, market share, future growth in profits, and anything else one pleases) leads to a lack of objectives definition (i.e., confusion and lack of purpose), thus leaving the managers with no way to make a reasoned decision. As a result, a firm that adopts stakeholder theory will be handicapped in the competition for survival because, as a basis for action, stakeholder theory politicizes the corporation, and it leaves its managers empowered to exercise their own preferences in spending the firm's resources.

Describing the already complex reality of Spanish banks and *Cajas* governance in relation to the risk-taking behaviour of such entities, García-Marco and Robles-Fernández (2003, 2008) point out that the owner–manager agency conflict coexists with another problem of moral hazard, and this causes a twofold effect on the “*organizational form-risk taking behaviour*” relationship that is not easily predictable.

This added *moral hazard hypothesis* states that similarly to non-financial institutions, the limited liability generates an incentive to the shareholders to expropriate part of the wealth from depositors while increasing the risk held by the bank. Furthermore, the existence of deposit insurance raises the entities' incentives to take risk above the optimal level, either in their assets or in their liabilities portfolios, while it can diminish the regulators' incentives to control and to reduce the risk excess in financial institutions. And the entities' incentives to take risk diminishes with a more diffuse ownership structure (e.g., in the case of *Cajas* compared to commercial banks, or in commercial banks with lower levels of concentration). This moral hazard approach developed by Merton (1977) was widely applied to explain the American Savings and Loan (S&L) crisis in the eighties (Kane, 1989; White, 1991; Akerlof and Romer, 1993; among many others).

Nevertheless, we would like to point out that conflicts among different stakeholders could be solved in banks of similar nature, as shown in the Norwegian banking industry. There, besides the case of Norwegian commercial banks (regular stock companies that are controlled by their stockholders) we can find savings banks (entities in which the stockholders, if any, hold only one fourth of the control rights, while the remaining three quarters of the control rights are split equally between the employees, the depositors, and community citizens). Following an agency problem perspective, Bøhren et al. (2012) point out that, although conflicts of interest between the stakeholders might reduce the bank's ability to create value, there are some instruments (i.e., dividends) that are used to mitigate inherent agency conflicts in the bank's stakeholder structure (i.e., when the potential agency conflict in the firm increases, the actual conflict becomes smaller through a higher dividend payout).

In addition, previous empirical studies point out some results which differ from the expected ones in theory, when they compare the performance of the stakeholder banks over the shareholder banks. Comparing American mutual institutions with stock banks, Esty (1997) concludes that stock banks exhibit greater incentives to take risk, and that the conversion of the organizational form of American S&L from mutual to stock ownership, ironically a conversion promoted by the Congress and the regulators to save the industry, was associated with increased risk taking, thus concluding that the regulatory changes were not based on a consideration of agency conflicts. Some empirical evidence from countries other than US support the hypothesis of a more pronounced principal-agent problem in the case of stakeholder banks. For instance, Gorton and Schmid (1999) conclude that Austrian cooperative banks, assumed as organizational forms with an exogenous ownership structure, reduce their performance as the number of cooperative members increases, corresponding to a greater separation of ownership and control. They find that agency costs (measured by efficiency wages)

are increasing in the degree of separation or dispersion of the ownership structure. However, Altunbas et al. (2001) evaluate the German case through the analysis of the private commercial banks, the government-owned savings banks and the mutual cooperative banks for the period 1989–1996. Following an efficiency approach, they find that savings banks and cooperative banks perform better than commercial banks under this dimension.

Regarding the cross-country studies, Iannotta et al. (2007) analyze a sample of 181 large banks from 15 European countries over the period 1999–2004 and find that, although private banks are better profit performers, this is sustained on higher net returns on their earning assets rather from a superior cost efficiency, in which public and mutual banks are better performers. They also conclude that public banks are worse performers in terms of loan quality and higher insolvency risk but that mutual banks are better than private banks in this aspect. Girardone et al. (2009) comparatively analyze the cost efficiencies among commercial banks, savings banks and credit cooperative banks from different European countries and, contrary to what agency theory would predict, they find that mutual banks are more cost efficient than commercial banks. Also in a comparative study among European countries, Ferri et al. (2012) conclude that, in terms of loan quality, shareholder-oriented banks are worse performers than stakeholder-oriented banks. However, it is very important to understand in detail the different and specific underlying organizational forms involved when doing comparative analyses. Precisely this is a great weakness of cross-country comparisons at the time of connecting governance and risk-performance issues. Different frameworks can lead to very different outcomes for the same approach.

In Spain, García-Marco and Robles-Fernández (2008) find that commercial banks are more risk-inclined than *Cajas*, supporting the moral hazard hypothesis described above, but contrary to a greater owner-manager agency conflict predicted for *Cajas*, with an organizational form that favours this problem and that, during the period (1993-2000), were in great territorial expansion (outside of their original Autonomous Community in which they traditionally operated) compared to commercial banks. However, when focusing on commercial banks, and contrary to the moral hazard hypothesis, the authors find that the degree of shareholder concentration has a negative impact on the level of risk-taking, arguing that a higher shareholder concentration implies a stricter control over managers under an agency problem approach, even when protected by deposit insurance. Finally, they conclude that size matters (in the sense of a less propensity to risk-taking), probably because a major capacity of bigger banks to diversify their risks (geographical and business diversification) and to gather information for their investments (Saunders et al., 1990).

The literature is also addressing the different banks' governance issues exposed by the recent global financial crisis. Mehran et al. (2011) makes a good general review

of this topic. Regarding the empirical studies, see for instance Beltratti and Stulz (2010), Fahlenbrach and Stulz (2011) or Aebi et al. (2012). The three papers conclude by different ways that there is a strong relationship between the banks' governance structure before the crisis (i.e., in 2006, the last complete year before the financial crisis) and their performance during the crisis. Erkens et al. (2012) develop a cross-country comparative study to analyse the corporate governance effects on the performance of financial firms during the 2007–2008 crisis period. However, these studies must be taken with care since, additionally to the weaknesses pointed out before, they cover several countries and large geographic areas, while taking into account only the largest and/or the listed banks, introducing a bias that may offer an incomplete picture of the sector. For instance, in the case of Erkens et al. (2012) only 9 Spanish listed banks are covered, thus the sample (formed by just 8 listed banks and 1 listed insurance company) hardly represents the whole sector. Although, under several differentiated perspectives, the literature has extensively exposed and argued about the differences between Spanish commercial banks and *Cajas* during the “good” years, it is precisely the financial crisis originated in 2007–2008 and the subsequent distress of many of the *Cajas* that generates an additional motivation for this Thesis. There are very few papers addressing the relation between governance issues and performance for the specific case of stakeholder-oriented banks in the current crisis context, and precisely one of the main objectives (and contributions) of this Thesis is to provide new empirical evidences for the current debate.

There is the possibility that a hidden *Cajas* agency problem (aggravated by a potential lack of human capital) during the “happy” boom years in Spain became unmasked during the crisis years. For instance, Illueca et al. (2013) noted the negative effect of the 1988 Spanish banking deregulation (i.e., the removal of branching barriers on the *Cajas*) in connection with the specific governance nature (and the politicization) of *Cajas* over their *ex ante* risk-taking and their *ex post* loan defaults. This could explain the existence of a differentiated behaviour between *Cajas* (e.g., with less knowledge about the new territories in which they expanded rapidly thus taking residual high risks; mostly orientated in taking heavy real-estate risk shares; funding several nonviable political projects because of their influence in governing bodies) and commercial banks. Furthermore, this particular behaviour of many *Cajas* originated a deferred problem of distress (somehow hidden during the boom period and becoming visible during the financial crisis). Confirming these premises, García-Meca and Sánchez-Ballesta (2012) find that commercial banks performed better than *Cajas* during the crisis period.

Taking into account the previous literature and the *Cajas* wide mission approach, one would expect a better performance in the case of commercial banks. They enjoy a more specific and clear goal than *Cajas*, and this clearness becomes a useful governance feature especially during a financial crisis. Furthermore, it becomes necessary to control for risk measures at the time of comparing the results of the different organizations. This is particularly relevant in a context like the financial sector

where the returns and the costs of decisions are allocated in different ways among the different stakeholders.

H1(a). Commercial banks are better performers than *Cajas* during the boom period.

H1(b). Commercial banks are better performers than *Cajas* during the crisis period.

3.2 Human capital of the Spanish banks chairmen

While great part of the financial literature has centred in the effects of formal features or composition of the boards (i.e., size, independence, or directors' stock ownership) over the banks' performance, Hau and Thum (2009) analyze the qualitative features of their members. These authors claim that features such as the education and the experience of the board members should receive more attention in the assessment of effects.

In a broader sense, and following Johnson et al. (2013), we could separate the qualitative characteristics (not only from board members but also from top managers) in different groups: demographics (i.e., age; education; gender), human capital (i.e., experience; tenure), social capital (i.e., ties to entities such as political parties; personal relationships; status or prestige), and others (i.e., business). For simplification, and as it is commonly used in most literature, we will denote the qualitative characteristics related to our study managers as 'human capital'.

Agency theory seems to play a specific (and sometimes limited) role in explaining the effect of governance mechanisms, since it focus on the "*incentives*" but not on the "*abilities*" of such mechanisms. The effects of human capital over the firms' performance have been addressed under many different points of view or theories. Without being exhaustive, we can mention for a comprehensive review of the literature the papers of Crook et al. (2011) and Johnson et al. (2013). Under the resource-based theory, in his empirical study Hitt et al. (2001) claims about the role of human capital as a key factor (i.e., a critical resource) to explain the differences on firms' performance. The variance in the firms' resources and capabilities is what explains the performance differences across firms. A competitive advantage (which may induce a better performance) can be more likely produced by intangible resources than by tangible ones, and firm's knowledge is an example of intangible firm-specific resource, and it mainly resides in the human capital of the organization.

A more recent study (Güner et al., 2008), allows to link the previous literature more centred in non-financial firms with banking industry, since it analyses a sample of publicly traded companies (excluding the financial firms), but utilizing different variables of interest regarding the financial expertise of the directors (i.e., previous commercial bank executive; previous investment bank executive; previous executive of a non-bank financial institution; previous finance executive, ‘finance’ professor; among others) as drivers of the corporate decisions. Fields et al. (2012) investigate if the quality of the board (i.e., they include variables regarding both formal and qualitative board measures) affects the cost of debt capital for S&P 1,500 firms, finding an inverse relation between both dimensions.

As mentioned above, very few studies deal with the effects of human capital over banks’ performance. When searching for literature close to our debate (commercial banks and *Cajas*), we only find empirical evidences in Hau and Thum (2009) for the German case, and in Cuñat and Garicano (2010) and García-Meca and Sánchez-Ballesta (2012) for the Spanish case. Regarding the German banks, Hau and Thum (2009) analyze the biographies data (i.e., educational background; finance experience; and management experience) of 592 board members from the 29 largest banks, comparing the performance of private and state-owned German banks in the 2007–2008 financial crisis, and relate this performance to qualitative measures of board competence. They find that measures of management and financial experience of the board members are systematically higher in privately owned banks compared to state-owned banks, and that a poorer quality in board competence is related to higher losses in the financial crisis. They also point out that *“most of the politically connected board members made their career in politics and in the administration but have little experience in banking and financial markets”*. This suggests that, under the resource-based theory, having such political background has a bad effect over performance.

Regarding the Spanish case, Cuñat and Garicano (2010) find a significant effect of the human capital of the *Cajas*’ chairmen (i.e., education; previous banking experience; political affiliations) on the measures of loan book composition (i.e., the size of the portfolios of real estate and individual loans) and performance (i.e., the amount of non-performing loans in the crisis; the decrease in ratings) during the financial crisis. While education and previous banking experience have a positive effect over both dependent variables, the *Cajas* whose chairman is a political appointee have significantly worse loan performance. Although García-Meca and Sánchez-Ballesta (2012) only measure the human capital of the chairmen through the dichotomy of having or not previous banking experience, they find similar results to those from Cuñat and Garicano (2010).

Summarising, human capital (in the sense of personal qualities of the entities rulers) cannot be avoided as an important driver for the understanding of banks' performance. In the book relating his own long-time experience as the chairman of one of the most important *Cajas*, Serra-Ramonedá (2011) argues that the *Cajas* could have remained within their traditional regions and ignored the temptation to expand. Some of them did just this, but most managers saw growth as an opportunity to increase their power, their status in society, and their income.

Taking into account the issues arisen from the human capital (i.e., experience and education) of the chairmen from Spanish banks, and considering the previous literature, we could expect a positive influence of such human capital over the performance of the entities. On the contrary, it seems to be a negative relationship between the political affiliation of the chairmen and the performance of the banks.

H2(a). There is a positive relationship between the human capital (i.e., experience and education) of the chairman and the performance of both commercial banks and *Cajas*.

H2(b). There is a negative relationship between the politicization of the chairman and the performance of both commercial banks and *Cajas*.

3.3 The politicization of Cajas

The regulatory framework established in 1977 was substantially modified by the 1985 'Ley de Órganos Rectores de las Cajas de Ahorros (*Cajas* Governing Bodies Act)' Act. The 1985 Act allowed executive chairmen (with executive salaries) and regulated the presence of the various stakeholders in the governing bodies of the *Cajas*, definitively boosting the presence of public authorities: it was established the framework for the stakeholders voting power shares (depositors between 25 and 50%, employees between 5 and 15%, local public authorities up to 50%, and founding entities remained with the resting share). Additional regional laws (i.e., laws approved independently by each Autonomous Communities in which each respective *Caja* was established), which were supported by some sentences from the highest judicial body in the country (i.e., the 'Tribunal Constitucional', or Spanish constitutional Court), allowed not only an increased presence of the local public authorities in the bodies, but also the presence of the regional public authorities on them. In many cases the *Cajas* were ruled *de facto* by their correspondent regional governments, since the politicization limitation of 50% was easily surpassed. It is true that in some cases (i.e., seven out of the ten Catalan *Cajas*) this politicization was really low (i.e., up to the 20% level), due to the traditional control exerted by their respective founding entities, typically civic organizations.

The 44/2002 ‘Ley de Medidas de Reforma del Sistema Financiero (Measures for the reform of the financial system Act)’, set a 50% limit to public bodies’ representation on the governance bodies of the *Cajas* to conform to the European law for private banks. It also allowed the issue of ‘cuotas participativas’ (non-voting equity units). Both measures were an effort to control and to monitor the politicization and performance of *Cajas*. However, both had little impact. On the one hand, there are evidences that the politicization limitation of 50% was easily circumvented by putting politicized people as representatives of other stakeholder groups. On the other hand, although there was some formal interest on issuing ‘cuotas participativas’ (CAM and Caixa Galicia were the unique issuers during the decade 2000-2009), in no case there was not a real interest, neither by the *Cajas* nor by potential investors with aiming to control and monitor the firm (they had not voting rights). Later, the ‘Ley Financiera (Financial Act)’26/2003 introduced some additional information requirements for *Cajas* in order to increase transparency. And finally, the 11/2010 Royal Decree-Law reduced from 50% to 40% the ceiling on voting rights of the public authorities in *Cajas* governing bodies, while increased its transparency and the professionalization of the political representatives and top managers with requirements in terms of banking experience and education. Although this was implemented a little too late.

It is of interest to know if such level of politicization affected the performance of the *Cajas*. While Melle and Maroto (1999) and Azofra and Santamaría (2004) find a negative relationship between the presence of public authorities in the *Cajas* bodies and their economic efficiency, recent studies contradict those results. García-Marco and Robles-Fernández (2008) do not find that the control of the bank by public administrations causes any effect on risk-taking behaviour. More specifically, Cuñat and Garicano (2010) show that neither the formal nor the real *Cajas* bodies level of politicization are correlated with the composition and the performance of the loan book at the peak of the financial crisis. García-Meca and Sánchez-Ballesta (2012) do not find any kind of relationship between the share level of politicians in the general assembly and the *Cajas* economic performance. Analysing the effects of the 1988 Spanish banking deregulation (i.e., the removal of branching barriers on the *Cajas*), Illueca et al. (2013) find out the negative effect of such deregulation in connection with the specific governance nature (and the politicization) of *Cajas* over their *ex ante* risk-taking and their *ex post* loan defaults. They conclude that deregulation of an industry in which institutions are subject to weaknesses in corporate governance and political influence does not necessarily lead to the expected positive outcomes. Italy offers interesting results in the same line. Sapienza (2004) points out that the level of political influence in Italian state-owned banks affects their lending behaviour (i.e., in terms of lower interest rates charged). Menozzi et al. (2012) offer results in the same line for Italian local public utilities, in which the degree of politicization affects negatively their performance. Hau and Thum (2009) address the German state-owned banks case during

the recent financial crisis, trying to establish a relationship between the governance quality of these banks (i.e., through the biographical background of their board members) and their constant underperformance regarding the private banks, and finding out a strong relation between both dimensions.

If we consider the issues arisen from the *Cajas* politicization, we could expect a negative relationship between the level of politicization of *Cajas* governing bodies and their performance, and during the financial crisis.

H3. Less politicized *Cajas* are better performers than more politicized ones.

4. Data and methodology

4.1 Data sources

We collected data from different sources. We used the Bureau van Dijk's Bankscope database to obtain the financial information about both *Cajas* and commercial banks. This database is widely used in international studies (see for instance Iannotta et al., 2007; Ferri et al., 2012; Pathan and Faff, 2013), and it contains both balance sheet and profit and loss account information for financial institutions. Regarding the information on *Cajas*' governance we obtained this from the Corporate Governance Reports published by the entities in The Spanish National Securities Market Commission (CNMV, or 'Comisión Nacional del Mercado de Valores'). Much harder was to obtain the information regarding the human capital (i.e., experience, education and political affiliation) of the chairmen from *Cajas* and commercial banks. We use different sources: the Boardex database, the web pages from the entities, the published *curriculum vitae* of the chairmen, and from news clippings and different newspapers.

The final data set covers the period 2004–2009, and it includes 42 *Cajas* (248 bank-year observations) and 16 commercial banks (92 bank-year observations) in the study. We managed to collect information from almost the totality of the *Cajas* universe, with the only exception of the three smallest *Cajas* (Caixa Ontinyent, Caja Jaén and Caixa Pollença) since there was not available data from them. Regarding the commercial banks, we include those entities with a minimum size of, at least, 3 billion Euros of total assets in their last available year. The period 2004–2009 was chosen because it covers 4 years before the onset of the crisis (i.e., 2004–2007), and 2 years

after the crisis (i.e., 2008–2009), and because the governance data was only available for those years. We did not collect data from 2010 onwards because of the financial sector restructuring, resulting in the integration of most entities in bigger groups, especially in the case of *Cajas* (see the Appendix 1). Furthermore, the governance nature of the *Cajas* was substantially affected by those changes introduced by the 11/2010 Royal Decree-Law. The financial data was collected for the period 2002–2009 because some dependant variables (i.e., ROA's volatility; Z-score) were calculated using standard deviations over 3-year windows.

4.2 Variables and models

4.2.1 Dependent variables

We have selected five different dependent variables to assess the entities' performance in its broad sense, ranging from the simplest profitability measures (i.e., return on assets) to the loan quality (or risk bad-output) measures (i.e., impaired loans over gross loans), without avoiding more complex risk measures (i.e., ROA's volatility; Z-score). The reason for taking this varied and complete spectrum of variables is that, for instance, the stakeholder entities (i.e., the *Cajas*) do not aim to maximize their benefits and so, focusing only on profitability measures could mislead the results. Also, we want to understand the whole trade-off between risk and return of banks. Riskier portfolios may be very profitable in certain periods but they may also imply a higher probability of bad loan quality or even bankruptcy.

We measure profitability through the ROA, defined as the ratio of bank after-tax profits to its total average assets. It is a measure of the level of returns generated by those assets, and it is the most widely used ratio to compare the performance among financial institutions. We use ROA, instead of ROE (return on equity), because the latter is influenced by the bank's capital–asset ratio and, due to the different ownership nature of commercial banks and *Cajas*, this ratio could differ substantially among the different banks (Crespí et al., 2004; Ferri et al., 2012). The somewhat abstract concept of bank risk is measured through three different variables. First, we use the volatility of ROA, calculated as the standard deviation of the ROA over 3-year windows (Laeven and Levine, 2009; Barry et al., 2011; García-Meca and Sánchez-Ballesta, 2012). Here higher values imply higher risk. Second, we use the Z-score (full sample), as implemented by Hesse and Čihák (2007) and Lepetit and Strobel (2013), through the form of $[(\text{Equity} / \text{Total Assets}) + \text{ROA}] / \text{ROA Standard Deviation}]^{-2}$. The ROA standard deviation estimates are calculated over the full sample $[1 \dots T]$, and combine these with current period t values of Equity / Total Assets and ROA in t . A higher value

implies a higher risk (i.e., probability of failure of a bank). Third, we refine the previous measure and we use the Z-score (year window) in the sense of García-Meca and Sánchez-Ballesta (2012), which follow some previous literature (Hannan and Hanweck, 1988; Laeven and Levine, 2009), through the form of the natural logarithm of $[(\text{Equity} / \text{Total Assets}) + \text{ROA}] / \text{ROA Standard Deviation}$. The ROA standard deviation estimates are calculated over 3-year windows, thus differentiating clearly this measure from the previous Z-score (full sample). In this case a higher value implies a lower risk (i.e., inverse probability of failure of a bank). Finally, we measure the loan quality (or risk bad-output) through the Impaired Loans / Gross Loans ratio, which shows the loan portfolio quality in terms of the worst and more doubtful loans. This ratio is a measure of *ex post* credit risk (Salas and Saurina, 2002).

4.2.2 Explanatory variables and models

Our work analyzes three main groups of explanatory variables and models, according to the questions and hypotheses raised.

First of all, it is of crucial importance to select the bank-specific control variables that should be in the models since, as noted by Ferri et al. (2012), it could lead us to a misinterpretation of the results due to the heterogeneous nature of the different groups of observations. Next we describe the control variables: Bank, which takes the value of 1 for commercial banks, and 0 otherwise (i.e., *Cajas*); Crisis, which takes the value of 1 for the years 2008 and 2009, and 0 otherwise (i.e., years 2004 to 2007 in our sample); Ln Size, which is the natural logarithm of the Total Assets; Gross Loans / Total Assets, to control for the type of assets (i.e., business) of the entities; and Equity / Total Assets, to control for the equity/debt structure of the banks. In addition, our control variables are in line with Iannotta et al. (2007), Laeven and Levine (2009), Ferri et al. (2012) and Bøhren et al. (2012), among many other strongly related references from the literature, and it means a step further concerning the works of Hau and Thum (2009), Cuñat and Garicano (2010) and García-Meca and Sánchez-Ballesta (2012), which only control for size. Importantly, heterogeneity between entities does not only respond to differences in their size but also in their business model (i.e., assets) and its funding structure (i.e., liabilities). Finally, the time dummies allow us to control for unobservable and time-varying effects.

Our first hypothesis was to assess the difference in performance between the commercial banks and the *Cajas*. This is tested through the following model:

$$\begin{aligned}
Performance_{i,t} = & b_0 + b_1 \cdot Bank_{i,t} + b_2 \cdot Crisis_{i,t} + b_3 \cdot (Bank \times Crisis)_{i,t} + b_4 \cdot Ln \text{ Size}_{i,t} \\
& + b_5 \cdot \text{Gross Loans/Total Assets}_{i,t} + b_6 \cdot \text{Equity/Total Assets}_{i,t} + b_7 \cdot Year_{i,t} + \varepsilon_{i,t} \quad (1)
\end{aligned}$$

In addition, the hypotheses regarding the human capital of the Spanish banks chairmen are tested through the following model:

$$\begin{aligned}
Performance_{i,t} = & b_0 + b_1 \cdot \text{Chairman previous banking experience}_{i,t} \\
& + b_2 \cdot \text{Chairman entity experience}_{i,t} + b_3 \cdot \text{Chairman education 2}_{i,t} \\
& + b_4 \cdot \text{Chairman education 3}_{i,t} + b_5 \cdot \text{Chairman education 4}_{i,t} \\
& + b_6 \cdot \text{Chairman has political affiliations}_{i,t} + b_7 \cdot (\text{Chairman education 4} \times \text{Crisis})_{i,t} \\
& + b_8 \cdot (\text{Chairman has political affiliations} \times \text{Crisis})_{i,t} + b_9 \cdot Bank_{i,t} + b_{10} \cdot Crisis_{i,t} \\
& + b_{11} \cdot (Bank \times Crisis)_{i,t} + b_{12} \cdot Ln \text{ Size}_{i,t} + b_{13} \cdot \text{Gross Loans/Total Assets}_{i,t} \\
& + b_{14} \cdot \text{Equity/Total Assets}_{i,t} + b_{15} \cdot Year_{i,t} + \varepsilon_{i,t} \quad (2)
\end{aligned}$$

In this model the chairman's previous banking experience variable represents the number of years that a chairman has spent in other banks previously to their current entity. The chairman entity experience variable represents the number of years that a chairman has been working for their current entity. It is important to note here the limitations of using a dichotomic variable to capture the effects of previous banking experience as done by the previous studies. Such approach does not distinguish between a chairman who has worked one single year in other institutions from a chairman who has worked twenty years in four institutions. This is an industry where specific knowledge proves to be very important, and the accumulation and depth of this past experience can be more important than just having a short experience in the industry. The chairman education variable represents the graduate degree level which holds the chairman: education 2 has a value of 1 if the chairman has undergraduate university education non related to business or economics (i.e., Medicine, Law degree, etc), and 0 otherwise; education 3 has a value of 1 if the chairman has undergraduate university education related to business and economics (i.e., Economics degree, etc), and 0 otherwise; education 4 has a value of 1 if the chairman has a PhD in Business Economics or a MBA in prestige institutions, and 0 otherwise. The omitted variable is education 1, which has a value of 1 if the chairman has not any education degree and 0 otherwise. The chairman political affiliations variable has a value of 1 if the chairman has been an elected public official and 0 otherwise.

Finally, at the time of measuring the political effects the hypothesis regarding the politicization of *Cajas* is tested through the following model:

$$\begin{aligned}
 Performance_{i,t} = & b_0 + b_1 \cdot \% \text{ of seats by Employees}_{i,t} + b_2 \cdot \% \text{ of seats by Depositors}_{i,t} \\
 & + b_3 \cdot \% \text{ of seats by Municipalities and Regions (Politicization)}_{i,t} \\
 & + b_4 \cdot \text{Compensation per board member}_{i,t} + b_5 \cdot \text{Crisis}_{i,t} + b_6 \cdot \text{Ln Size}_{i,t} \\
 & + b_7 \cdot \text{Gross Loans/Total Assets}_{i,t} + b_8 \cdot \text{Equity/Total Assets}_{i,t} + b_9 \cdot \text{Year}_{i,t} + \varepsilon_{i,t} \quad (3)
 \end{aligned}$$

This model introduces the particular ownership nature of *Cajas*. The first three variables contain the percentage of seats held by the different groups of stakeholders (i.e., employees, depositors, and local and regional public authorities, respectively) in the board, being the omitted variable the percentage of seats held by the founding entities (i.e., government-related, civic or religious institutions). It is important to note here that, compared to the previous studies regarding the *Cajas*, we have adjusted the distribution of the seats among the different stakeholder groups in order to represent the real political representation in the governing bodies, since the theoretically non-politicized stakeholder groups may have politicized seats. The compensation per board member variable is the total compensation of the board divided by the number of board members.

Since we need to control the individual features of each bank (i.e., there is a different constant value for every cross-sectional observation), all models are estimated using random effects, instead of pooled ordinary least squares (OLS) regression. The Breusch and Pagan test confirms that it is better to use random effects instead of pooled OLS is preferable, since the null hypothesis of the test is rejected (the test shows a Prob > Chi2 below 0.01). We cannot estimate the models by fixed effects since we need for time-constant dummies to control for bank type (i.e., in the first and second model), or other constant-type variables (i.e., % of seats in the board) in the third model. In addition, we have also estimated all the models using pooled OLS regression and dynamic OLS regression (i.e., with the lagged dependent variable as exploratory variable, since random effects cannot handle lagged dependent variables), with time dummies and standard errors adjusted for clustering at the bank level. We get very similar results compared to the random effects models. The results remain stable when we run these alternative specifications, and they are available upon request.

One important issue in governance studies is that of endogeneity (Hermalin and Weisbach, 2003; Adams et al., 2010; and Wintoki et al., 2012, make a good review of

this topic). It is important to note that we are trying to establish an association between exploratory variables and dependent variables, and that we do not pretend to find a causality connection or reverse causality issues. The great limitation in the number of observations prevented us to use the usual techniques (i.e., GMM, among others) to deal with this kind of issues.

5. Empirical findings

Table 1 shows a descriptive analysis of the human capital collected data of the chairmen from both *Cajas* and commercial banks for the period 2002–2009, synthetized in three dimensions, which are experience (having previous banking experience, and years of global, banking and entity experience), education (level of studies) and political affiliation (being a political appointee), along with the frequency and type of chairmen turnover.

We can see a quite different human capital approach when we compare these two institutions. Regarding the experience dimension, while most of the *Cajas*' chairmen have not previous banking experience (92.5%), this is not the case of chairmen of commercial banks (where 60% lack previous banking experience). Also, the number of years of experience of commercial banks' chairmen is higher than what *Cajas*' chairmen have, especially when we focus on banking and inside the firm experience. Quite surprising is the distribution of the *Cajas*' chairmen education, skewed clearly towards the lowest levels of education (i.e., no education, or university education but unrelated to economics or business). For commercial banks, chairmen educational background is more balanced and there are not cases of chairmen without education.

Regarding the political affiliation of *Cajas*' chairmen, it is quite interesting to see that, while almost two thirds of the non-executive chairmen have not a political affiliation, this situation is inversed in the case of executive chairmen. This could demonstrate a plausible interference by regional and/or municipal governments in those entities. On the opposite side, we have not found any political relationship among the executive chairmen from commercial banks.

Table 1. Human capital of the Spanish banks chairmen

Value	Description	Cajas			Commercial banks		
		Chairman	Executive Chairman	Non Executive Chairman	Chairman	Executive Chairman	Non Executive Chairman
0	With no previous banking experience	62	21	41	12	8	4
1	With previous banking experience	5	3	2	8	5	3
	TOTAL	67	24	43	20	13	7
	Years "Global" experience (Average)	32	28	35	34	33	37
	Years "Banking" experience (Average)	13	15	13	25	28	20
	Years "Entity" experience (Average)	12	13	12	19	21	16
	1 No education	10	2	8	0	0	0
	2 Undergraduate university education (Medicine, Law degree, ...)	32	9	23	6	4	2
	3 Undergraduate university education (Economics degree, ...)	12	5	7	9	4	5
	4 PhD in Business Economics, or MBA in prestige institutions	13	8	5	5	5	0
	TOTAL	67	24	43	20	13	7
	0 Has not been a political appointee	35	7	28	17	13	4
	1 Has been a political appointee	32	17	15	3	0	3
	TOTAL	67	24	43	20	13	7
	1 Worsening (Overall)	8	3	5	4	3	1
	2 Remaining constant (Overall)	12	3	9	2	0	2
	3 Improving (Overall)	9	4	5	0	0	0
	1 Worsening (Education)	5	4	1	3	3	0
	2 Remaining constant (Education)	17	4	13	3	0	3
	3 Improving (Education)	7	2	5	0	0	0
	TOTAL	29	10	19	6	3	3

Appendix 2 reports the basic descriptive statistics and the correlations for all the variables considered in the three models. It is remarkable the maximum values which show the percentage of seats held by depositors and politicized stakeholders (municipalities plus regional governments in our sample). First, the mean and maximum values reflect the existence of a strong influence given both type of stakeholders, compared with other stakeholders (i.e., founders and employees). This influence is polarized in the existence of banks in which the depositors hold the majority of votes and institutions in which politicians hold the majority. And second, and more surprisingly, there are institutions in which the power held by politicized stakeholders surpasses the maximum established by law since, as commented earlier, the 44/2002 ‘Ley de Medidas de Reforma del Sistema Financiero (Measures for the reform of the financial system Act)’, set a 50% limit to public bodies’ representation on the governance bodies of the *Cajas* to conform to the European law for private banks. For the general assembly this was the case of Bancaja in 2005, Caixa Catalunya since 2006, Cajasol in 2007 and 2009, Cajastur in 2004, 2005, 2006 and 2008, Caja Granada since 2004, and Caixa Girona since 2007. Concerning the board this was the case of Caixa Galicia since 2004 and Caja España since 2004. The main reason behind these anomalies is that some *Cajas* report as founding entities those members coming from councils or regional governments, since they were labeled as founders. We have adjusted this carefully in order to assess more correctly the formal politicization of each entity.

The first hypothesis to be tested was if commercial banks, which are profit-maximizing institutions, are better performers than *Cajas*, which are stakeholder-oriented institutions, and Table 2 provides some evidence in this sense.

Commercial banks have a better performance in terms of profitability than *Cajas* (Model 1), although this is accompanied with higher levels of risk (Models 2 and 3). But, when we refer to the crisis period, banks perform better than *Cajas* in terms of risk (Models 2, 3, 4 and 5). This is contrary to the moral hazard hypothesis, and being a shareholder-oriented bank implies a stricter control over managers under an agency problem approach, even when protected by deposit insurance. Summarizing, we find that commercial banks are, in general, more profitable than *Cajas*, although by incurring in more risk during the boom period. However they manage to control their own risks in a better form than *Cajas*, since during the crisis period they show a better performance in all senses. These results support our first hypothesis, and they are coherent with the subsequent restructuring of the whole sector, while confirming the different risk-taking behaviour models between commercial banks and *Cajas*. Finally, if we focus on the control variables, we confirm that the crisis period has strong statistical significance affecting the whole sample, and that a higher sized and more capitalized bank becomes

more profitable (Model 1) and less risky (Model 3) than those who are not, although the latter is not supported by the rest of risky measures.

Table 2. Commercial banks and *Cajas* (boom and crisis periods)

	Model 1	Model 2	Model 3	Model 4	Model 5
	Random effects	Random effects	Random effects	Random effects	Random effects
VARIABLES	ROA	ROA Volatility	Z-score (full sample)	Z-score (year window)	Imp.Loans / Gross Loans
Bank (1 = commercial bank; 0 = Caja)	0.3616** [2.5154]	0.1469* [1.6994]	0.0156** [2.0357]	-0.3328 [-1.2558]	-0.2033 [-1.0067]
Crisis (1 = 2008 and 2009 years)	-0.4606*** [-4.8408]	0.2099*** [3.7001]	0.0112*** [2.8710]	-1.3010*** [-9.5969]	4.3777*** [13.2906]
Bank x Crisis	-0.0428 [-0.2298]	-0.1594*** [-2.9352]	-0.0106** [-2.0270]	0.4715** [2.2220]	-0.9791** [-2.1139]
Ln Size	0.0517** [2.0187]	0.0027 [0.1607]	-0.0040** [-2.3301]	-0.0413 [-0.7475]	0.0489 [0.7657]
Gross Loans / Total Assets	-0.0022 [-0.8922]	-0.0008 [-0.5218]	-0.0006*** [-5.8090]	-0.0019 [-0.2734]	0.0106 [0.9256]
Equity / Total Assets	0.1736*** [5.8845]	0.0312 [1.1879]	-0.0033*** [-2.9358]	0.0380 [0.7526]	-0.0965* [-1.8816]
Constant	-0.8190*** [-2.8522]	-0.0717 [-0.4172]	0.1091*** [5.7563]	4.9678*** [6.3287]	0.4210 [0.3043]
Time dummies	Yes	Yes	Yes	Yes	Yes
Observations	341	341	341	340	315
R ²	0.68	0.25	0.41	0.29	0.71
Chi ²	104.44***	69.38***	246.52***	204.76***	387.46***

Robust z-statistics in brackets

*** p<0.01, ** p<0.05, * p<0.1

Next, we consider the model of the effects of human capital over the entities' performance we report the results in Table 3. And we can extract some relevant conclusions from them. First, those institutions where a chairman has more years of previous banking experience and more years spent in the entity have a better performance in terms of risk (Models 7, 8, 9 and 10). Second, entities whose chairmen have a top degree in their education perform better than those lacking such chairman's profile. These both findings support the hypothesis H2(a). Although Models 8 and 9 show a negative effect of this variable over risk, its behaviour is very similar than that showed by commercial banks (i.e., during the crisis period, the chairmen with top degree in their education are better performers, as Models 9 and 10 show). Our results do not find evidence about a potential influence of the political affiliation of the chairmen over the entities' performance (except in Model 7), so the hypothesis 2(b) does not find support from this analysis. The ROA results (Model 6) do not show any significant variable regarding the human capital of the chairmen, concluding that profitability was not a factor depending on this dimension. The effects of all the control variables are the same as in the previous basic models (Table 2). A higher sized and

more capitalized institution is more profitable (Model 6) and less risky (Model 8) than those who are not, although this result is not supported by the rest of risky measures, Models 9 and 10.

Table 3. The role of chairman's human capital in commercial banks and *Cajas*

VARIABLES	Model 6	Model 7	Model 8	Model 9	Model 10
	Random effects	Random effects	Random effects	Random effects	Random effects
	ROA	ROA Volatility	Z-score (full sample)	Z-score (year window)	Imp.Loans / Gross Loans
Lagged dependent variable					
Chairman: number of previous years experience	-0.0025 [-0.5243]	-0.0029 [-1.1169]	-0.0008** [-1.9949]	-0.0017 [-0.2512]	-0.0244 [-1.4784]
Chairman: number of entity years experience	-0.0010 [-0.4455]	-0.0031*** [-2.8945]	-0.0002 [-1.5388]	0.0187*** [4.0608]	-0.0143* [-1.9192]
Chairman: education 2 (non economics degree) (the omitted is Chairman with no education)	-0.0652 [-0.7971]	0.0563 [0.9746]	0.0036 [0.9877]	-0.1341 [-0.5559]	-0.4674* [-1.9095]
Chairman: education 3 (economics degree)	-0.0313 [-0.4140]	0.0405 [0.6023]	0.0086 [1.4444]	-0.0834 [-0.2914]	-0.0642 [-0.2107]
Chairman: education 4 (PhD, MBA)	-0.0897 [-0.6858]	0.1101 [1.4084]	0.0100* [1.9587]	-0.6140** [-2.0834]	-0.1209 [-0.3805]
Chairman has political affiliations	0.0378 [0.5368]	-0.0673** [-2.3937]	-0.0045 [-1.1218]	0.2396 [1.3810]	-0.1201 [-0.8120]
Chairman (education 4) x Crisis	-0.1088 [-0.5083]	-0.0607 [-0.8790]	-0.0008 [-0.1734]	0.5184** [2.1052]	-0.8493** [-2.0315]
Chairman has political affiliations x Crisis	-0.1112 [-0.8293]	0.0912 [0.9582]	0.0077 [1.3484]	0.0077 [0.0360]	0.0906 [0.1684]
Bank (1 = commercial bank; 0 = Caja)	0.3950*** [2.8595]	0.1499 [1.5171]	0.0174** [2.2331]	-0.3156 [-1.1663]	-0.0661 [-0.2994]
Crisis (1 = 2008 and 2009 years)	-0.3699*** [-3.8998]	0.1758*** [3.5780]	0.0077*** [2.9234]	-1.4114*** [-8.6306]	4.5665*** [12.9913]
Bank x Crisis	-0.0954 [-0.5558]	-0.1217*** [-2.5865]	-0.0072 [-1.6096]	0.4383** [2.0020]	-0.9944** [-2.0805]
Ln Size	0.0604** [2.3695]	0.0006 [0.0391]	-0.0048** [-2.3293]	-0.0375 [-0.6789]	0.0738 [1.1575]
Gross Loans / Total Assets	-0.0020 [-0.8689]	-0.0011 [-0.6153]	-0.0006*** [-7.0118]	-0.0015 [-0.2473]	0.0112 [1.1141]
Equity / Total Assets	0.1771*** [5.8312]	0.0285 [1.0660]	-0.0035*** [-3.3246]	0.0515 [0.9843]	-0.0863* [-1.7782]
Constant	-0.8951*** [-3.3271]	0.0059 [0.0314]	0.1195*** [4.9349]	4.6634*** [6.5857]	0.5552 [0.4214]
Time dummies	Yes	Yes	Yes	Yes	Yes
Observations	341	341	341	340	315
R ²	0,68	0,26	0,44	0,34	0,74
F-ratio (Chi ²)	317.90***	118.26***	653.53***	259.30***	430.15***

Robust z-statistics in brackets

*** p<0.01, ** p<0.05, * p<0.1

Finally, focusing on the effects of the level of politicization of *Cajas* governance over their performance, reported in Table 4, we can conclude that a major presence of politicized seats in the governing bodies of those entities implies a better profitability but a worse risk performance (Models 11, 12 and 14).

Table 4. The influence of *Cajas*' politicization

VARIABLES	Model 11	Model 12	Model 13	Model 14	Model 15
	Random effects	Random effects	Random effects	Random effects	Random effects
	ROA	ROA Volatility	Z-score (full sample)	Z-score (year window)	Imp.Loans / Gross Loans
% of seats by Employees (the omitted is % of seats by Founders)	1.9331 [1.4155]	-1.8438** [-2.0026]	-0.0813 [-1.4824]	3.8076 [1.4979]	-2.1435 [-0.4369]
% of seats by Depositors	0.1457 [0.2497]	-0.2093 [-0.8531]	-0.0039 [-0.3043]	0.2302 [0.2631]	-0.5973 [-0.3628]
% of seats by Municipalities and Regions (Politicization)	0.3940* [1.8864]	0.3509** [2.0494]	0.0055 [0.9436]	-1.4087* [-1.8566]	0.4450 [0.4835]
Compensation per board member	0.0005** [2.3650]	0.0003* [1.7508]	-0.0000 [-1.1963]	-0.0012* [-1.6746]	-0.0005 [-0.7104]
Crisis (1 = 2008 and 2009 years)	-0.5157*** [-7.0435]	0.2016*** [4.8994]	0.0092*** [2.9819]	-1.2224*** [-9.0663]	4.1144*** [12.6333]
Ln Size	-0.0190 [-0.6730]	0.0088 [0.3293]	0.0009 [0.7271]	0.0723 [0.5018]	0.1090 [0.8377]
Gross Loans / Total Assets	0.0030 [0.8995]	-0.0015 [-0.6428]	-0.0002** [-2.0302]	0.0148 [1.3752]	-0.0099 [-0.5129]
Equity / Total Assets	0.1148*** [3.9443]	-0.0355 [-1.5914]	-0.0040*** [-2.9307]	0.1789*** [3.4393]	-0.2470*** [-3.0404]
Constant	-0.5631 [-1.0508]	0.4423 [1.4567]	0.0518*** [3.3208]	2.0079 [1.2065]	2.8850 [1.3502]
Time dummies	Yes	Yes	Yes	Yes	Yes
Observations	240	240	240	239	232
R ²	0,54	0,24	0,37	0,44	0,74
F-ratio (Chi ²)	169.80***	89.98***	224.36***	216.67***	289.90***

Robust z-statistics in brackets

*** p<0.01, ** p<0.05, * p<0.1

Probably a higher level of politicization does not necessarily mean a worse performance of a *Caja*, given the previous mixed results and taking a glance on what has happened to the entities individually (i.e., there are some examples of very high politicized *Cajas*, like BBK or Unicaja, that are examples of success), but we can conclude that, in general terms, the level of politicization affected in some manner the entities, including their risk taking. Or, at least, we cannot conclude that politicization of *Cajas* did not affect their final fate as a group, since hypothesis H3 is not supported. On the contrary, a higher percentage of seats by Employees is associated with a better risk performance, highlighting the positive influence of this collective in the entities, while the Compensation per board member seems to be associated with a higher performance in terms of ROA but also in relation with higher levels of risk. These non expected results are in line with those from Hau and Thum (2009), who find that higher average executive board compensation is positively correlated with bank losses, contrary to what can be expected in an efficient market for managerial pay, suggesting suggest that particularly large executive pay package signal not better management but rather more severe agency problems.

6. Conclusion

When searching for literature close to our debate (commercial banks and Cajas), we find very few empirical evidence. Hau and Thum (2009) for the German case, and Cuñat and Garicano (2010), and García-Meca and Sánchez-Ballesta (2012) for the Spanish case are the exceptions. Hau and Thum (2009) compare the performance of private and state-owned German banks in the 2007-2008 financial crisis, and relate this performance to qualitative measures of board competence (i.e., educational background; finance experience; and management experience). They find that measures of management and financial experience of the board members are systematically higher in privately owned banks compared to state-owned banks, and that a poorer quality in board competence is related to higher losses in the financial crisis.

Cuñat and Garicano (2010) find a significant effect of the human capital of the Cajas' chairmen on the measures of loan book composition (i.e., the size of the portfolios of real estate and individual loans) and performance (i.e., the amount of non-performing loans in the crisis; the decrease in ratings) during the financial crisis. They conclude that being the chairman a political appointee, or having neither a postgraduate education nor previous banking experience, implies a worse performance of the entity. Finally, although García-Meca and Sánchez-Ballesta (2012) only measure the human capital of the chairmen through the dichotomy of having or not previous banking experience, they find similar results to those from Cuñat and Garicano (2010). In addition, neither Cuñat and Garicano (2010), nor García-Meca and Sánchez-Ballesta (2012) find any significant effect of the governance bodies politicization over the Cajas' distress during the financial crisis. In our view, there is plenty of room for improvements in matters of risk within the banking industry. Risk governance has been largely neglected. It seems reasonable to expect that a more dedicated board is needed. And therefore, the human capital of the controlling members becomes an important issue.

Although Corporate Governance emphasizes the presence of independent board members, in the case of banks the needs come from the presence of experts in the field, experts able to calibrate the risk adopted by the managers. It is in this sense that our use of more detailed data concerning the chairman may help, also comparing its effects side by side with the presence of politicization (or lack of independence) in the boards.

While most of the Cajas have already disappeared by the end of 2012, almost all the Spanish commercial banks have withstood the crisis in a successful way. Our aim in the third chapter is to assess if such different fates experienced by both types of banks which shared equally almost the entire Spanish market are related to their governance practices and the human capital of their chairmen. We test if there are differences in terms of the Cajas' performance with respect to banks and among themselves. Some authors have pointed out that neither the composition of the different governance bodies nor the role played by politicians can explain the *Cajas* results.

We provide a number of contributions. First, we cover a wide spectrum of performance definition with measures like ROA, ROA volatility, Z-score (with both “full sample” and “year-window” variants) and Impaired Loans/Gross Loans. Second, we make use of an extended dataset, since it contains 42 *Cajas* (compared to the average of 30 *Cajas* analysed in previous studies) for the period 2004–2009, covering both the period of boom and the subsequent crisis. Third, we make use of a more detailed description of the chairmen's human capital. In particular, we consider previous banking experience, formal education, and political background to get a better grasp of these important issues. History seems to matter and the use of a better organizational capital of the former chairmen, and the stakeholder composition help us to get clearer results. Fourth, we make a more accurate use of bank-specific control variables and their interactions. Our results may be relevant to banking regulators and future supervisory policies, and not only for Spain but also for other countries where non-shareholder-oriented institutions hold important shares.

In this work, we find significant differences in banks' performance and risk during the boom and the crisis periods, as well as differences between commercial banks and *Cajas*. Governance features (such as board composition and politicization) and human capital also play a role to explain the heterogenous results in the *Cajas*. We find that commercial banks were, in general, more profitable than *Cajas*, although by implying more risk during the boom period. However they managed to control their own risks in a better form than *Cajas*, since during the crisis period they showed a better performance in all senses. This is contrary to the moral hazard hypothesis, and being a shareholder-oriented bank implies a stricter control over managers under an agency problem approach, even when protected by deposit insurance. These results are coherent with the subsequent restructuring of the whole sector and confirm the different risk-taking behaviour models between commercial banks and *Cajas*.

Our paper contributes to the very scarce literature assessing the relationship between the human capital and governance dimensions and the banks' performance, while establishing additional knowledge about the reasons for the collapse of many of the Spanish financial institutions. On the one hand, those institutions with a chairman that had more years of previous banking experience, more years spent in the entity and a top degree in their education, performed better than those with not such chairman's profile. Some authors under the resource-based theory (e.g., Hitt et al., 2001) have argued that a competitive advantage (which may induce a better performance) may respond more to intangible resources than to tangible ones. Firm's knowledge is an example of intangible firm-specific resource, and it mainly resides in the organizational human capital.

Our results do not find evidence about a potential influence of the political affiliation of the chairmen over the entities' performance. On the other hand, focusing

on the effects of the level of politicization of *Cajas* governance, we can conclude that a major presence of politicized seats in the governing bodies of those entities implied better profitability but a worse risk performance.

There is the possibility that a hidden *Cajas* agency problem (aggravated by a potential lack of human capital) during the “happy” boom years in Spain could have been unmasked during the crisis years. For instance, the evidence noted by Illueca et al. (2013) about the negative effect of the 1988 Spanish banking deregulation (i.e., the removal of branching barriers on the *Cajas*) in connection with the specific governance nature (and the politicization) of *Cajas* over their *ex ante* risk-taking and their *ex post* loan defaults, could help to explain the existence of a differentiated behaviour between *Cajas* (e.g., with less knowledge about the new territories in which they expanded rapidly thus taking residual high risks; mostly orientated in taking heavy real-estate risk shares; funding several nonviable political projects because of their influence in governing bodies) and commercial banks, and this particular behaviour of many *Cajas* originated a deferred problem of distress (masked during the boom period and unmasked during the financial crisis).

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Appendix 1. Summary table on restructuring of the Spanish banking sector

Institutions that make it up (2008)	Transaction date		Resulting bank (2012)
BBVA			
UNNIM: <i>Caixa Sabadell, Caixa Terrasa, Caixa Manlleu</i>	March 2010	March 2012	BBVA
Bankinter			Bankinter
Caixabank: <i>La Caixa + Caixa Girona</i>	October 2010	March 2012	Caixabank
Banca Cívica: <i>Caja Navarra, Caja Canarias, Caja Burgos</i>	April 2010		
<i>Caja Sol + Caja Guadalajara</i>	December 2010		
Banco de Valencia	December 2012		
<i>BBK-Cajasur</i>	July 2010	December 2011	<i>Kutxabank</i>
<i>Caja Vital/Kutxa</i>			
Sabadell	December 2011		Sabadell
CAM			
Santander, Banesto	December 2012		Santander
<i>Unicaja</i>	April 2010		<i>Unicaja</i>
<i>Caja Jaén</i>			
Banco Popular, Banco Pastor	June 2012		Popular
<i>Ibercaja</i>	December 2011	Merger under way	<i>Ibercaja</i>
<i>Caja 3: CAI, Caja Círculo de Burgos, Caja Badajoz</i>			
<i>Caja España</i>	March 2010		<i>Ceiss</i>
<i>Caja Duero</i>			
<i>Caja Murcia, Caixa Penedés, Sa Nostra, Caja Granada</i>	June 2010		<i>BMN</i>
<i>Cajastur-CCM</i>	November 2009	April 2011	<i>Liberbank</i>
<i>Caja Cantabria, Caja Extremadura</i>			
<i>Caja Madrid, Bancaja, Caja Ávila, Caja Segovia, Caja Rioja, Caixa Laietana, Caja Insular de Canarias</i>	June 2010		<i>Bankia</i>
<i>Caixa Catalunya, Caixa Tarragona, Caixa Manresa</i>	March 2010		<i>Catalunya</i>
<i>Caixa Galicia, Caixanova</i>	June 2010		<i>NCG</i>
<i>Caixa Ontinyent</i>			<i>Caixa Ontinyent</i>
<i>Caixa Pollença</i>			<i>Caixa Pollença</i>

Source: own elaboration from Bank of Spain data.

Note: *Cajas* are shown in *italic* to distinguish them from commercial banks.

Appendix 2. Descriptive statistics and correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 ROA	Mean 0.746	S.D. 0.791	Min -3.060	Max 9.240	1.000														
2 ROA Volatility	0.181	0.330	0.000	3.082	0.237	1.000													
3 Z-score (full sample)	0.016	0.027	0.000	0.286	-0.369	0.173	1.000												
4 Zscore (year window)	4.304	0.997	0.036	7.530	0.163	-0.600	-0.209	1.000											
5 Imp.Loans / Gross Loans	1.979	2.110	0.030	16.100	-0.461	0.370	0.395	-0.609	1.000										
6 Crisis	0.336	0.473	0.000	1.000	-0.288	0.232	0.051	-0.508	0.780	1.000									
7 Ln Size	9.710	1.265	6.806	13.920	0.047	0.067	-0.026	-0.161	0.078	0.134	1.000								
8 Gross Loans / Total Assets	72.630	11.602	2.790	91.041	-0.013	-0.047	-0.320	0.011	0.039	-0.024	-0.140	1.000							
9 Equity / Total Assets	7.134	3.434	1.080	27.820	0.814	0.382	0.000	0.844	0.492	0.661	-0.093	0.058	1.000						
10 Chairman: number of previous years experience	1.786	5.773	0.000	31.000	0.000	0.000	0.000	0.008	0.085	0.285	-0.106	1.000							
11 Chairman: number of entity years experience	13.328	11.834	0.000	62.000	0.089	0.014	0.047	0.081	0.062	0.073	0.292	0.036	0.048	1.000					
12 Chairman: education 2	0.462	0.499	0.000	1.000	-0.094	-0.066	-0.048	0.051	-0.079	-0.030	-0.133	0.005	-0.097	-0.061	1.000				
13 Chairman: education 3	0.217	0.412	0.000	1.000	0.082	0.113	0.378	0.347	0.164	0.578	0.014	0.931	0.073	0.255	0.448	1.000			
14 Chairman: education 4	0.199	0.400	0.000	1.000	0.031	0.605	0.001	0.681	0.109	0.503	0.005	0.528	0.000	0.978	0.000	-0.487	1.000		
15 Chairman: political affiliation	0.399	0.490	0.000	1.000	0.292	0.192	-0.108	-0.099	-0.063	0.022	0.193	-0.038	0.378	0.169	-0.031	-0.462	-0.262	1.000	
16 % of seats by Employees	0.095	0.032	0.050	0.158	0.000	0.000	0.046	0.069	0.269	0.679	0.000	0.483	0.000	0.001	0.558	0.000	0.000	0.000	
17 % of seats by Depositors	0.131	0.125	0.000	0.471	-0.127	-0.026	0.038	0.030	0.079	0.024	-0.261	-0.004	-0.061	-0.200	-0.355	0.051	-0.089	-0.026	0.234
18 % of Politicized seats	0.414	0.108	0.167	0.529	0.019	0.632	0.480	0.582	0.159	0.656	0.000	0.945	0.000	0.000	0.339	0.000	0.000	0.000	0.000
19 Reatribution per board member	177.478	181.353	35.000	1187.048	0.040	-0.081	-0.041	-0.019	0.024	0.012	0.136	-0.024	-0.194	0.048	-0.226	0.053	-0.305	0.139	0.075
					0.533	0.201	0.522	0.767	0.712	0.846	0.032	0.704	0.002	0.442	0.000	0.398	0.000	0.026	0.234
					0.037	0.750	0.346	0.749	0.805	0.924	0.141	0.604	0.032	0.941	0.001	0.000	0.915	0.001	0.006
					0.198	0.959	-0.003	-0.014	0.027	0.166	0.078	-0.034	0.117	-0.106	-0.215	-0.058	-0.081	0.118	0.369
					0.107	0.138	-0.046	-0.108	0.013	0.056	0.620	-0.306	-0.018	0.405	0.166	0.122	-0.159	0.138	-0.198
					0.097	0.032	0.475	0.094	0.845	0.385	0.000	0.000	0.785	0.000	0.009	0.056	0.012	0.030	0.002

Significance levels are in parentheses.