

Did Good *Cajas* Extend Bad Loans? Governance, Human Capital and Loan Portfolios*

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November 3, 2009

Abstract

The lending behavior in the run up to the crisis and current non performing loan situation of different Savings and Loans in Spain (*Cajas*) has varied widely. However, neither formal governance institutions (e.g. the way the board is appointed) nor real governance (e.g. the actual composition of the board and the role played by political parties in it) are highly correlated with the composition of the loan book at the peak of the financial crisis (the size of the portfolios of real estate and individual loans) or with the performance of these loans (the amount of non performing loans in the crisis or the decrease in ratings). On the other hand, we find a clear and significant impact of the human capital of the *Caja* chairmen on the measures of loan book composition and performance. In particular, we find that (1) *Cajas* whose chairman was previously a political appointee have had very significantly worse loan performance; (2) *Cajas* whose chairman did not have postgraduate education have significantly worse performance; and (3) *Cajas* whose chairman had no banking experience had significantly worse performance.

*We thank Miguel Anton, Gabriela Antonie, Manuel Huete, Raquel Vargas for excellent research assistance and FEDEA for financial support.

1 Introduction

In hindsight the signs of a developing housing bubble appear as clear in Spain as in the US or Ireland: Real Estate prices grew, in real terms, by over 100% between 99 and 2007. And yet up to 2007 real estate loans continued funding one of the largest real estate booms in the world, so that 860,000 housing starts took place in 2006. Fully two thirds of the housing units built in Europe between 99 and 07 were built in Spain. By the end of all of the construction boom (end of 2008), the stock of loans to real estate developers and builders reached almost 500bn euros, equivalent to 50% of Spain's GDP. This lending bonanza appears foolish in hindsight: some investment banks now estimate that up to 50% of loans to developers will be irrecoverable.

Not all lenders took the same decisions. In fact, as we document below, the performance differential between different lenders are huge: the share of real estate loans in the *Cajas* books' at the of the boom (2006) ranges, in our sample, between just over 10% and almost 50%, and the share of non-performing loans in the Summer of 2009 also ranges widely, between just over 1% and close to 7%.¹ The question we study in this paper is what accounts for such heterogeneity. In particular, we study whether differences in human capital and in governance can partly account for it.

By answering this question, we hope to illuminate the current policy debate in Spain on the regulation of this segment. Some of the *Cajas* are among the most successful commercial banks in Spain, but there is a lot of heterogeneity in their performance. Our aim is to explain part of this heterogeneity in performance on the basis of governance and human capital issues. This is a particularly important exercise insofar *Cajas* are an unusual segment of the Spanish financial sector, characterized by heavy political involvement; as a result, moves towards changing the regulation of the segment are continuously being discussed. Moreover, *Cajas* do not have tradeable participations and are not quoted in the stock market- thus take-overs and other control mechanisms relying on the share price, which play a role in banks do not act as automatic disciplining channels here.

Beyond this narrow policy objective, we hope that this study of the *Cajas* will contribute to illuminate the general debate on decision making up to the crisis on the conflicting role of incentives and bounded rationality on it. One side of the debate argues that those in charge of the key decisions may not have been informed enough, knowledgeable enough, or smart enough to understand what they were doing- a case of 'bounded rationality'; the other side argues that they may have foreseen it, but it may not have been in their interest to do the

¹Or 17.3% counting a Caja taken over by the Bank of Spain, Caja de Castilla la Mancha. More on this later.

right thing—in other words, their incentives were misaligned, and the corporate governance arrangements put in place by the shareholders and other stakeholders did not impose the necessary discipline. Of course, a third option is possible, namely that those lending decisions were, at the time, optimal and only appear wrong-headed to us, in retrospect. Our data will allow us to differentiate at least partially among these three hypothesis, and thus hopefully will help us clarify the general debate on the roots of the ongoing worldwide financial crisis.

The incentive alignment problem takes a particular form in the Spanish *Cajas*. Local governments and local political parties in Spain have a much closer relationship with them than with private banks. Formally, a substantial proportion of board members are directly appointed by local and regional governments. Moreover, many other board members that are formally appointed by other types of institutions (depositors, workers, founders. . .) are often quite connected in the political sphere.² Political membership is known to be correlated with voting patterns in boards and firm performance, and political connectedness of firms is also related to the way legislators act when passing regulation that is important for those same firms.³ In this sense it is reasonable to expect the level of political involvement of their managers to matter. Some of these effects may be associated with conflicting interests and thus affect performance negatively. But some others, such as those derived from better coordination between banks and local governments, may be positive. The relative importance of each of these channels may also be different during expansion times or during crises.

We study empirically how corporate governance matters by studying the impact of the board composition and structure on loan losses, rating changes and the composition of the loan portfolio. Pre-existing literature on Spanish savings banks has focused on the effects of the formal level of political influence, using information from the bylaws of the different savings banks. However, the effective level of governance has attracted much less attention, probably due to the difficulty of obtaining such information. In this paper we exploit new information on the actual composition of the board, as well as on the connection between it and political parties and institutions to study the effect of actual, as oppose to formal, governance.

The alternative hypothesis involves studying the impact of limited knowledge and information by the executives of the bank. This is potentially related to the absence of human capital of some of the leaders of the institution, who cannot

²Sumner and Webb (2009) show how loans in commercial banking are linked to the composition of the board of the bank. Through a related argument Mian and Khwaja (2005) show that politically connected firms get more loans from commercial banks.

³Mian, Sufi and Trebbi (2009) show how local legislators vote according to the needs of their local financial institutions.

effectively monitor their subordinates, provide them with input in their decisions and coordinate their efforts- the main role of CEOs. To do this, we have hand collected data on curriculum vitae, political affiliation, loan books, etc. of the Chairmen of most *Cajas*.

Our data allows us to reject the luck hypothesis. Under the null, that is if the variance in lending decisions is the product of luck, there should not be any systematic variation in the real estate exposure by *Cajas*- in particular this exposure (and the subsequent variance in non-performing loan performance) should be unrelated to either human capital or corporate governance issues, after controlling for size and other systematic factors. In fact, we find that there are clear and significant patterns in governance and human capital of the Chairman that are correlated with its performance. Most significantly, the human capital level of the Chairman of the *Caja* is closely correlated with both the loan portfolio of the *Caja* before the Crisis (in 2007) and with the loan performance of the *Caja* during the crisis. In particular, a *Caja* run by someone with post-graduate education, with previous banking experience, and with no previous political appointments, is likely to have significantly less real estate lending as a share of total lending, a larger share loans to individuals, a lower rate of non-performing loans, and a lower downgrade in its rating.

Specifically, those *Cajas* led by Chairmen without graduate studies extended 6-7% more of their portfolio as loans to individuals. Consistently with this, as of July 2009, they had significantly lower non performing loans, around 1% less. Given that the average in the sample is around 5%, this is a 20% drop just from this variable. The role of banking experience is also very significant: *Cajas* led by those without banking experience had a 1% increase in non performing loans; this also partly reflects a larger portfolio allocation to real estate, of around 2% more. These two effects are cumulative, that is compared to one who has graduate education and relevant experience, a chairman without both increases current non performing loans in his *Caja* by 2 percent points. This is a huge effect, of around 40% of non-performing loans. These numbers are significant and quite precisely estimated.

As to political connections of the Chairman, having been an elected public official previously had also significant effects on non-performing loans, with an increase in around 1% of the share to the non performing loans for *Cajas* run by previously elected public officials- that is political connections account for 1/5 of the average mean non-performing loan.

On the other hand, we find limited evidence that the composition of the board of the *Caja*, even its politization, also have played a role. Taking all *Cajas* together, the politization of boards seems to be correlated with less real estate investments but this is largely driven by the subset of Basque *Cajas*. Once this

is factored in, those boards with a dominant party are in fact associated with worse portfolio quality; clear effects cannot really be discerned.

Of course, all of these numbers have to be taken with the proverbial grains of salt. First, we cannot actually prove any causal connection, of course, as we have no instrument. In particular, a third, unobserved variable could account for both Chairman choices and loan choices. Second, our data are very incomplete in some instances. We have collected most data from public information, as we discuss below; public information on chairmen of some *Cajas* is hard to come by. We have attempted to complement the data by surveying the *Cajas* themselves, but we have regretfully had no success. We aim to continue completing the data set to the extent possible.

The paper proceeds as follows. Section 2 presents the data sources and the key stylized facts. Section 3 studies the more ‘traditional’ explanations, the role of the Board of the *Caja*. It begins by considering the role of the formal rules that determine the board composition and structures, and then studies the available measures of ‘real’ political interference in the governing of the *Cajas*. Section 4 presents the evidence on the role of Chairman’s human capital. Section 5 concludes.

2 Data and Empirical Approach

2.1 Data Sources

Our empirical analysis requires drawing data from a number of sources. Most of these data was collected by us from a wide range of public sources. We collected data on human capital of chairman; on formal and effective corporate governance; on the loan portfolio as of 2007; on ratings downgrades between 2007 and now; and on the non performing loan as of July 2009.

We collected data on human capital (education, experience, political affiliations, and previous political experience) about the Presidents of the savings banks using information available through the web sites of the *Cajas* and news clippings about their appointment. This information was then supplemented by additional information provided by some of the savings banks’ press offices that have cooperated with us. Moreover, some additional information -contained in the financial press, in the Boardex database and the Registro Mercantil- has also been used to supplement it. To collect information about the formal structure of the boards and the financial links between *Cajas* and political parties we used Corporate Governance Reports.

For reasons of availability, the human capital variable reflects the human capital of the last president as of 2009. That means that we have to be careful

interpreting the results. Essentially, what we hope to measure is the human capital policies and culture of the organization, rather than the effect of the human capital of one particular Chairman. That is to interpret properly our findings we need to think not of ‘the effect of not having a postgraduate degree’ but ‘*cajas* who hire chairmen without graduate degrees’ and similarly for other data.

We attempted to complete the public information collected over the summer of 2009 by directly contacting all of the *Cajas* for whom the information was missing. Sadly, perhaps because of the sensitivity of the issue, we had no traction and almost no *Cajas* answered our request.

The dependent variables in all of our analysis are real estate loans, individual loans, changes in ratings and share of non performing loans. These came from three different sources: the Annual Balances, the Savings banks’ Semianual Reports results filed with the CNMV, and reports published periodically by international rating agencies (S&P, Moody’s and Fitch)

For the ratings we transformed the data from the alphabetic (AAA etc.) codes used by rating agencies to a numeric scale using the transformation proposed by Miguel García-Posada y Josep M.^a Vilarrubia (2008). In our regressions we used every single piece of information we found, with one exception: the non performing loan data for *Caja de Castilla la Mancha (CCM)*. By the time we collected the non-performing loan information (the data are for the first semester 09, as of July 1, 2009) this institution had been taken over by the Bank of Spain. While the distribution of non-performing loans for our sample without CCM has a mean of 4%, a minimum of 1.75% and a maximum of 7.38%, CCM reported non-performing loans of 17.3%, with a jump during the months of the intervention of over 8%. We believe that this huge difference responds to very different accounting standards used by *Cajas* accountants versus the Bank of Spain.⁴ As a result of this non-comparability, we have run all of our regressions without this value to avoid skewing our results.⁵

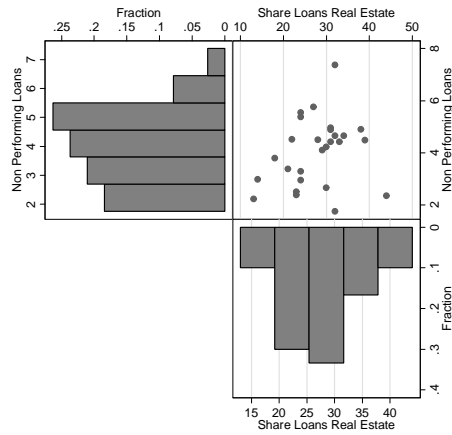
2.2 Stylized Facts and Empirical Strategy

The key stylized fact we exploit is the causal relation between the portfolio allocation decisions during the ‘bubble years’ (before 2007) and the pain that the banks suffered later. Figure 1 serves as both data description and as a summary

⁴See Cunat and Garicano “¿Para cuándo la reestructuración del sistema financiero español?” El País, 13 September 2009.

⁵None of our results changes sign, and only one becomes non-significant, the coefficient on postgraduate education, if we include this outlier. On the other hand the impact of appointing politicians for non political board seats is strongly negative if we include CCM in the sample.

Fig 1. 2007 Real Estate Loans vs. 2009 Non Performing Loans



of this relation. Clearly, large shares of real estate loans and small shares of individuals pre 2007 are correlated with lower default today with lower delinquency rate as well as with lower downgrade probability. The relationship is causal, as a large part of the bad loan issues in Spain are derived from the 320bn euro stock of loans allocated to real estate developers and 160bn euro of loans to builders..

Figure 1 shows that there is a wide dispersion in the allocation of loans to real estate. The average of the 30 *Cajas* for which we have the 2007 real estate data is 27.7%, with the share ranging from 13% to 44%. The share of non-performing loans on July 1, 2009 varied widely, between 1.75% and 7.3%. Moreover, the figure shows a very clear correlation between both.

Thus it is clear in hindsight that allocating a large share of the loan book to real estate investments was a bad decision. Of course the question is whether it was also bad ex ante. We cannot really have a firm view on this without some analysis. Our aim here will simply be to find out which specific characteristics of *Caja*'s boards and executives explain their portfolio decisions. Under the null, where nothing could be known ex ante, we would not expect that, for example, CEOs with higher levels of human capital would allocate lower (or higher) fractions of their portfolios to real estate; or that those who are most connected would instead allocate larger shares. Thus our tests, were we to find clear relations between human capital, board structure or political connections and portfolio decisions, will allow us to reject the null that the variation in loan portfolio decisions was essentially random or due to 'luck'.

3 Corporate Governance

Savings banks do not formally have shareholders. In terms of control rights, the extended board of the savings banks constitutes the equivalent of a general shareholders' meeting. With respect to economic rights, the not for profit foundation or 'obra social' is closest to a shareholder.

The extended board of savings banks is composed by representatives of the local political authorities, representatives of the founders of the *Caja*, relevant social institutions, workers and other stakeholders. Their mandate is to maximize the long-term expected returns for the foundation; in this sense, their formal mandate is not that different from the objectives that a regular shareholder in a private bank would pursue. There is however a growing literature that shows that when shareholders of private corporations have other interests in the firms on top of maximizing the value of their shares their voting patterns are affected.⁶ In the case of savings banks it is conceivable that there is some degree of conflict of interests between the maximization of a hypothetical shareholder's value and the objectives of the institutions present on the board.

3.1 Formal governance institutions

The formal institutions on governance is the aspect of Spanish *Cajas* that has attracted most interest in the academic literature. There is substantial heterogeneity in the way boards are appointed and this information is public. Several studies have sought to exploit this information to study the influence of governance structures on performance. Garcia-Cestona and Surroca (2007) study the differences in performance between *Cajas* formally controlled by non-political institutions (mainly depositors and workers) and those controlled by local authorities. They find that non-political *Cajas* to focus on profit maximization and on the universal access to financial services, leading to better performance. On the contrary, contributing to regional development becomes the most favored goal when public administrations control the bank. Illueca, Norden and Udell (2008) show that *Cajas* are more likely to expand to other regions whenever the same political party is dominant in both regions and the board of the *Cajas* is dominated by local authorities. Several other studies have compared the efficiency levels of *Cajas* and private commercial banks trying to elicit whether there is a substantial difference in performance, in general with mixed results.⁷ While

⁶See among others the work of Agrawal (2008) on US union pension funds. Matvos and Ostrovsky (2007) on the strategic interaction of activist funds and the analysis of Harford, Jenter, and Li (2006) on how the levels of cross-ownership of shares affect merger negotiations.

⁷See Salas, V. , J Saurina (2002), Tortosa, E. (2002), Crespi R., M. A. Garcia Cestona and V. Salas (2004) among others.

Table 1: Corporate Governance

	Loans to Real Estate		Loans to individuals		Non Performing Loans		Change in Rating (positive=increase)	
	(I)	(II)	(I)	(II)	(I)	(II)	(I)	(II)
% politics	4.000 (12.55)	4.183 (12.57)	-22.56 (14.82)	-22.87 (14.57)	0.718 (1.615)	0.697 (1.633)	-0.340 (0.244)	-0.339 (0.248)
% founders	0.669 (11.80)	-3.753 (12.62)	-3.448 (14.49)	3.682 (15.28)	-4.474*** (1.557)	-4.523*** (1.619)	0.315 (0.245)	0.339 (0.254)
Herf. Board	-2.465 (20.05)	-2.784 (20.09)	-9.966 (24.57)	-9.432 (24.25)	-2.702 (2.912)	-2.765 (2.943)	-0.249 (0.421)	-0.250 (0.427)
Observations	29	29	29	29	36	36	38	38
size controls		yes		yes		yes		Yes

Source: Corporate governance reports and own collection

these latter studies provide interesting evidence they have certain limitations. Efficiency measures are generally unstable. Output measures and measures of risk from banking balance sheet data are controversial and may not be very informative during periods of expansion. Finally, these papers can exploit the panel nature of balance sheet data, however, their main variables of interest (i.e. the governance structure of savings banks) are in general constant through large periods of time so the advantage of using panel data is somewhat limited.

Existing studies have mainly concentrated on one aspect of governance: the extent of political influence on the savings banks and how it affects performance. The effect of political influence is ex-ante not obvious from a theoretical point of view. While stronger political influence may lead to conflicts of interest between maximizing shareholder's value and other objectives such as fostering regional growth or directed lending, political connections may provide valuable human capital related to institutional knowledge, private information or professional networks. In fact, it has been shown empirically that political connectedness is often valued by private corporations and that it affects firm value.⁸ Common measures of political influence that have been used in the analysis of Spanish savings banks include the share of board members appointed directly by local authorities.

How do these measures relate to the loan performance of the *Cajas*? Table 1 analyzes this effect. Each cell represents a different regression.

The first variable of interest is the % of board members that are formally appointed through a political channel (local and regional governments). We do not find substantial effects of this variable on the lending behavior and portfolio

⁸See for example Fishman (2001) and several follow-up papers.

performance of savings banks during this crisis. However we find mild negative effects on the rating change (statistically significant at a 17% rate). The second measure uses the % of board members that are appointed by the founders, which has often been used as a measure of political independence (although it can also be associated with different founder agendas). Again we do not find strong results on portfolio composition; however loan portfolios perform much better when there is a higher proportion of founders. The effect is quite strong both economically and statistically, an extra 11% of representation of founders (one standard deviation) leads to an increase of 4.9% in the share of non performing loans (2.9 standard deviations). Thus consistently with previous findings and the theoretical hypothesis, the existence of a more independent boards is correlated with better loan performance.

Weak boards and dispersed ownership have also been under the spotlight as potential drivers of poor performance. Free riding and coordination failures among shareholders and board members can be responsible for poor oversight of management that leads to entrenched managers and poor performance. The degree of concentration of a board may also be associated with political diversity. To test these hypothesis we use as independent variable the Herfindahl index of the representation of the different institutions that form the board. The results do not show any strong patterns, with coefficients that are in general very imprecise.

Thus we do not find strong effects of formal measures of politization on portfolio choice; when it comes to performance we do find a clear positive effect of a larger founder share on non performing loan share and a mild negative effect of the % of politically appointed board members on the savings bank rating. Overall, it formal governance measures do not show strong impacts on the performance of the Spanish savings banks during the current crisis, in line with some of the results in the preexisting literature that use more conventional performance measures.⁹

Of course, one has to bear in mind that the channels through which board members are appointed are only mildly correlated with the real level of political involvement of the board members. One of the added values of this study is that we collect public information about the board members and in particular we are able to assess whether they belong to a political party or have been appointed to political positions in the past. We move to this issue next.

⁹Of course, this does not necessarily mean that governance issues are unimportant in this case. Good governance is important for firms and even more so for savings banks that lack some of the market-based discipline devices such as the information contained in their share prices or hostile takeover threats. It may however reflect that the formal governance provisions across savings banks are not that different or relevant to determine lending decisions.

3.2 ‘Real Governance’: Political Involvement and Loan performance.

In this section we concentrate on the effects of this effective influence on performance during the current crisis. For this purpose, we collected public information about the political connection of the different presidents and board members of all the savings bank in our sample.¹⁰ Individuals were classified as politics if they belonged to a political party or had previously occupied politically appointed public positions. While public reports in the press, personal and institutional web-pages may be an incomplete source of information, it can still be treated as a valid proxy subject to measurement error. If anything, it is conceivable that our variables underestimate the level of political involvement of board members (i.e. some of them may not want to publicize their political connections). However, we do not expect that biases in terms of declaring a political membership should have a strong correlation with performance.

Figure 2 below measures the correlation between a formal measure of political involvement (% of politically appointed seats) and a ‘real’ one (% of effective politicians) :the correlation is positive, but not high, 0.32. Similarly if we regress the percentage of politically connected board members on the percentage of board members that are formally politically appointed we find a coefficient of 0.42 that is statistically significant at a 5% level.¹¹ This means that the percentage of members that are politically appointed is possibly a valid proxy for political influence, but it is subject to a lot of noise. Given that formal measures of political influence are questionable and the limitations of traditional efficiency measures, we believe that going further towards measuring the extent of effective political influence in the *Caja* is very useful.

Table 2 uses as independent variables different measures of effective political influence. To measure the extent of political influence, we use the percentage of politicians in the board and the percentage of the board controlled by the largest party, as well as the Herfindahl index of the representation of the political parties. Surprisingly, the three variables seem to have a strong impact on the portfolio composition of savings banks, with more political and boards with a high representation of the top party choosing a more conservative portfolio. This could be interpreted as a positive impact of politicians on boards, however the results in the last four columns show that this conservativeness, does not translate into a better portfolio performance.

¹⁰The sources of this public information are boardex, the public web pages of the institutions, news and publicly available web pages.

¹¹Note that a majority of Cajas has a higher "real" amount of politicians than "formal". Board seats that are formally non political (employees, founders, depositors...) are often filled by politicians, while the opposite is less common.

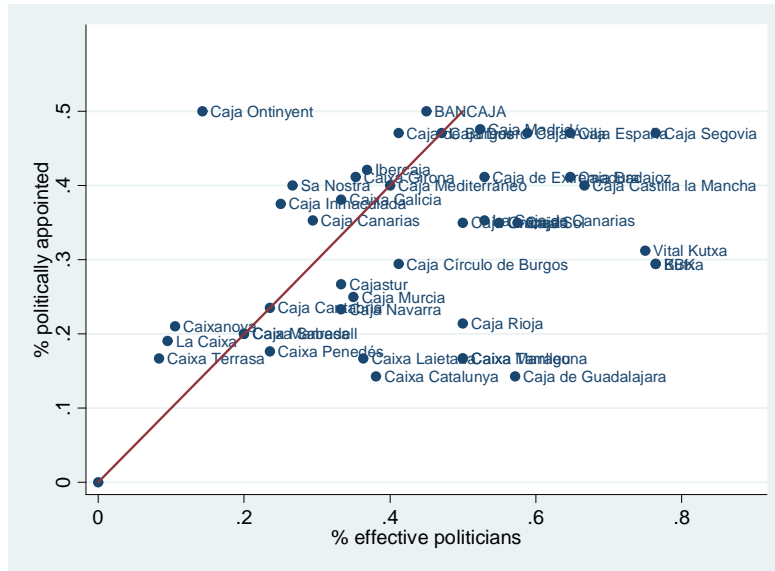


Table 2: Politics and Performance

Panel A

Explanatory Variable	Real Estate Loans		Loans to individuals		Non performing Loans		Change in Rating (positive=improve)	
	(I)	(II)	(I)	(II)	(I)	(II)	(I)	(II)
% Politicians	-12.15* (6.697)	-14.03** (6.695)	8.201 (8.692)	10.92 (8.606)	0.291 (1.087)	0.371 (1.116)	0.143 (0.152)	0.155 (0.157)
Herfindahl Parties	-29.40*** (10.58)	-30.98*** (10.44)	30.63** (13.73)	33.12** (13.30)	-1.576 (1.696)	-1.520 (1.730)	0.247 (0.245)	0.258 (0.250)
% top Party	-20.95*** (7.526)	-22.29*** (7.419)	19.45* (9.948)	21.49** (9.670)	-0.778 (1.204)	-0.732 (1.229)	0.133 (0.172)	0.141 (0.176)
Politicians in non political seats	-4.125 (3.935)	-3.713 (4.276)	3.375 (6.486)	2.367 (6.987)	0.0925 (0.552)	0.0592 (0.582)	0.138 (0.0869)	0.150 (0.0970)
Observations	30	30	30	30	38	38	39	39
Include size controls?		Yes		Yes		Yes		Yes

Source: Corporate governance reports and own collection

Panel B: Including dummy for Basque Cajas

Explanatory Variable	Real Estate Loans		Loans to individuals		Non performing Loans		Change in Rating (positive=improve)	
	(I)	(II)	(I)	(II)	(I)	(II)	(I)	(II)
% Politicians	-6.473 (7.655)	-8.576 (7.679)	-2.995 (9.420)	-0.0259 (9.338)	2.294* (1.142)	2.452** (1.170)	0.0203 (0.176)	0.0317 (0.182)
Herfindahl Parties	-23.91 (14.55)	-25.94* (14.37)	13.78 (18.38)	16.92 (17.80)	1.869 (2.121)	2.008 (2.165)	-0.0364 (0.328)	-0.0240 (0.335)
% top Party	-16.40* (8.835)	-17.85* (8.704)	9.234 (11.28)	11.44 (10.92)	1.054 (1.339)	1.133 (1.366)	-0.0257 (0.202)	-0.0179 (0.207)
Politicians in non political seats	0.208 (3.090)	1.582 (3.152)	-3.292 (5.475)	-5.940 (5.472)	0.698 (0.520)	0.722 (0.560)	0.117 (0.0940)	0.127 (0.108)
Observations	30	30	30	30	38	38	39	39
Include size controls?		Yes		Yes		Yes		Yes

Source: Corporate governance reports and own collection

A closer inspection of the independent variables shows an important pattern: the three savings banks in the Basque country, BBK, Kutxa and *Caja Vital*, rank 1st, 2nd, and 4th in terms of the percentage of politically connected board members. The three of them also had had a very conservative portfolio approach during the crisis. This may be due to a positive effect of political influence, but it could be determined by exogenous factors as well, such as different industrial basis in the Basque region.¹² For this reason, in the next table we also show tables in which we include a dummy for the three Basque savings banks.

In this alternative specification, the effect of political influence has a neutral effect on the portfolio choice of the savings banks but it has a negative effect on non performing loans, that is, outside the three Basque savings banks political influence seems to have had a negative impact in loan portfolio quality.

We also measure the percentage of politicians in seats that, in principle, are not appointed by political bodies (depositors, employees). This measure indicates that some board members that should, in principle, be independent from the local government may in fact be highly aligned with it. Again, the measure seems to have no impact on portfolio choice or performance.¹³

Overall we find some evidence of positive effects of board politization on the portfolio choice of savings banks. Banks with lower politically connected board members, those without a dominant party and those with a high concentration of political parties had less exposure to real estate risks. This effect is largely explained by the three Basque savings banks. In terms of performance, once these three savings banks are excluded, we find negative effects of political influence on non-performing loans.

We have several reasons to think that the effect of boards on performance may not be statistically very strong. First, a combination of positive and negative results associated with political influence. Second, poor statistical power of our tests due to the necessarily small cross-section of observations that we need to use once we concentrate on the current crisis. Finally, we could be observing in *Cajas* the phenomenon of “weak boards” that has been observed for firms in general. If boards do not have strong powers to limit the decisions of the executives of the firm, then it is normal that board characteristics of any kind do not affect firm performance. If this was the case, to find alternative channels of political influence we need to either concentrate higher up in the hierarchy of the firm or to use proxies of political influence that come from the firm itself. We therefore concentrate from now, on direct lending to political parties; we later study the impact of the political affiliation of the bank chairman.

¹²In particular BBK ranks 1st in percentage of politicians and last in real estate loans.

¹³However once CCM is included in the sample it has a very strong and negative impact on the proportion of non performing loans.

Table 3: Loans to Political Parties and Performance

	Real Estate Loans		Loans to individuals		Non performing Loans		Change in Rating (positive=improve)	
	(I)	(II)	(I)	(II)	(I)	(II)	(I)	(II)
Total Loans	-0.203 (0.132)	-0.289 (0.239)	0.295* (0.162)	0.330 (0.295)	-0.0102 (0.0241)	-0.0569 (0.0427)	0.00348 (0.00337)	0.00908 (0.00602)
Loans over loans+deposits	0.427 (1.246)	0.275 (1.259)	-0.0605 (1.558)	0.209 (1.545)	0.183 (0.166)	0.197 (0.169)	0.0110 (0.0238)	0.0121 (0.0244)
Herfindahl Loans	-3.476 (5.296)	-4.729 (5.374)	1.556 (6.649)	3.508 (6.654)	0.893 (0.631)	0.927 (0.641)	0.0532 (0.0949)	0.0576 (0.0972)
Observations	30	30	30	30	38	38	39	39
Include size controls?		Yes		Yes		Yes		Yes

Source: Corporate governance reports

In terms of direct financial links with political parties, we measure the total amount of loans given to political parties, a ratio of the total amount of loans relative to the total loans+deposits of the savings bank and a herfindahl index of the loans given by political party that measures whether loans are concentrated on one or few parties. Table 3 shows the results of these regressions.

While political lending is often exemplified as a potential manifestation of conflicts of interests in the savings banks, the results on these variables do not seem to show a strong pattern in terms of their influence on performance measures. In general the loans to political parties represent a small proportion in terms of the total portfolio of the savings banks and the lending is often quite diversified among political parties, so it may be the case that it is not a good proxy for politization. Furthermore we do not have good measures of directed lending, that is, lending that is politically motivated but is not direct lending to political parties.

The full picture with respect to the political influence of savings banks shows little clear impact either way of the board composition and possible politization on the loan portfolios and loan performance of different *Cajas*. We move now on to study our next hypothesis: does the human capital of the *Caja* chairman matter?

4 Hacks versus Experts: does it pay to have a knowledgeable chairman?

Previous literature has identified several roles for those at the top of the managerial hierarchy: coordinating among different units (see Hart and Moore, ??); monitoring subordinates (e.g. Qian, 1994) or dealing with the exceptional issues (e.g. Garicano, 2000). Without the right knowledge, Chairmen cannot properly

Fig 3: Impact of CEO Graduate Studies on Caja Loan Book



Source: Own collection from public sources. 0: Not Postgraduate, 1: Postgraduate

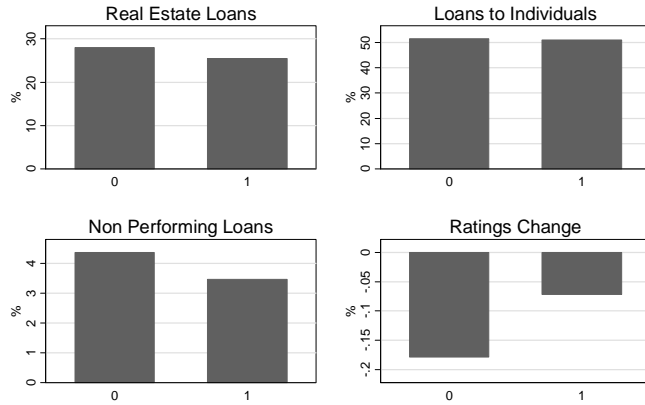
undertake these roles.

This is particularly true in the case of portfolio allocation decisions and loan risk taking. It is a critical determinant of the performance of a financial institution, and thus cannot really be delegated; and it requires some relatively arcane knowledge. For example, such decisions require understanding statistical concepts such as covariance or correlation, finance concepts such as value at risk or 'beta' etc. It is unlikely that those without adequate education or experience can undertake such roles. For example, absent some finance knowledge it is likely the math wizzes from trading can outargue the CEO at any time.

Thus we hypothesize that the absence of post-graduate education at the top as well as of banking experience will hamper decision making at the top of the *Caja* and thus be linked to worse loan performance and excessive risk taking.

Only 1/3 of the 45 CEOs in the sample have some form of postgraduate education, either in the form of studies abroad, master or Ph.D. degrees. On the other hand, half of the CEOs of the *Cajas* have some previous banking experience. These two dimensions of human capital are not correlated- the correlation coefficient is .01. Finally, age seems to play a key role in the human capital heterogeneity: older managers are less likely to have postgraduate experience and also to have banking experience. To make sure we are finding the effects of education and not of the vintage of the manager, we will control for age in all of

Fig 4: Impact of CEO Banking Experience on Caja Loan Book



Source: Own collection from public sources. 0: No Banking Experience, 1: Banking Experience

our regressions.

Figure 3 presents the portfolio choices of those with and without postgraduate degrees. It shows that the *Cajas* led by chairmen with postgraduate degrees had a 5.6 percent points smaller real estate loan portfolio as a share of total loans than those led by chairman with those loans, more individual loans, 6 points more of loans to individuals. As a result, they had less non performing loans and fewer ratings downgrades.

Figure 4 undertakes the same exercise for banking experience. Although the differences in share of real estate loans have the same sign – those with more education allocated less loans to real estate, here the difference is not significant as we’ll see below. On the other hand, there is sharp and clear difference in the fraction of non-performing loans: those banks whose chairmen had previous banking experience had almost 2% less, on our preferred specification, non performing loans. This difference is very large: given that the average *Caja* had 4.93% of non-performing loans, having a president with banking experience reduces by 40% the amount of non-performing loans.

These results could reflect simply a size bias- that is, larger *Cajas* could have better loan portfolios and larger *Cajas* could have managers with more education and experience, making the correlation spurious. A second bias could be simply age: maybe officers from older *Cajas* did worse, and those were less likely to be educated or experienced. To deal with these concerns we present now the results of a set of regression analyses that hold constant size and age.

Table 4 presents this analysis. There are 5 specifications for each variable, so that each panel presents five regressions on each of our dependent variables, real estate and individual loans, non performing loans and rating increase. The first column in each panel shows the average difference due just to postgraduate education, similarly to the figure above; the second column shows the impact of banking experience, the third column shows the impact of having been, previously to running the Caja, a public appointee. The fourth column investigates the robustness of the results by putting them all together and finally the 5th column puts them all together controlling for the impact of turnover (to avoid size effects) and age.

Table 4: CEO Human Capital and Political Background and Performance

Expl. Vble.	Loans Real Estate					Loans to individuals				
	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
Graduate Studies	-5.85** (2.47)			-5.34* (2.87)	-7.48** (3.47)	7.45** (3.07)			7.11* (3.71)	6.38 (4.76)
Banking Experience		-2.76 (2.87)		-2.63 (2.83)	-2.61 (3.3)		-0.15 (3.66)		-0.34 (3.66)	-1.25 (4.52)
Public Office			-3.57 (2.63)	-2.2 (2.81)	-2.89 (3.76)			-2.71 (3.29)	-3.63 (3.63)	-6.02 (5.15)
Turnover					-8.75 (20.21)					22.65 (27.68)
Age					-0.28 (0.3)					-0.17 (0.41)
Intercept	29.65** (1.43)	28.3** (2.16)	29.64** (1.86)	31.65** (2.59)	51.92** (20.96)	46.85** (1.77)	51** (2.75)	50.21** (2.33)	49.58** (3.35)	60.77** (28.71)
N Obs	30	23	28	22	19	30	23	28	22	19
R Sq.	0.17	0.04	0.07	0.25	0.33	0.17	0	0.03	0.19	0.26

Expl. Vble.	Non Performing Loans					Change in Rating (positive=increase)				
	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
Graduate Studies	-0.84** (0.41)			-1.06** (0.34)	-0.98** (0.34)	0.1* (0.06)			0.08 (0.06)	0.09 (0.07)
Banking Experience		-0.94** (0.4)		-1.09** (0.33)	-0.93** (0.34)		0.09 (0.06)		0.12* (0.06)	0.08 (0.07)
Public Office			0.76* (0.4)	0.53 (0.33)	0.93** (0.35)			-0.03 (0.06)	0.03 (0.06)	0 (0.07)
Turnover					4.39** (2.17)					0.09 (0.45)
Age					0.05* (0.03)					-0.01 (0.01)
Intercept	4.34** (0.24)	4.4** (0.3)	3.72** (0.29)	4.73** (0.3)	0.83 (2.03)	-0.19** (0.03)	-0.18** (0.05)	-0.15** (0.05)	-0.26** (0.06)	0.25 (0.42)
N Obs	38	27	35	26	23	39	26	35	25	22
R Sq.	0.11	0.18	0.1	0.5	0.66	0.07	0.08	0.01	0.21	0.29

Note: standard errors in parenthesis. Source: Own collection from public sources.

Graduate studies are most significant and important. Those without any graduate studies (a masters, a doctorate, or studies abroad) extended 6-7% more of their portfolio as loans to individuals, and around 5-7% less to real estate. Consistently with this, as of July 2009, they had significantly lower impaired loans, around 1% less; were less likely (although this is not always statistically significant) to experience a downgrade.

The role of banking experience is very significant, but less straightforward: banking experience reduces current non performing loans ratios by an additional 1%. This also partly reflects an increase in the portfolio allocation to real estate; although in this case the estimate is not precise enough to be significant, all regressions show a consistent drop of around 2% in this allocation.

A common view on the chairmen of Spanish *Cajas* is that it is often a job for retiring politicians. The next set of regressions studies the extent to which being a previous politician affects the performance of the *Caja*. Of course, having political experience and connections could be a plus, in that it can provide the *Caja* with access to information and projects that it would not have otherwise. Thus it is an empirical question whether the Chairman's political connections and experience harm or hurt the *Caja*.

The regressions on Table 4, columns (III), (IV) and (V) show that it does indeed have a significant and negative impact. Specifically, having held previously elected political office damages the performance of the *Caja* in approximately 1%, similarly to not having graduate education or banking experience. It also similar impact: more, although insignificantly so, real estate allocation; less individual loans, higher share of non-performing loans and more likely to have a decrease in rating.

This effects are additional to one another: since they are quite uncorrelated, putting them together in the regression hardly reduces their size. Thus we can conclude that compared to one who has graduate education and relevant experience, a chairman without both increases current non performing loans by 2 percent points; since non-performing loans average around 4%, this is roughly a 50% increase in non performing loans, and larger of the standard deviation of this variable. Moreover, using the estimates in column (V) we can see that having a chairman without experience and graduate education who has previously held public office increases these effect to 3%, almost two standard deviations, in non performing loans. Non performing loans of an average *caja* would increase from 4% to 7% in this case.

Note that the differences in observable skills of the different chairmen of the *Cajas* need not be very large to lead to large economic losses. Given the nature of the financial sector with large and highly levered institutions, very small differences in the rates of return achieved by different chairmen lead to large economic losses when translated into monetary terms.¹⁴ Even though those chairmen that in our sample appear as less able to run the *cajas* may in fact be very skilled individuals, the difference in skill with respect to those that seem to be optimal is correlated with large differences in performance. As a back of the

¹⁴See Gabaix and Landier (2007) for a more general and formal argument on the influence of size on the returns to skill of the CEOs of large corporations.

envelope calculation, we can make the inference of what would have happened if each and every *Caja* in our sample had been run by the optimal chairman (ie. an experienced, formed and non politically connected one). This exercise yields that the total amount of impaired loans of the whole system would have gone down by 12.3 billion euro. Assuming a common conventional recovery rate for impaired loans of 35% this would translate into losses of 8 billion euro. This inference has to be taken with some care, as chairmen may differ in unobservables that are correlated with size and performance but gives an impression of the size of the effects at work. It also talks to the controversy about incentive pay and large bonuses in the financial sector. While paying large bonuses to non performing executives is obviously a poor policy, setting a high pay seems like a good one whenever it is a necessary condition to attract high skill individuals.

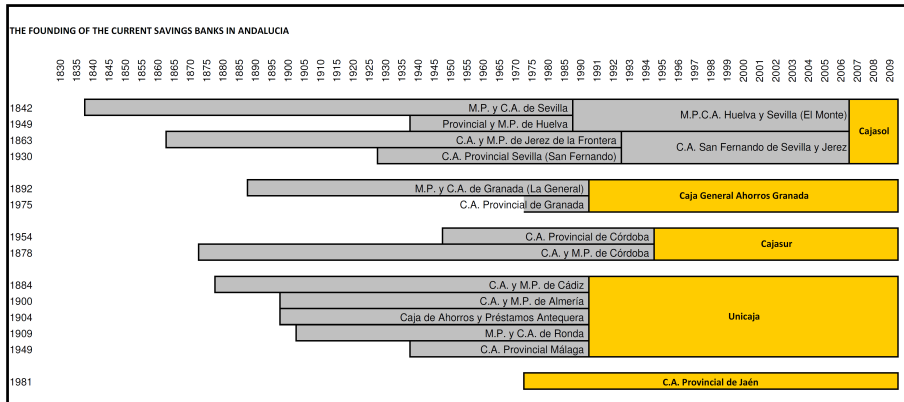
Although making causal statements is difficult, and even though we could not obtain data on these sensitive issues for many *Cajas*, our results are strongly suggestive: we believe that using the *Cajas* as a political sinecure has proven extremely costly to the Spanish financial system.

5 Andalucía: A tale of four *Cajas*

In this section we illustrate some of the issues exposed in the previous sections using as a case study the evolution of the savings banks in Andalucía. The current four *Cajas* are the result of a consolidation and expansion process over the last 50 years. Despite the relatively level playing field for all the institutions, their performance is quite heterogeneous. In order to add some texture to our study, we study how this differential performance relates to the two main elements of our study, corporate governance and human capital differences.

There are currently four main savings banks in Andalucía: Cajasol, Caja de Granada, Cajasur and Unicaja, with a fifth smaller bank *Caja* de Jaen. All of them resulted from different consolidation processes of smaller banks according to the following diagram.

In terms of total deposits, in 1940 the sum of the parts of Cajasol was clearly the dominant player but during the 40s and 50s, and till today Unicaja became the dominant savings bank in Andalucía. The picture with respect to the total amount of credit given is slightly different: the relative share of loans exhibits much more volatility, as loans are more sensitive to economic fluctuations than deposits. Both Cajasol and Cajasur became more loan oriented towards the year 2000.



5.1 Performance

Table 5 shows the evolution of the relative size of deposits, loans and the accounting value of equity with respect to the total of Andalucía during the period 2000-2006. This is a period of great expansion of the financial sector as a whole and the savings banks in Andalucía are no exception. Table 5 Panel A presents this data in relative terms in order to assess the different business strategies used.

Unicaja stands out as the most conservative savings bank of all four during this period, its relative share of deposits falls by 3.2% and its relative size in terms of loans increases by roughly 2%, however, simultaneously, Unicaja has reinforced its solvency levels representing over 40% of the relative size in terms of own equity. *Caja Sol* moderated its previous expansion during the 90s and shows a relatively healthy picture, with a moderate reduction in equity. *Caja Sur*, on the contrary shows signs of poor performance with its loans to equity ratio increasing from 103% to 126% and becoming the largest of all four savings banks. *Caja Granada* shows a very stable picture although its relative level of own equity is also quite low throughout the whole period.

The picture during the current crisis reinforces the trends seen over the last decade. Panel B on Table 5 shows our main variables of interest for the four main savings banks in Andalucía. The two good performers are Unicaja and *Caja Sol*. Unicaja has been the *Caja* that has suffered least from the crisis. The share of loans that are related to real estate is the lowest in the region and it also shows healthy figures in terms of non performing loans. Not surprisingly, it has the highest long term credit rating of all four, which has remained stable during the whole period. *Caja Sol* on the other hand has expanded aggressively during the last two decades and as a result a higher share of its loans belongs to real estate.

Table 5: Recent Evolution Andalusian Cajas

Panel A: Loan and Deposit Shares

	Deposits 2000	Deposits 2006	Loans 2000	Loans 2006	Equity 2000	Equity 2006
Unicaja	34.80%	31.64%	30.05%	32.48%	36.96%	43.09%
Caja Sol	29.44%	31.76%	32.93%	31.84%	29.04%	26.79%
Caja Sur	19.89%	19.63%	20.43%	19.38%	19.71%	15.34%
Caja Granada	15.06%	15.82%	15.77%	15.24%	12.84%	13.64%

Source: Anuario Estadístico de las Cajas de Ahorros, de 2006

Panel B: Loan Composition and Performance

	% Real Estate (06)	% Loans to individuals (06)	% Non Performing (09)	Current Rating	Rating drop
Unicaja	24%	50%	2.9%	AA3	No
Caja Sol	32%	53%	4.5%	A-	No
Caja Sur	28%	40%	7.8%	BB+	0.23
Caja Granada	28%	55%	-	BBB+	1.59

Source: Fitch Ratings Agency; 09 S1 Report at CMNV.

It also has relatively high levels of non performing loans. However the long-term rating is still good and it has not suffered a drop during the period that we study.

While Unicaja and *Caja Sol* show different paths within a good solvency situation, *Caja Sur*, on the contrary, shows signs of being under a lot of stress during the current crisis. It has a high share of real estate loans, and its loans are performing much worse than the ones of its counterparts. Not surprisingly its rating has been downgraded and it is currently just above investment grade. Finally *Caja Granada* shows a mixed profile, it has been a more conservative institution than *Caja Sur* with less growth throughout the last 10 years but suffering more in terms of its rating.

While a small sample of four savings banks cannot be used to make any statistical inference, the case of the savings banks in Andalucía is interesting insofar the size of the four main banks is very similar and they operate under similar institutional and business circumstances. However their performance has been widely different. Overall, Unicaja has been solid and it continues to be the leader of the sector in Andalucía. *Caja Sol* has embarked in an aggressive growth path that has not created so far substantial solvency problems. *Caja Granada* and *Caja Sur* show a much grimmer picture, particularly in the case of *Caja Sur* where solvency problems are quite acute. It is important to understand to what extent formal corporate governance, political influence and human capital issues

Table 6: Understanding Recent Evolution: Potential Explanations

Panel A: Politics, Board

	PSOE/UGT	PP	Other Political
Unicaja	45%	5%	15%
Caja Sol	52.5%	10%	7.5%
Caja Sur	30%	10%	5%
Caja Granada	25%	20%	5%

Panel B: Human Capital and Political Affiliation CEO

	Political Party CEO	Education	Related Experience	Turnover
Unicaja	PSOE	Since 91 PhD in Economics	Yes	1 since 91
Caja Sol	PSOE	Economist, PhD and MBA studies	Yes	1 since founding (06) previous multiple
Caja Sur	Catholic	Last 3, Catholic priests; theologician	No	3 since 97
Caja Granada		Last 3, no training in business and economics	N	4 since 94

Panel C: Compensation at Andalusian Cajas

	Total pay	Per board member	Per billion Business	Front vs. Back
Unicaja	4.6m	231k	94.5k	1.42
Caja Sol	1.7m	45k	39.7k	0.97
Caja Sur	1.8m	90k	65.3k	0.86
Caja Granada	1.1m	55k	49.6	1.33

can be partly responsible for the differences in performance.

5.2 Why this divergence in performance?

Formal and Real Governance. In terms of formal governance all four savings banks are quite similar, Unicaja and *Caja Granada* are the ones with a lower number of board seats formally appointed by political institutions (35%) and a very dispersed representation on the rest of the seats *Caja Sol* has a higher percentage of politically appointed board members 45% and *Caja Sur*. All in all it seems that institutionally the four institutions are not substantially different to each other or to the rest of the savings banks in Spain. Similarly to our results with respect to all the Spanish savings banks there does not seem to be a clear pattern with respect to performance and the composition of the board, both formally and effectively. However the pattern is more consistent when we concentrate on the political affiliation of the president of the savings banks.

Human Capital. In terms of human capital the only savings bank that has

been consistently run by someone with knowledge of finance or economics is Unicaja. Run by since 1991 Braulio Medel who has experience as an entrepreneur and Ph.D. in Economics and some past academic activities. *Caja Sol* is also run since the merger that constituted it as such in 2006 by an economist Antonio Pulido, former academic with a Ph.D. and MBA studies. Other than these two presidents, the recent and current presidents of the different savings banks do not have specific economic training, although most of them had professional experience in other areas such as law, medicine or engineering. The last 3 presidents of *Caja Sur* were all catholic priests formed as theologians. None of the last 3 presidents of *Caja Granada* had any specific formation in economics or business administration.

As for the political connections variables that our analysis above found relevant, a substantial proportion of all the presidents of *Caja Sol* and *Caja Granada* during the past two decades are linked to the regional government either through direct membership to the same party (PSOE) or by having occupied publicly appointed positions in the past. The presidents of *Caja Sur* have, on the contrary been normally linked to the catholic church which is itself linked to the founding body of *Caja Sur*. Finally Unicaja has had a single president for the last 18 years who is not formally linked to any political party; however he had a political position linked to PSOE as deputy minister of economics and treasury.¹⁵

The turnover of CEOs and presidents has also been analyzed as a source of inefficiencies. While too little turnover may be an indication of entrenchment, excess turnover of presidents can also show of lack of continuity and poor governance. In this sense, *Caja Sur* has had 3 different presidents since 1997, *Caja Granada* 4 different presidents since it was founded in 1992. *Caja Sol* has had a single president since it was founded in 2006, although the different savings banks that composed it often exhibited a high turnover of presidents. Finally Unicaja stands out again in this dimension, with a single president since 1971. While it is not possible to extract strong conclusions from such a small sample it seems that stability at the top of the institution may be either one of the driving factors of success or a manifestation of lack of problems.

It'd be of interest to now the level of human capital below the top level in the *Cajas*. Although we cannot access data on the full hierarchies of the different savings banks, we can get a sense of the importance given to human capital by studying how much pay is devoted to top employees. It is easy to see that again Unicaja is the savings bank that devotes more resources to paying its top executives both in absolute terms, in per capita terms and relative to its own resources. It also pays relatively more to the executive board members that deal

¹⁵More precisely he was "Viceconsejero de Economía y Hacienda" between 1984 and 1997.

with strategic issues (Consejo) relative to those that deal with pure governance issues (Comisión de Control). This may give Unicaja an advantage in terms of attracted external professional and talented individuals.

Conclusion. Overall, even though a case study like this cannot be interpreted as conclusive statistical evidence, the big picture of the savings banks in Andalucía gives a pretty consistent image that seems to support the evidence of the rest of the study. Despite the fact that in terms of business conditions all four savings banks have similar common grounds, there is substantial heterogeneity in performance, both historically but more importantly during the recent crisis. Unicaja stands out as the leading institution and *Caja Sol* seems to be on a stable path after completing a relatively successful expansion. On the other end, *Caja Granada* seems to underperform with respect to its peers and *Caja Sur* seems to be experiencing moderate to large solvency problems. With respect to the variables that explain these performance differences, the formal and effective composition of the board seems to be uncorrelated with performance, however the level of political independence and human capital of the presidents of each institution is again positively correlated with performance: the ability and willingness to attract and place skilled workers at the top of a *Caja* is a crucial determinant of its lending performance.

6 Conclusions and Discussion

The main result of our analysis concerns the cost of the lack of human capital of those running a *Caja*. We find (see Table 4) that in total the lack of human capital of those running the *cajas* adds 3 points to its non performing loan ration: having been an elected politician adds .9 points, not having postgraduate education .98 and having no previous experience .93. Since the average non performing loan in our sample is 4.05% (standard deviation of 1.24%) and the average *Caja* loan book is 19800m euro we can calculate the monetary cost of this lack of human capital for an average *Caja*. Specifically, it would suffer on average 1350m euro in non performing loans, rather than 801.9m euro average, that is the lack of human capital would add 556.4m euro of non performing loans. Assuming a recovery rate of .35, this extra bad loans would add 361m euros to the 641m in expected losses. Assuming the obra social gets a payout of 20%, this is an additional of 72m euro loss to the obra social and an additional 289m solvency loss. The implication is obvious: if a retiring politician needs a job, the tax payer and society would be far better off if he were not be chattered around for the rest of a life in luxury.

Running a bank is a hard business. It requires expertise. It is unlikely that those whose previous lives have involved no contact with economics or finance,

either in their studies or in their previous professional lives can understand the issues involved in lending policies, loan provisions and, risk diversification among other key issues. The problem with the *Cajas* is thus not politization, as most have argued in recent debates. Empirically this just does not pan out: the worst offenders in this respect are the three Basque *Cajas*, whose boards are entirely controlled by political parties, and show in fact exemplary performance. But professionalization does clearly suggest itself as the key lesson for the performance heterogeneity among *Cajas*. Having postgraduates education, previous banking experience and no previous political appointments makes a material difference in our analysis to several important aspects of the performance of the *Cajas*. We sincerely hope that future reform efforts, and future appointments, will reflect this hard-won (for the Spanish economy) knowledge.

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