

THE RELATIONSHIP BETWEEN POLITICIZATION AND THE SPANISH SAVINGS BANKS DEFAULT

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Impact statement:

Inexperienced directors with no knowledge in economics or finance were appointed on the boards of Spanish savings banks, generating a poor performance and contributing to their default. This sector has been restructured by transforming these entities into banks to face the new economic environment, to change their governance in order to attract capital more easily; however, this is not enough and more regulation is required. The new banks need to be controlled and managed by depoliticized, independent and professional experts to avoid corporate governance problems. Supervisory systems should be strengthened to guarantee their solvency in the long term.

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ABSTRACT

The politicization of the corporate governance of Spanish savings banks was a key factor to explain their default. This paper focuses on the effect of political influence within the Board of Directors and provides empirical evidence about the factors that have influenced their performance and failure. The study concludes a negative association between the percentage of savings banks' board members appointed by politicians and performance. The findings show that the presence of non-experienced members on the boards weakened savings banks.

Keywords: banking, corporate governance, politicians, Spain

JEL classification: G.21, G.30, H.10, L.30

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1. Introduction.

The Spanish financial sector has undergone a conversion process of its commercial banking in which the number of institutions decreased from 50 in 2009 to 11 in 2019. In this process, Spanish savings banks have proven to be the weakest part of the national financial system (Parejo *et al.*, 2011). The vast majority of the 45 savings banks that existed ten years ago have been nationalized or acquired by commercial banks (losing importance in the long term, as in other European countries): only 2 small savings banks and 4 groups remain.

Spanish Banking institutions were greatly affected by the 2008 crisis. This was manifest in a rise in impaired assets, including both non-performing loans and real estate foreclosures, and in a significant reduction in profitability, which even turned negative in 2012 (Bank of Spain, 2018). Despite the volume of non-performing loans has diminished significantly from 2013, the Spanish banking industry continues to have deteriorated balance sheets and a high credit risk. Compared with the banking systems in other European countries, Spain has accumulated a high volume of non-performing assets during the crisis and the non-performing assets ratio in Spain is still at a high level from a historical perspective (Bank of Spain, 2018). Although forecasts indicate that non-performing assets will continue on a path of correction in the coming years, boosted by economic growth, in the absence of an active control of credit risk, the deterioration of bank balance sheets cannot be resolved. The Bank of Spain asserted that there were errors of appreciation about how to correct the imbalances of the real estate bubble in bank accounts, as the Bank of Spain thought that they could be corrected gradually. These expectations were not realistic and the correction was sudden with unforeseen consequences (Bank of Spain, 2017).

For decades, regional political parties tried to obtain a greater participation on the corporate governance of savings banks in economic development (García-Cestona and Surroca, 2008) by using them as financial tools to compensate for the lack of interest of the private sector in financing regional projects because of their financial risk. The role of the Bank of Spain on the corporate governance of savings banks has been determinant. As de Andrés *et al.* (2018) assert, the Governor of this entity admitted in 2017 that the regulation and supervision of the Bank of Spain did not act as a control mechanism during the financial crisis due to its own shortcomings, political and institutional constraints and information deficiencies. The Governor recognized that the neither so-called institutional protection schemes (integration process), nor the issue of participative quotas (innovative capital instrument) was enough to deal with the solvency and governance problems of savings banks. In sum, conflicts of interest between regional government and national government were not solved by the regulator. So, the corporate governance of Spanish savings banks may be an explanatory factor of the current financial situation of this industry.

Previous empirical research has mainly analyzed the productivity of Spanish savings banks (Grifell-Tatje and Lovell 1996; Illueca *et al.*, 2009; Buch *et al.*, 2011), costs (Maudos *et al.*, 2002; Prior 2003) and efficiency (Tortosa-Ausina, 2002; Carbo *et al.*, 2003; San-Jose *et al.*, 2014). This paper focuses on the effect of political influence

within the Board of Directors of these organizations and provides empirical evidence about the factors that have influenced the long term performance of Spanish savings banks and their failure. The political presence in the corporate governance of Spanish savings banks is probably unique in the world and has led to poor performance. The concentration of power in the hands of regional and municipal officials makes the Spanish financial crisis different to those of other countries.

The article is structured as follows. The next section describes the theoretical background related to the context of the corporate governance of Spanish savings banks and hypothesis. In the third section the methodology applied in the study is detailed and the data and variables used in the analysis are described. Section 4 presents the empirical results, while Section 5 contains the discussion and Section 6 the conclusions.

2. Background and hypothesis

In general, the ownership structure of Spanish commercial banks presents high levels of ownership concentration except for the two biggest banks (Santander, BBVA) whose main shareholder owns less than 5% of the capital (Crespí and Pascual, 2009). The most common type of director is the independent director¹ (44%); executive directors account for 20% of the boards and the proportion of proprietary directors is 26% (Stein *et al.*, 2012). In Spanish banks, the average size of the boards is close to the upper limit indicated by the corporate governance code (15 members). In these entities, the remuneration of directors is higher than those of Spanish companies operating in other sectors (Crespí and Pascual, 2009) and the salary of the chairman and two senior managers account for 80% of the total directors' remuneration (Stein *et al.*, 2012).

In savings banks, the corporate governance was an especially interesting case of lack of equity instruments and so, all directors were formally 'independent'. However, the Spanish legal framework allowed political parties to appoint the members of the Board of Directors of savings banks. Forty per cent of the members of this board, on average, were appointed by political parties. The other board members were representatives of the employees, depositors and original founder entities (civil and catholic associations) of the savings banks. However, these non-political board members did not influence the savings banks' performance because of their fragmented participation on the board.

The voting distribution of the savings banks, established by the legislator, had an effect on the goals to be attained. Conflicting interests appeared on the boards of the savings banks because they were made up of different groups such as public authorities, depositors, trade unions, employees and founding entities (Tortosa-Ausina *et al.*, 2008; Ysa *et al.*, 2012). In Spanish savings banks, corporate governance codes did not work as well as in commercial banks (Crespi *et al.*, 2004). As these entities did not operate under capital market discipline, they showed shortages in competitiveness and efficiency (Serra Ramoneda, 2012; Lu, 2018).

Although government ownership of banks facilitates the financing of projects that could promote national economic development and that private banks are unable to finance (Sapienza, 2004; Dinç, 2005), for La Porta *et al.* (2002), governments acquire control of banking entities to provide employment, subsidies and other benefits to their supporters

¹ An independent director is defined as a member of the board who does not own shares in the company, and is not an employee of or a related party with the company.

who, in exchange, return these favors in the form of votes and political contributions. Notwithstanding, Spanish savings banks were not a case of governmental ownership, but a case of lack of equity instruments, which avoided the discipline of the corporate control market since these entities could not be acquired by other entities (De Andrés *et al.*, 2018) and, hence, had a lower transparency. The supervision of savings banks was carried out by internal control mechanisms and it was the boards that had strong power to monitor and advise the managers.

Spanish savings banks were also affected by other factors, such as the lack of professionalism of board members (Fernández Ordoñez, 2013). Politicians appointed non-experienced economists to consolidate their power and satisfy regional interests. Savings banks whose chairperson lacked experience were less profitable than savings banks managed with professionalism (Cuñat and Garicano, 2010, p.351; García-Meca and Sánchez-Ballesta, 2014; Ibáñez-Hernandez *et al.*, 2019)².

The main priority for regional politicians, which participated in the control of these entities, was to fund regional projects, sometimes high-risk, non-profitable investments, in which the private sector was not interested, rather than profitable economic projects (Bachiller and Garcia-Lacalle, 2018). Goals such as regional development and universal financial services received more attention when public administrations held a majority of seats on the governing bodies, whereas the attainment of economic growth and higher profits were the favored goals when insiders (managers and workers) held control (García-Cestona and Surroca, 2008). Politicians used savings banks as a financial mechanism when the regional public budgets were not enough to fund investments or when they were interested in funding projects outside of public budgets. Savings banks with more weight of public administration in their management gave more credit to public entities.

The conflicting interest derived from the lack of property rights and the political influence within savings banks generated high credit risk. The influence of politicians is defined in this study as the percentage of politically-appointed board members. According to La Porta *et al.* (2002), banking entities with more governmental participation generated more risk as investments responded to political objectives rather than to economic goals. Literature asserts that state-owned banks financed politically attractive projects rather than economically efficient ones (Shleifer and Vishny, 1998; Barth *et al.*, 2004).

Taking into account all the above, we posit that:

H1: Influence of politicians has led to poor performance in the Spanish savings bank sector.

Control variables

Coverage ratio, efficiency and size are typical financial industry variables that also explain the savings banks' performance.

- The *coverage ratio* is the intermediation margin to operating costs ratio. This variable indicates the ability of banking entities to cover their cost with the spread between

² The national legislation on financial entities (Law 14/2013) establishes regulation about the corporate governance of these entities in order to solve these problems.

interest charged on loans and interest paid on deposits. The intermediation margin is indicative of the traditional business of the banking sector: granting credit and capturing deposits. A higher intermediation margin reflects the attempts of savings banks to run a traditional business and to gain market share to avoid default. Therefore, it is positively correlated with the performance of the entity (Pina *et al.*, 2016).

The intermediation margin has been decreased due to the reduction of interbank interest rates with the convergence of the Spanish economy towards the European Monetary Union (Crespí *et al.*, 2004). Moreover, expansion of branches and the increasing competition in the market makes it more difficult to obtain high margins. As for the operating expenditures, if the entity is able to reduce these expenses and, in consequence, increase this ratio, the performance will be higher.

The coverage ratio helps to determine the company's ability to survive in the long run. Therefore, we consider that the coverage ratio will be positively related to performance.

This ratio is similar to the traditional efficiency ratio in Spanish commercial banks. Notwithstanding, given that savings banks are non-profit oriented entities, this ratio needs to be complemented with an additional measure of efficiency provided by the following control variable.

- *Efficiency*. Savings banks were foundations with two main objectives: commercial and non-profit. As non-profit organizations, savings banks did not pay dividends to shareholders and the relationship principal-agent was not as clear as in commercial banks. An important portion of their benefits were assigned to social programs. As commercial financial entities, they competed with the other banks in the financial market but they were subjected to less pressure. So, the traditional assessment methods to measure efficiency in the banking sector are not completely adequate for these firms.

Non-efficient entities obtain lower market share and take greater risk with a consequent decrease in their performance. In line with this, Hermalin and Wallace (1994) find that inefficient financial entities are, indeed, more likely to fail. Therefore, we consider that efficiency is positively related to performance in the Spanish savings banks sector.

To assess the efficiency of savings banks, the relationship between the main inputs (number of branches and number of employees) and outputs (deposits and credits) of this industry has been analyzed.

- *Size*. The size of banking entities is *per se* a factor that explains differences in performance (Maudos *et al.*, 2002). In the last five years, a wave of consolidation has transformed the Spanish banking industry. The financial crisis has intensified this process and acquisitions have been considered a means to prevent bank failures because banking entities that have made wrong decisions and/or managed their resources inefficiently obtained lower performance and disappeared (Crespí *et al.*, 2004). However, the literature is contradictory about the possible benefits derived from bigger entities. Grifell-Tatje and Lovell (1996) and Lozano-Vivas (1997) find no productivity gains and profits in merger periods. By contrast, the study of Tortosa-Ausina *et al.* (2008) show that mergers led to improvements in production.

In general, a bigger company is considered more solvent because it has more assets with which to meet its liabilities. In consequence, we test for the positive relationship between size and performance in the Spanish savings banks.

3. Empirical Analysis

This study is focused on all the savings banks operating in Spain in 2009, that is, 46 entities. Data is collected from the Spanish Savings Banks Association (CECA) and annual reports from savings banks for 2009. In order to analyse whether the relationship between board members appointed by politicians and performance was the same in previous years, analysis is carried out for the years 2006, 2007 and 2008³.

In this study, *performance* is defined in terms of return on assets (ROA) and return on investment (ROI) ratios. Hodge (2000) shows that only a few performance indicators are common across studies and that, among these, ROA is the most frequently used. The dependent variable, ROA, is measured as net income divided by the book value of total assets as disclosed in the annual report. We have also applied ROI to confirm the robustness of the results. The variable ROI is measured as net income/trading portfolio⁴.

The independent variables have been measured as follows:

- *Influence of politicians* is expressed in logarithms of the percentage of politically-appointed members on the Board of Directors to avoid the effect of outliers and skewness in its distribution. We have determined whether each member of the board for the 46 savings banks was appointed by the regional government. First, this information has been obtained by searching for the name of each member of the board of directors in the Statistical Yearbook of the Spanish Savings Banks Association. Second, we searched for their names on the websites of political parties, trade unions, and other sites in order to determine whether they belonged to any political party or had a relationship with the regional government.

Public information on the composition of the other governing bodies is available, but we focus on this governing body because it takes the strategic and executive decisions and because the political influence in the General Assembly and the Steering Committee is the same as that of the Board of Directors.

- The *coverage ratio* corresponds to the formula:

$$Coverage = \frac{Intermediation\ Margin}{Total\ Operating\ Cost}$$

This ratio provides evidence for the company's ability to meet its total operating cost from the normal intermediation margin and determines its ability to survive in the long run (Prior, 2003).

³ Previous data are not available. After 2010, the 46 Spanish savings banks merged into 5 banks (Bankia, Caixa, Ibercaja, Unicaja, Kutxabank).

⁴ 'Net income' is defined as the difference between the company's total revenues and total expenses for a given period of time. Also known as net earnings, after-tax income, or profit, net income is the 'bottom line' of the formal accounting report known as the income statement. The concept 'trading portfolio' includes deposits at credit institutions, customer loans and debt securities.

- Along with the coverage ratio, the DEA (Data Envelopment Analysis) model⁵ has been used to test the influence of *efficiency* on the performance of Spanish savings banks. Savings banks are non-profit organizations and, as such, they are under less pressure to obtain profits than commercial banks. So, the traditional assessment methods (profitability indicators) are not adequate for measuring the performance of these firms. The coefficients of efficiency obtained from this model show the theoretical quantity of inputs that could be reduced without affecting output level. When the coefficient is 1.00, the DMU is comparatively efficient, i.e. the DMU optimizes its resources to obtain the output. The number of branches and the number of employees have been included as inputs and deposits and credits as outputs. The coefficients of technical efficiency for each savings bank are included in Appendix 1.

- The variable *Size* is the total assets of the Spanish savings banks (in logarithms).

Two multivariate regressions have been run to analyze the performance, taking the ROA and ROI as dependent variables and influence of politicians, efficiency, coverage ratio and size as independent variables. The regressions use different measures of performance (ROA, ROI) to increase the robustness of the results.

$ROA_i = \alpha_1 + \alpha_2 \text{ Influence of politicians}_i + \alpha_3 \text{ Coverage Ratio}_i + \alpha_4 \text{ Efficiency}_i + \alpha_5 \text{ Size}_i + \varepsilon_i$
[Model 1]

$ROI_i = \alpha_1 + \alpha_2 \text{ Influence of politicians}_i + \alpha_3 \text{ Coverage Ratio}_i + \alpha_4 \text{ Efficiency}_i + \alpha_5 \text{ Size}_i + \varepsilon_i$
[Model 2]

4. Analysis of results

Table 1 shows the descriptive statistics for the variables used in the study. It reflects the evolution of accounting figures from 2006 to 2009, the year of the savings banks default.

[Insert Table 1 about here]

As can be seen in the mean and standard deviation, during 2006 and 2007, savings banks did not record the losses related to their credit risk, showing high ROIs and ROAs. In 2008, savings banks started the partial recognition of credit risk losses in profit or loss and the ROIs and ROAs fell dramatically (from 0.8 to 0.2), although the savings banks in worse conditions did not fully recognize their credit losses. Only in 2009, when all savings banks fully recognized their credit risk losses, did some ROIs become negative with a high standard deviation and big differences between the minimum and maximum.

The results of the regressions are shown in Table 2⁶. Model 1 and model 2 have been replicated without a constant and results obtained have been similar.

⁵ See Charnes, Cooper & Rhodes (1978) and Banker (1984).

⁶ The R^2 and F values indicate that there is no misspecification. According to Belsley *et al.* (1980), condition indexes indicate moderate to strong multicollinearity when they take values of 30 to 100. Another indicator of multicollinearity is the variance inflation factor (VIF), which, according to Hair *et al.* (1995), when it is bigger than 10, there is severe multicollinearity. As can be seen in Table 3, the

[Insert Table 2 about here]

In Model 1, ROA is the dependent variable. In this model, the variable *Influence of Politicians* has a negative sign, as expected. As for the control variables, the *coverage ratio* has a positive effect on performance, as predicted. The variable *efficiency* is not significant in the regression but presents the expected sign. The *size* variable is significant and has a positive relationship with the performance of savings banks, as expected. In Model 2, ROI is the dependent variable. The results are the same as those of Model 1: a negative relationship between performance and *Influence of Politicians* and a positive one between performance and both the *coverage ratio* and *size*. *Efficiency* is again non-significant.

The joint analysis of the two models shows that the coefficient for *Influence of Politicians* is negative and significant, so savings banks with a higher political influence obtain a lower performance. The particular corporate governance system of savings banks had adverse effects on their performance. In entities controlled by politicians, economic reasons were not their main concern when deciding to fund investment projects. The coefficient of the *coverage ratio* confirms a positive relationship between this variable and performance. This means that the traditional business of the banking sector (granting credit and capturing deposits) guarantees the performance of the banking sector and, as a result, a greater ability to survive in the long run. The coefficient for *efficiency* is positive, as expected, but non-significant. The variable *size* is positive and significant. This means that the bigger savings banks obtain a better performance. These findings show that Model 2 confirms the results of Model 1 and the robustness of the measures of performance used.

The results of the regressions for 2006, 2007 and 2008 are shown in Table 3.

As a consequence of the incomplete recognition of credit risk losses from 2006 to 2008, the behavior of the variables is not always consistent within this period. For these three years, the coefficient for *Influence of Politicians* is non-significant, except for Model 2 in 2006 which is significant and negative. Our results show that composition of the boards in this period is not a determinant factor of the profitability, which is coincident with García-Meca and Sánchez-Ballesta (2014) and Martín-Oliver *et al.*, (2017). One reason may be that the voting rights of governments are often fragmented by different parties, which hampers the coordination and decreases the potential influence of this stakeholder group (Illueca *et al.* 2012). Moreover, Martín-Oliver *et al.* (2017) consider that political influence was not the problem, but the migration to high market-debt business models with the expectation of increasing the compensation of the management team to emulate shareholders of commercial banks. Another reason is that, in these years, savings banks did not make provisions for their assets due to the lack of risk control and, therefore, they did not account for write-off assets. So, the profit or loss did not reflect their bad performance. These results confirm that politicians did not exert a positive influence on savings banks in Spain in these years either.

condition indexes do not indicate multicollinearity problems. The VIF coefficients are below 10 for the sample, which confirms the absence of multicollinearity.

With respect to control variables, the coefficient for the *coverage ratio* confirms a positive relationship between this variable and performance. This result is coincident with result for 2009. The coefficient for *efficiency* is positive in 2006 for Model 2, as expected, but not significant for the other years and models. The coefficient for *size* is positive in 2007 (Model 2) and non-significant in 2008 and in Model 1. The results of the control variables do not contradict the results of 2009.

[Insert Table 3 about here]

5. Discussion

The influence of politicians on Spanish savings banks was negative. Before the financial crisis, the negative consequences of the political influence detected for 2009 were mitigated by an inappropriate measurement and recognition of risks. This is in line with Illueca *et al.* (2012), who assert that, in the period of expansion, political influence created incentives to delay the reporting of loan loss provisions and write-offs to hide potentially negative effects from the rapid expansion. Our results are consistent with those obtained by Shleifer and Vishny (1998), La Porta *et al.* (2002), Barth *et al.*, (2004) and Carretta *et al.* (2012) who conclude that the influence of politicians on banking entities leads to bad performance. Politically attractive projects were the main concern of regional governments, which did not respond to economic criteria and generated higher financial risks (García-Marco and Robles-Fernández, 2008), in order to obtain more votes and be reelected. Huge investments in public projects, such as airports and high speed train stations with no passengers, congress buildings with no activity and motorways with no traffic, along with mortgage loans to citizens, generated the bankruptcy of the savings banks sector and the banking rescue process in Spain (Pina *et al.*, 2016). Inexperienced directors with no knowledge in economics or finance were appointed on the boards of these Spanish entities, contributing to their default. This sector has been restructured by transforming these entities into banks to face the new economic environment, to change their governance in order to remove the politicians and to attract capital more easily.

The relationship between the coverage ratio and performance (ROA, ROI) is direct, showing that the traditional banking business (granting credit and capturing deposits) underpins future performance. When margins cover the expenditures of savings banks, their insolvency risk is reduced and they obtain a better performance.

Efficiency does not explain variations in performance. Although consolidation process has reduced the number of employees and branches to obtain a higher operational efficiency (Konstantopoulos *et al.*, 2009; Martín *et al.*, 2018), our results do not indicate that these two concepts (inputs in our efficiency model) are significantly related to the profitability of savings banks. This is possible because entities that do not operate on an optimum scale can be profitable, for instance, when they offer specialized treatment for specific market segments. So, the future performance of Spanish banking entities will depend on their capacity to promote a profitable business and select the best investment opportunities. The strong contraction in the main activity of the financial institutions, obtaining deposits and granting credits (outputs), has led to a decrease in efficiency. The current macroeconomic context, in particular the low interest rates and high default

rates, has affected the profitability of the banking business. The lack of relationship between efficiency and profitability means that the internal organization of the production is not a source of failure. The source of failure is the increased risk generated by their particular corporate governance, as hypothesized. Although the increased competition brought about important cost savings and, hence, gains in efficiency, savings banks did not take advantage of this context as a consequence of the politicization of their corporate governance.

Performance is directly related to the size of savings banks. This result is coincident with those of Cuesta and Orea (2002) and Carbo *et al.* (2003), who assert that merged entities are more efficient and that the bigger the savings bank is, the higher the scale of economies is, thus improving their performance.

The overall consideration of the results obtained by the sample explains how the Spanish savings banks were brought to their current situation by their unusual corporate governance with a higher influence of politicians on their boards. It would be necessary to promote the audit function in order to improve the governance process and promote competition to improve the performance (Arcas and Bachiller, 2010) and check whether the Spanish financial system has recovered its efficiency or not.

6. Conclusions

The study shows that the relationship between the influence of politicians and the performance of Spanish savings banks is negative. The findings show that political influence on these entities generates a bad performance. These results confirm previous studies in which banking entities controlled by politicians obtain a poor performance, as politicians seek to finance projects to obtain votes and political yields rather than profitable results.

The coverage ratio has a positive relationship with the performance, which shows that the traditional banking business is the best guarantee of future performance for Spanish banks. Efficiency or the internal organization of the production is not a source of their failure. The size of savings banks is also positively related to performance. In the last years, a wave of consolidation has transformed the Spanish banking industry. The financial crisis has intensified this process and acquisitions have been considered a means to prevent bank failures and strengthen the banking sector.

The commercial activity of these entities has been now converted into banks. However, this is not enough. The new banks need to be controlled and managed by independent and professional experts, totally depoliticizing their supervision, to avoid the above mentioned corporate governance problems. In sum, the political presence in their corporate governance is behind their default. Therefore, we consider that supervisory systems should be strengthened to ensure that experienced members are appointed in the boards of banking entities and that their solvency is guaranteed in the long term.

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Table 1: Descriptive statistics of variables

| 2009 | | | | |
|--------------------------------------|--------|--------------------|---------|---------|
| Variable | Mean | Standard deviation | Minimum | Maximun |
| ROA (%) | 0.002 | 0.006 | -0.033 | 0.011 |
| ROI (%) | 0.003 | 0.008 | -0.039 | 0.015 |
| INFLUENCE OF POLITICIANS(LOGARITHM) | -1.180 | 0.622 | -2.944 | -0.305 |
| COVERAGE RATIO | 1.076 | 0.364 | 0.393 | 1.883 |
| EFFICIENCY SCORE | 0.780 | 0.134 | 0.358 | 1.000 |
| SIZE (LOGARITHM) | 16.401 | 1.262 | 12.754 | 19.354 |
| 2008 | | | | |
| Variable | Mean | Standard deviation | Minimum | Maximun |
| ROA (%) | 0.002 | 0.001 | 0.000 | 0.005 |
| ROI (%) | 0.002 | 0.001 | 0.000 | 0.006 |
| INFLUENCE OF POLITICIANS (LOGARITHM) | -1.183 | 0.627 | -2.944 | -0.305 |
| COVERAGE RATIO | 1.326 | 0.290 | 0.494 | 2.030 |
| EFFICIENCY SCORE | 0.717 | 0.171 | 0.400 | 1.000 |
| SIZE (LOGARITHM) | 16.339 | 1.294 | 12.688 | 19.354 |
| 2007 | | | | |
| Variable | Mean | Standard deviation | Minimum | Maximun |
| ROA (%) | 0.007 | 0.003 | 0.003 | 0.018 |
| ROI (%) | 0.009 | 0.003 | 0.004 | 0.024 |
| INFLUENCE OF POLITICIANS (LOGARITHM) | -1.183 | 0.627 | -2.944 | -0.305 |
| COVERAGE RATIO | 1.303 | 0.250 | 0.419 | 1.870 |
| EFFICIENCY SCORE | 0.722 | 0.192 | 0.040 | 1.000 |
| SIZE (LOGARITHM) | 16.335 | 1.295 | 12.651 | 19.331 |
| 2006 | | | | |
| Variable | Mean | Standard deviation | Minimum | Maximun |
| ROA (%) | 0.008 | 0.003 | 0.004 | 0.023 |
| ROI (%) | 0.009 | 0.003 | 0.004 | 0.020 |
| INFLUENCE OF POLITICIANS (LOGARITHM) | -1.183 | 0.627 | -2.944 | -0.305 |
| COVERAGE RATIO | 1.246 | 0.246 | 0.314 | 1.726 |
| EFFICIENCY SCORE | 0.691 | 0.188 | 0.250 | 1.000 |
| SIZE (LOGARITHM) | 16.154 | 1.268 | 12.610 | 19.158 |

Table 2: Multivariate regressions results

| | Model 1 (Dependent variable ROA) | Model 2 (Dependent variable ROI) |
|--------------------------|--|--|
| CONSTANT | -0.005** | -0.006** |
| INFLUENCE OF POLITICIANS | -0.421*** | -0.385*** |
| COVERAGE RATIO | 0.281** | 0.286** |
| EFFICIENCY SCORE | 0.033 | 0.282 |
| SIZE | 0.336*** | 0.168*** |
| Condition index | 1.000 | 1.000 |
| | 4.251 | 4.742 |
| | 6.889 | 7.640 |
| | 9.381 | 9.802 |
| R ² | 0.377 | 0.309 |
| F | 5.892 | 5.808 |

*** p < 1%; ** p < 5%

Estimated equations:

$$ROA_i = \alpha_1 + \alpha_2 \text{ Influence of politicians}_i + \alpha_3 \text{ Coverage Ratio}_i + \alpha_4 \text{ Efficiency}_i + \alpha_5 \text{ Size}_i + \varepsilon_i$$

[Model 1]

$$ROI_i = \alpha_1 + \alpha_2 \text{ Influence of politicians}_i + \alpha_3 \text{ Coverage Ratio}_i + \alpha_4 \text{ Efficiency}_i + \alpha_5 \text{ Size}_i + \varepsilon_i$$

[Model 2]

Table 3: Multivariate regressions results (2006, 2007 and 2008)

| | 2006 | | 2007 | | 2008 | |
|--------------------------|----------|-----------|----------|---------|----------|----------|
| | Model 1 | Model 2 | Model 1 | Model 2 | Model 1 | Model 2 |
| CONSTANT | -0.001** | -0.006 | 0.001 | -0.001 | -0.001 | -0.002 |
| INFLUENCE OF POLITICIANS | 0.150 | -0.116*** | 0.122 | 0.117 | 0.086 | 0.081 |
| COVERAGE RATIO | 0.476*** | 0.431 | 0.431*** | 0.338 | 0.557*** | 0.528*** |
| EFFICIENCY SCORE | 0.038 | 0.141*** | -0.063 | -0.009 | -0.330 | -0.344 |
| SIZE | 0.136 | 0.161 | 0.070 | 0.091** | 0.273 | 0.275 |
| Condition index | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3.272 | 2.780 | 4.719 | 5.343 | 3.462 | 3.862 |
| | 5.303 | 6.546 | 7.647 | 8.596 | 5.611 | 6.223 |
| | 7.221 | 7.423 | 9.413 | 9.776 | 7.641 | 7.984 |
| R ² | 0.285 | 0.286 | 0.222 | 0.146 | 0.557 | 0.521 |
| F | 3.979 | 4.008 | 2.758 | 2.712 | 12.559 | 10.895 |

Model 1: Dependent variable: ROA

Model 1: Dependent variable: ROI

*** p < 1%; ** p < 5%

Estimated equations:

$$ROA_i = \alpha_1 + \alpha_2 \text{ Influence of politicians}_i + \alpha_3 \text{ Coverage Ratio}_i + \alpha_4 \text{ Efficiency}_i + \alpha_5 \text{ Size}_i + \varepsilon_i \text{ [Model 1]}$$

$$ROI_i = \alpha_1 + \alpha_2 \text{ Influence of politicians}_i + \alpha_3 \text{ Coverage Ratio}_i + \alpha_4 \text{ Efficiency}_i + \alpha_5 \text{ Size}_i + \varepsilon_i \text{ [Model 2]}$$