QUALITY OF GOVERNANCE AND THE CONSTRUCTION OF GOVERNANCE INDICES: EVIDENCE FROM SPAIN

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Abstract

Corporate governance is a set of mechanisms relevant to economic efficiency since it can minimize agency problems. The question is to determine how governance and firm performance interact. Recent research shows that firm-level corporate governance mechanisms are more important in countries with low investor protection, suggesting that firms can partially compensate for ineffective legal environments. Within this context, the objective of this paper is to construct a robust proxy for quality of corporate governance for the Spanish public companies. Thus, after providing an extensive literature review on the field of corporate governance and its interaction with firm performance, we construct a governance index (GOV-I) for a sample of 97 Spanish non-financial public companies. Finally, we assess the determinants of governance in the case of Spain. The results show a significant relationship between governance and performance, future growth opportunities and size, demonstrating that Spanish firms adopt better standards of governance to compensate for the low level of investor protection holding in the country.

Keywords: corporate governance, governance index (GOV-I), firm performance, investor protection.

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1. Introduction

In a capitalist economy, financing is fundamental to the viability of companies and to the persistence of the capitalism itself. The availability of funds depends on the efficient allocation of resources by the economic agents from financial markets to productive investments, e.g. for the creation of new ventures or to finance the growth process of established companies. An efficient allocation depends on the investors expected return, but also, on the investors belief that the firm will be managed in order to maximize the investment and that the cash flows promised in exchange for the investment will effectively be returned. The economic viability of investment projects can be assessed through capital budgeting techniques and risk-return trade-off analysis for asset allocation decisions. Nevertheless, investors trust depends on a broad set of factors as the legal, institutional and regulatory environment that guarantees the investor protection. In this sense, corporate governance surges to mitigate the agency problems derived from the relationship between principals and agents.

Shleifer and Vishny (1997) define corporate governance as a set of mechanisms relevant to economic efficiency due to its influence over the decision of investors to provide finance, debt or equity, to the firm. The purpose of a governance structure is to assure a significant flow of capital to the financing of firms. The separation between ownership and control, as described by Berle and Means (1932), aggravated by the problem of information asymmetry between managers and providers of capital, can lead to the expropriation of the capital suppliers' wealth. An efficient governance structure should be able to guarantee that the agent will undertake the optimal level of investment and minimize the amount of rent seeking behavior. In the presence of agency problems, it is necessary a mechanism that is able to govern the way in which decisions will be taken in the future in face of an event that was not contemplated in the contract established between agent and principal, as described by Hart (1995, p.679) "(…) governance structure matters when some actions have to be decided in the future that have not been specified in an initial contract: governance structure provides a way for deciding these actions".

A variety of governance mechanisms can be used in order to design efficient governance structures, for instance, the organization of a board of directors, the ownership structure and control, stock options and other incentives programs to management and employees, the capital structure, the market competition, the product competition, the presence of an active market for corporate control, among others.

Another reason why corporate governance is relevant to economic growth is related with its possible impact on the performance of the companies. The basic idea is that in a population of companies, some can be distinguished as "companies with good governance". These firms would become more attractive to investors, *ceteris paribus*, increasing their access to capital. As a result of such increment in the

availability of credit, the cost of capital of these companies would be reduced, both the cost of debt and the cost of equity, which implies that companies with good governance should experience a reduction in their weighted average cost of capital (WACC). As a consequence of such reduction in the cost of capital, there would be an increment in the market value of these companies[10]. Besides, the reduction in the required rate of return allows the firm to accept a greater number of investment projects which could increase its competitiveness.

In a broad sense, research on corporate governance is justified by its contribution to the increase in the access to capital and, consequently, to the reduction of the cost of capital in a given economic system. As stated by Shleifer and Vishny (1997), the suppliers of finance use corporate governance structures to ensure that they will get a return on their investment. Moreover, according to Rajan and Zingales (2004, p.51) there are three obstacles in the way of broadening access to finance: (1) the degree to which risk is concentrated (in a developed system the risk is widely distributed and allocated to the players that can best hold it, which reduces the risk premium demanded by investors); (2) the limited information financiers or investors have about borrowers and their prospects; and, (3) the possibility that borrowers may not act in the best interest of the financiers. Research on corporate governance can reduce the third problem by analyzing and defining the mechanisms that assure that firms (managers) will use the funds in the best interest of the investors. There are some firm characteristics that are associated with the governance of the public companies, the so-called internal and external mechanisms of governance. Ownership concentration and board structure are pointed to be the primary internal mechanisms, while an active market for corporate control is the main external mechanism. These mechanisms are alleged to work together "in a system to affect the governance of the firms" (Cremers and Nair, 2005). In this paper we try to provide some empirical evidence of how these mechanisms interact within the Spanish reality. For reaching this objective we ask the following question: Which observable factors make companies adopt different levels of governance under the same contracting environment? In order to proxy quality of governance, and following a new trend in governance studies, we construct a governance index for the Spanish public companies, namely GOV-I.

The paper is organized as follows. Part 2 states the problem. Part 3 presents the theoretical framework and offers a revision of the extant literature. In Part 4 there is a description of the research methodology, data and design. Part 5 presents the empirical results. In Part 6, WE discuss the results and conclude the paper.

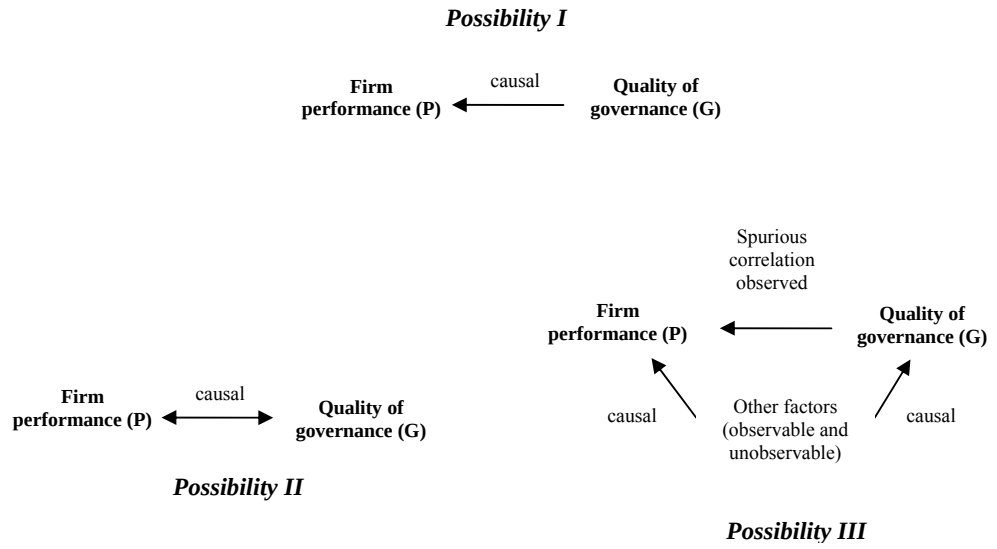
2. Problem Statement and Objectives

The theoretical discussion about corporate governance is based on two hypotheses, firstly that governance mechanisms influence the performance of the firms, and, secondly that firm performance also influences the governance system adopted by the firms. Essentially, the basic issue is to detect whether the performance is determined by internal or external mechanisms of governance. Gillan (2006, p.385) divide the internal mechanisms into 5 categories: (1) the board of directors; (2) managerial incentives; (3) capital structure, (4) bylaw and charter provisions (antitakeover measures); and (5) internal control systems. Similarly, the external mechanisms of governance are also divided into 5 categories: (1) law and regulation; (2) the markets (capital markets, market for corporate control, labor markets, and product markets); (3) the providers of capital market information (credit, equity, and governance analysts); (4) accounting, financial and legal services from parties external to the firm (auditing, insurance, and investment banks); and, (5) private sources of external oversight (media and external lawsuits).

Hitherto, there is still no conclusive empirical evidence in the literature about whether and how governance mechanisms influence the performance of the firms; and, about how governance mechanisms interact (in a complementary or substitute way) (Bøhren and Ødegaard, 2003). According to Chi (2005), there are three possible causal relationships between quality of governance and firm performance (or market value proxy by Tobin's *q*), as illustrated by Figure 1. The first possibility is that there is a direct causal relationship with governance enhancing firm performance. In the second possibility, causality runs in both ways and, finally, the third possibility is that governance and performance are not directly related, but they are spuriously connected through other variables (Chi, 2005 p.67). Most studies analyze exclusively the possible influence of specific governance mechanisms on specific corporate performance variables. In these studies, governance mechanisms are treated as independent variables and performance measures as dependent variables. In this sense, governance mechanisms are considered and treated as exogenous variables with no relation with other governance mechanisms or other firm's characteristics. Himmelberg et al. (1999), however, argue that the ownership structure of the firm may be endogenously determined by the firm's contracting environment, which differs across firms in observable and unobservable ways. For instance, if the scope for perquisite consumption is low in a firm, then a low level of management ownership may be the optimal incentive contract.

[10] The logic of such increment in the value of the firm is based on the fundamentals of capital budgeting. The value of a company is calculated discounting its expected free cash flows by the weighted average cost of capital (WACC).

Figure 1. Three Possible Causal Relationships between Governance and Performance



Source: Adapted from Chi (2005, p.68).

The endogeneity of management ownership has also been noted by Jensen and Warner (1988, p.13): "A caveat to the alignment/entrenchment interpretation of the cross-sectional evidence, however, is that it treats ownership as exogenous, and does not address the issue of what determines ownership concentration for a given firm or why concentration would not be chosen to maximize firm value. Managers and shareholders have incentives to avoid inside ownership stakes in the range where their interests are not aligned, although managerial wealth constraints and benefits from entrenchment could make such holdings efficient for managers."

Within this context, the paper aims to assess the possible factors that make companies adopt different levels of governance under the same level of investor protection (legal, institutional and regulatory environment), namely in the context were the Spanish public companies operate. To proxy quality of governance, a governance index is specially constructed. For the construction of the index, the approach to be used is the one developed by Gompers Ishii and Metrick (2003, hereafter GIM) and strengthened by Brown and Caylor (2004), but departing from the determinants of governance detected by Klapper and Love (2004).

2.1. Determinants of the Quality of Corporate Governance

First of all, it is preemptive to define quality of corporate governance. Durnev and Kim (2005, p.1463) define the quality of governance as $(1 - d)$, where d is the proportion of firm value diverted for private gains. Thus, a high level of d implies poor governance practices, where d is broadly defined to include a wide range of value-decreasing activities from what Jensen and Meckling (1976) define as excessive evasion and corporate benefits to direct stealing of tangible and intangible corporate resources. This definition of the quality of governance captures various governance and managerial practices in place that may or may not be legally compulsory.

Recent research has been focused in analyzing the quality of corporate governance among firms operating in different country-level investor protection. It is possible, however, that, due to some observable characteristics, not all firms operating in the same country (with the same legal environment) offer the same degree of protection to their investors. As hypothesized by La Porta *et al.* (1998), the legal system is fundamental to corporate governance. In particular, they argue that the extent to which a country's laws protect investor rights and the extent to which those laws are enforced are the most basic determinants of the ways in which corporate finance and corporate governance evolve in that country.

Within this framework, Klapper and Love (2004) provide a cross-country study of firm-level corporate governance practices and they conclude that companies operating in the same level of investor protection show different levels in the quality of corporate governance. They found firms with a high level of corporate governance provisions in countries with weak legal environments and vice-versa.

This approach, developed by Himmelberg *et al.* (1999), Himmelberg *et al.* (2002) and Klapper and Love (2004), states that investor protection has an external component related to the legal environment and an internal component related to the activity developed by the firm and other characteristics (endogenous protection). According to Himmelberg *et*

al. (2002, p.2) "(…) 'investor protection' refers collectively to those features of the legal, institutional and regulatory environment – and characteristics of firms or projects – that facilitate financial contracting between insider owners (managers) and outside investors." Thus, it is probable that firms operating in the same country offer different degrees of investor protection, due to specific operational characteristics and to particular interests. It is corroborated by the research of La Porta *et al.* (2000). They find that firms in common law countries where investor protection is stronger make higher dividend payouts when the firms' investment opportunities are poor than do firms in countries with weak legal protection.

According to Klapper and Love (2004) corporate governance is likely to be endogenously determined and they point out three sources of endogeneity that in theory could be associated with firms adopting better governance mechanisms: (1) the composition of a firm's assets; (2) unobservable growth opportunities; and, (3) firm size. The composition of a firm's assets will affect its contracting environment because it is easier to control and harder to steal fixed assets (equipments, etc.) than "soft" capital (intangibles, R&D, etc.). In that sense, a firm with a high level of intangibles may find optimal to adopt a higher level of corporate governance (and avoid possible misuse of these assets). The variable 'unobservable growth opportunities' is related with the fact that firms with good growth opportunities will need capital to finance the expansion process and they can find optimal to improve their level of governance in order to reduce the cost of capital. And finally, firm size has ambiguous effects because large firms may have greater agency problems due to destination of their free cash flows and small firms may have better growth opportunities and greater need for external finance, thus, both have incentives to adopt better governance mechanisms.

The use of indices in the field of corporate governance is relatively new, and the authors that have construct and/or used governance indices for analyzing the reality of different countries are Black (2001) for Russia, Gompers *et al.* (2003) for the US, Klapper and Love (2004) for emerging markets, Brown and Caylor (2004) also for the US (they strengthen the index developed by GIM),Leal and Carvalhal-da-Silva (2004) and Silveira (2004) for Brazil, Black *et al.* (2005) for Korea, Durnev and Kim (2005) for emerging markets, Cremers and Nair (2005) for the US, and Beiner *et al.* (2006) for Switzerland.

3. Governance and Performance: Theory and Practice

The conceptual framework for studies in corporate governance is given by a combination of approaches to the theory of the firm. Within this context, the agency theory surges to explain the agency problem and the costs associated with it. The discussion about the need for improving the governance of the firms is a response to many cases of expropriation of shareholders' wealth by the top executives, but also by the majority shareholders at the expense of the minority shareholders. This phenomenon describes quite well the agency problem, when the agents take decisions in order to maximize their own best interests rather than those of the shareholders (the same apply to the appropriation by the majority shareholders of the private benefits of control).

The agency problem is an essential element within the contractual view of the firm, developed by Coase (1937), Alchian and Demsetz (1972) and Fama and Jensen (1983). The theme of corporate governance is inserted within this context and the development of governance mechanisms aims to mitigate this problem. According to Jensen (2001) the contractual view is based on the idea that the firm is a nexus of contracting relationships among clients, workers, executives and suppliers of goods and capital. In line with this view, executives and shareholders sign a contract specifying how firm resources must be managed. In theory, a complete contract should be designed, specifying all actions the agent must undertake in face of any possible situation or contingency. The problem is that, since many contingencies are hard to predict, complete contracts are unviable. Due to this problem, investors have to allocate their residual control rights or their right to decide in circumstances not predicted in the original contract.

The institutional theory provides the conceptual basis for the discussion about the degree of investor protection holding in each country. The property rights are the explicative variables of the level of economic development in a given institutional environment, and of the governance model adopted by the companies, since it has an impact on their ownership structure. Moreover, the new institutional economics visualize the firm as a nexus of contracts and, for North (1990) the institutions are the "rules of the game" in a society. The institutions determine not only the economic performance, but also the governance structure and the governance model adopted by the firms. It is necessary to understand the evolution of the institutions in a given environment (e.g. country) to understand its patterns of corporate governance.

Nevertheless, the theoretical framework could be improved by the inclusion of an approach developed by Jensen (2001), the 'corporate objective function'. Actually there are two corporate objective functions discussed by the literature: "the value (or shareholders) maximization proposition" and the "stakeholder theory". The stakeholder theory has been gaining great acceptance among professionals and governments but also among academics whose argument is that managerial decisions impact investors but also a number of stakeholders who have an intrinsic relationship with the firm: employees, clients, suppliers, the community were the firm is

located, etc, the so-called externalities by the economists. In the words of Tirole (2001, p.4), "Why should institution design ignore the natural stakeholders, and favor the investors, who are 'stakeholders by design', by giving them full control rights and by aligning managerial compensation with their interests?", and goes further, defining corporate governance as "the design of institutions that induce or force management to internalize the welfare of stakeholders."

Nevertheless, neither the theory of the firm with the value (shareholder) maximization paradigm nor the stakeholder theory with its multiple objectives offers a clear picture of the exact direction of the causality between governance and firm value. Governance theories suggest that strong shareholder rights can mitigate agency problems and, as a consequence, increase firm value. However, shareholders rights can be restricted by the managers. Therefore, no causal inferences can be drawn from the theory since it is not clear that there is a causal relationship and its direction. Due to this lacuna in the theoretical framework, many researchers have been showing empirically that governance drives performance. However, they point out the limitations of their results warning that they may not be robust to some unobservable firms' characteristics (Chi, 2005).

In the sequence, a literature review on the field of corporate governance is provided, giving special attention to the relationship between governance and performance.

3.1. What Does the Literature Say?

3.1.1. Ownership Structure and Performance

The relationship between ownership structure and performance was firstly approached by Berle and Means (1932). They suggest that, due to the separation between ownership and control in the American big corporations, there is an inverse relation between disperse ownership and performance. Four decades after, Jensen and Meckling (1976) and Stulz (1988) developed theoretical models trying to formalize the relationship between ownership and performance, arguing that ownership influences performance. The model of Stulz (1988) predicts a concave relationship between managerial ownership and firm value. In the model, as managerial ownership and control increase, the negative effect on firm value associated with the entrenchment of manager-owners starts to exceed the incentive benefits of managerial ownership.

The first empirical studies in the field aimed to test this hypothesis assessing the impact of ownership structure on performance through the use of linear regressions with ownership structures as the independent variables. Among the first empirical studies, the most important are Mørck *et al.* (1988), McConnell and Servaes (1990) and Hermalin and Weisbach (1991). In all these studies, the authors find a significant relationship between ownership structure and firm value that can be interpreted as consistent with the theoretical hypothesis formulated by Jensen and Meckling (1976) and Stulz (1988). Mørck *et al.* (1988) find an inverse U-shaped relationship between managerial equity ownership and firm valuation for a sample of US firms. One interpretation is that firms' performance improves with higher managerial ownership, but after a point, managers become entrenched and pursue private benefits at the expense of outside investors. McConnell and Servaes (1990) also provide empirical support for this relationship for US firms.

Demsetz and Lehn (1985) formulate an alternative hypothesis assuming that ownership structure is endogenously determined under the assumption of equilibrium. To test this hypothesis, more recent studies make use of sophisticated econometric techniques and consider the ownership structure variables as endogenous rather than exogenous. These studies have not been corroborating the hypothesis that ownership structure is an exogenous variable and that it influences performance (Cho, 1998; Himmelberg *et al.*, 1999; Demsetz and Villalonga, 2001).

Cho (1998) examines the relationship between ownership structure, investment and corporate value in the United States. According to the author, common sense says that ownership structure must influence corporate investment decisions, and that the last must influence corporate value. In the first part of the study, the author uses the method of ordinary least squares (OLS) to test the hypothesis. The initial results suggest that ownership concentration (considered as the independent variable) has a significant impact on corporate investment (proxy by capital investments and investments in R&D). Thus, these results corroborate the assumption that ownership structure influences firm value. In the sequence, the author changes the method to simultaneous equations systems and considers ownership structure as an endogenous variable. Cho (1998) concludes that causation is reversed, running from performance to ownership structure rather than in the opposite way, with investments influencing corporate value and corporate value, in its turn, influencing the ownership structure. The author presents empirical evidence showing that probably ownership structure is not an exogenous variable, and questions previous research that tried to demonstrate the causal relationship between ownership structure and performance.

Himmelberg *et al.* (1999) analyze the determinants of insider ownership and the relationship between ownership structure and performance in the US. The study follows the methodology proposed by Demsetz and Lehn (1985) and tries to find evidence that insider ownership is endogenously determined by other corporate variables like size and industry. After introducing other possible variables as capital intensity, R&D expenses, free cash flow (FCF) and

investment rate, the authors, through the use of panel data analysis, try to isolate unobservable firm characteristics that did not vary across the time period under analysis. They conclude that insider ownership and performance are endogenously determined by some characteristics of the legal environment and that they are only partially observable.

Demsetz and Villalonga (2001) analyze the relationship between ownership and performance primarily using the traditional approach of isolated regressions (OLS) considering ownership structure as the independent variable. Their results indicated that ownership structure has a significant influence on performance so as the results obtained by Mørck *et al.* (1998) and McConnel ans Servaes (1990). Then, the authors run some tests using a two simultaneous equation system through the procedure of 2SLS (two stages least square). The results produced by this approach showed that ownership structure has no statistically significant influence on performance.

De Miguel *et al.* (2003), as previously mentioned, investigate the relationship between ownership structure and value in the Spanish firms. They provide new evidence on this relation, since the Spanish corporate governance system differs from the ones considered in previous theoretical and empirical research (e.g. US, UK, Germany). The authors use panel data methodology and control for potential endogeneity using instruments. Their results confirm the monitoring and the expropriation effect for the very highest concentration values in Spanish firms. The fact that Spanish majority shareholders manage to expropriate the wealth of minority shareholders confirms the idea that differences in corporate governance systems are related to the legal environment as described by Klapper and Love (2004) and Himmelberg *et al.*(2002).

More recently, De Miguel *et al.* (2005) examine how different control mechanisms relate to one another in the Spanish corporate governance system. The authors propose a new empirical approach that consists in analysing control mechanisms according to the non-linearity of the value-ownership relation. They conclude that the Spanish corporate governance system is very different from the US one. Moreover, their results show that control mechanisms (especially insider ownership, debt and dividends) are used in a complementary way by Spanish firms.

3.2. The Construction of Indices as a Proxy for Quality of Governance

The main objective of an empirical study in the field of corporate governance is to assess whether governance drives performance. To reach this objective, recent studies have constructed corporate governance indices that put together in only one measure all relevant information about a series of governance mechanisms.

Black (2001) analyzes the hypothesis that good governance practices affect firms' market value in Russia. As a proxy to quality of corporate governance, the author uses a corporate governance ranking created by the *Brunswick Warburg Investment Bank*.

Gompers *et al.* (2003) use the incidence of 24 different provisions to build a governance index for about 1,500 firms per year, and then they study the relationship between the index and several performance measures during the 1990s. The authors find a strong relationship between corporate governance and stock returns. They also find that weaker shareholder rights are associated with lower profits, lower sales growth, higher capital expenditures, and a higher amount of corporate acquisitions.

Klapper and Love (2004) evaluate the differences in the governance practices of fourteen companies in emerging markets through the use of a corporate governance index developed by the *Credit Lyonnais Securities Asia* (CLSA), an investment bank. The authors verified a huge variation in the quality of corporate governance among companies, and the average quality of corporate governance was superior in countries with more efficient legal systems.

Bøhren and Ødegaard (2003) analyze the relationship between corporate governance and performance in Norway. The authors find that corporate governance matters for economic performance, insider ownership is the most important, outside ownership destroys market value, and direct ownership is superior to indirect. Their results persist across a wide range of single-equation models, suggesting that governance mechanisms are independent and may be analyzed one by one. The authors conclude that the lack of significant relationships in the tests allowing for endogeneity may not reflect optimal governance, but rather an underdeveloped theory of how governance and performance interact.

Leal and Carvalhal-da-Silva (2004) analyze the relationship between quality of corporate governance and the performance of the Brazilian public companies. The authors also construct an overall governance index composed by fifteen questions divided into four categories: disclosure, board composition, ownership structure and shareholder rights. They found evidence that companies with best governance practices have a higher market value (proxy by Tobin's Q).

Brown and Caylor (2004) develop an index called Corporate Governance Quotient (CGQ). They found that firms with weaker corporate governance are less profitable, since they have lower return on assets, lower return on average equity, lower return on equity, and lower return on investment than do firms with stronger governance (measured by the CGQ). Besides, the authors also find evidence that firms with weaker corporate governance are riskier, have lower dividend payouts and lower dividend yields than firms with stronger corporate governance. They examine four factors: board composition, managerial

compensation, takeover defenses, and audit. Board composition is the most important factor while takeover defenses is the least important for the firm's quality of corporate governance.

Black et al. (2005) report evidence that corporate governance is an important factor for predicting the market value of South Korean firms. The authors construct a corporate governance index for 515 Korean companies listed in the Korea Stock Exchange. The study offers evidence consistent with a causal relationship between an overall governance index and higher share prices in emerging markets. Finally, the authors allege that they report the first evidence consistent with greater board independence causally predicting higher share prices in emerging markets.

In the case of Spain, the literature about corporate governance is concentrated on the analysis of ownership structure and the effects of ownership concentration on the performance of the companies, which is justified given that ownership concentration is the main control mechanism in the Spanish corporate governance system. Nevertheless, the construction of an index that considers other dimensions of governance can offer a more complete picture of the Spanish reality.

To reach this objective the paper puts forward the following research question: Which observable factors make companies adopt different levels of governance under the same contracting environment? That takes to the formulation of the following hypothesis:

H_1: *There is a significant relationship between the variables selected as possible determinant factors and the level of corporate governance adopted by the companies of the sample. Moreover, the direction of the relationship is the one proposed by the literature.*

3.3. Sample Selection and Data Collection

The sample is composed by all Spanish non-financial listed companies in the Madrid Stock Exchange (Mercado Continuo). The main data source is the web pages of the companies, but also the Spanish Securities Exchange Commission (*Comisión Nacional del Mercado de Valores* – CNMV) and the Madrid Stock Exchange (*Bolsa de Madrid*) databases for all governance related information (board composition, ownership structure and control, etc.). All financial and accounting information (balance sheets, income statements, capital structure, industry/sector, book values, stock prices, etc.) were obtained from COMPUSTAT.

The final sample is composed by 97 firms and the selection criteria are (1) to be a Spanish firm and (2) to not belong to the financial and real estate sectors. During the collection of the data, one firm has presented insufficient information to construct the index, so it was excluded from the sample. The rational for such selection criteria is that the foreign companies listed in the Madrid Stock Exchange are not located and operating in Spain, thus they are not exposed to the legal, institutional and regulatory environment holding in Spain. The financial and real estate sectors are regulated by specific rules which influence their governance model directly, for this reason they were excluded from the sample.

Table 4 shows descriptive statistics for all variables included in the analysis.

3.4. The Corporate Governance Index (GOV-I) and the quality of governance

The governance index is created for proxy quality of governance. It is constructed based on a questionnaire with binary objective questions and the answers must be obtained exclusively from secondary data. Since the ultimate objective is to measure the degree of transparency of the companies, the use of secondary data is justified (annual reports, companies' webpage, and the securities exchange commission webpage - CNMV).

The questions of the governance index (GOV-I) were developed based on the Credit Lyonnais Securities Asia (CLSA) questionnaire used by Klapper and Love (2004) and in the questions developed by Brown and Caylor (2004) when building their Gov-Score. For a detailed description of provisions and antitakeover measures, the reference was the work of GIM. The construction of the index is straightforward, we first code the 25 variables as 1 or 0 depending on whether the firm has satisfactory corporate governance standards or not. Each positive answer adds one point to the index, and the companies present a corporate governance level that ranges, in theory, from 0 to 25. The main source of information is the Annual Report on Corporate Governance prepared by the companies for the year 2005.

The index is composed by four dimensions in order to assess good governance practices: (1) *access and content of the information*; (2) *structure of the board*; (3) *ownership structure and control*; and, (4) *progressive practices*. Appendix 1 provides the questions compounding the index.

The governance index (GOV-I) is one proxy for quality of governance. Other proxies used in the study are: board independence (BIN), board size (BSZ), and the duality between CEO and Chairman. The subindices GOV-I 1, GOV-I 2, GOV-I 3, and GOV-I 4 that are composed by the questions of each dimension of the complete index. The construction of the subindices is very simple, since each dimension of the I-GOV is represented by one subindex. Table 2 provides a description of each subindex.

Table 2. I-GOV Subindices

	DIMENSION	QUESTIONS
GOV-I 1	Access and content of the information	1-7
GOV-I 2	Structure of the board	8-16
GOV-I 3	Ownership structure and control	17-20
GOV-I 4	Progressive practices	21-25

3.5. Determinants of the Quality of Governance

Based on the work of Himmelberg *et al.* (1999), Himmelberg *et al.* (2002) and Klapper and Love (2004), the governance determinants to be tested are: future growth opportunities, firm size, composition of firm's assets, ownership structure, corporate performance, belonging to the Spanish stock market index (IBEX-35), and listing in an American or European (non-Spanish) stock market, besides the control variable industry.

Future growth opportunities are measured following Klapper and Love (2004) through the average annual sales growth over the past three years (2002-2005). There are three measures of performance, Tobin's *q*, return on assets (ROA) and EBITDA. Tobin's *q* reflect firm performance and also firm profitability, the other two accounting variables are used to proxy operating profitability (EBITDA) and net profitability (ROA). Firm size is proxy by the logarithm of the total assets. Finally, composition of firm's assets is proxy by the ratio of fixed assets to net sales.

Table 3 describes the variables, the rational for introducing each variable in the analysis explaining its possible influence in the governance of the companies and the code attributed to each of them.

Table 3. Possible Determinants of Governance

GOVERNANCE DETERMINANT	REASONING	CODE
Future Growth Opportunities	A growing firm with large needs for outside financing has more incentive to adopt better governance practices in order to lower its cost of capital (Klapper and Love, 2003).	*GROWTH*
Firm Size	The effect of size is ambiguous as large firms may have greater agency problems (because it is harder to monitor them, so they need to adopt better standards of governance to compensate. On the other hand, small firms may have better growth opportunities and greater need for external finance, so they may present better governance mechanisms (Klapper and Love, 2003).	*SIZE*
Ownership Structure (OWN)	Managers and shareholders have incentives to avoid inside ownership stakes in the range where their interests are not aligned, although managerial wealth constraints and benefits from entrenchment could make such holdings efficient for managers (Jensen and Warner, 1988). Besides, several studies describe a positive and significant relationship between ownership concentration and corporate performance.	*OWNCON* *OWNmain*
Performance (PERF)	The best is the performance of the company, the higher the governance standards we could expect, due to the lower external shareholders expropriation. Besides, the performance variables are used to assess the possible occurrence of reverse causality with corporate governance.	*Q* *ROA* *EBITDA*
Composition of Firm's Assets	The composition of a firm's assets will affect its contracting environment because it is easier to monitor and harder to steal fixed assets than intangibles. Hence, the firm operating environment will affect its governance system. (Himmelberg, Hubbard and Palia, 1999).	*TANG*
IBEX-35	Companies that are listed in the Spanish Market Index (IBEX-35) are expected to adopt higher standards of governance.	*IBEX-35*
Listing in another stock market	Companies that are listed in an American or European stock market (non-Spanish) must adopt higher standards of governance.	*INTSM*
Industry	Industry is expected to influence governance. Mostly because there are more regulated economic sectors than others, but also due to the competition holding in certain sectors.	*IND*

The governance index (GOV-I) is constructed for proxy quality of governance, as described in the previous section, and a cross-sectional OLS model is used to directly examine the relation between governance and the selected operational characteristics measured by the above mentioned variables. The general model to be tested is the following:

$$GOV\text{-}I_i = \alpha + \beta_1 GROWTH_i + \beta_2 SIZE_i + \beta_3 TANG_i + \beta_4 INTSM_i + \beta_5 IBEX\text{-}35_i + + \beta_6 OWNCON_i + \beta_7 PERF_i + \Sigma\delta_j IND_{ji} + \varepsilon_i$$

EQUATION 1

The coefficients are expected to be statistically significant and to present the following signals:

- $\beta_1, \beta_4, \beta_5, \beta_7 > 0$;
- $\beta_3 < 0$;
- since the effect of firm size and ownership structure on governance are ambiguous, in theory, no signal is expected for β_2 and β_6;
- δ_j is the coefficient for the binary variable of industry, no signal is expected for it.

4. Results

4.1. Descriptive Statistics

The descriptive statistics for the governance index (GOV-I) are presented in Table 4 and the histogram and the normal curve of the distribution are drawn in Figure 2. The mean for the GOV-I is 13,38 and the median is 14, indicating a relatively symmetric distribution. Appendix 2 provides histograms for the total sample and for the firms that belong to the Spanish stock market index (IBEX-35). As one could expect, the companies that compose the IBEX-35 present a significantly higher mean for the GOV-I than the other firms compounding the sample. Besides, the histogram can reveal that there is a wide distribution for the GOV-I between the firms compounding the sample, the minimum value is 4 and the maximum is 21 (16% and 84%, respectively) which mitigates possible sample selection bias (Beiner *et al.*, 2006). Table 6 shows GOV-I means for the industries.

Table 6 shows the correlation coefficients between Tobin's *q* (Q) and the governance mechanisms used in the study. Despite not being significantly correlated with any variable, what is frequent in governance studies, we can make conclusions based only on the nature of the relationship. Thus, we find a positive correlation between Q and GOV-I as was expected, so as with the other governance mechanisms (BIN, BSZ, CEO-Chair and OWNmain), except for ownership concentration (OWNCON) with what we find a negative correlation. On the other hand, the GOV-I is significantly positive correlated with the other three mechanisms of governance (BIN, BSZ and CEO-Chair) and negatively correlated with the variables of ownership (OWNCON and OWNmain). It is also expected since the GOV-I is constructed based on the recommendations of the Spanish codes of best practices (Olivencia and Aldama Codes) and is composed by the aforementioned four dimensions of governance that are also reflected in the other variables. The two ownership variables (OWNCON and OWNmain) present a significant and positive correlation between them and a negative correlation with board size and board independence. Nevertheless, the ownership variables present a positive correlation with CEO-Chair. Board independence is negatively correlated with board size and with CEO-Chair. And, finally board size and CEO-Chair are positively correlated.

Table 4. The Governance Index (GOV-I)

	2005	
Governance Index (GOV-I)	absolute	*%*
Minimum	4,0	*16,00*
Mean	13,381	*53,53*
Median	14,0	*56,00*
Mode	14,0	*56,00*
Maximum	21,0	*84,00*
Standard Deviation	2,770	*11,08*
Number of Firms		
GOV-I ≤ 10	14	
GOV-I = 11	3	
GOV-I = 12	15	
GOV-I = 13	13	
GOV-I = 14	20	
GOV-I = 15	10	
GOV-I = 16	13	
GOV-I = 17	6	
GOV-I ≥ 18	3	
TOTAL	97	
Subindex means	absolute	*%*
Access to information (GOV-I 1)	4,948	*79,69*
Board structure (GOV-I 2)	4,186	*46,51*
Ownership and control (GOV-I 3)	1,268	*31,70*
Progressive practices (GOV-I 4)	2,979	*59,59*

This table provides summary statistics on the distribution of *GOV-I*, the Governance Index for the Spanish public companies, and the subindices (*Access to information, Board structure, Ownership and control,* and *Progressive practices*) for the year 2005.
Table 8 provides descriptive statistics for the board structure variables. In relation with the size of the boards (BSZ) the average number of directors in the Spanish Boards is 10,67. This is an acceptable average size since the consensus is in something between 5 and 15. Nevertheless, it is clear that the size of the board depends largely on the number of influent shareholders that can nominate "external" directors as their representatives[11]. The more influent the shareholder the large the number of directors he/she indicates.

[11] In the case of Spain, the external directors indicated by large shareholders are called "*dominicales*".

Table 5. The Governance Index (GOV-I) per Industry

INDUSTRY	N	mean	std dev
Food	10	12,6	2,836
Textil & Apparel	5	10,6	4,393
Paper Products	6	11,7	4,033
Pharmaceuticals	6	12,7	3,327
Leisure	3	13,7	1,528
Media Entertainment	5	14,2	2,049
Transports/Airlines	2	15,5	2,121
Logistics	3	12, 7	2,517
IT & Telecom	7	14,3	1,890
Other Services	6	14,5	2,588
Gas & Utilities	9	14,6	2,128
Steel & Metals	8	13,8	3,412
Industrial Machinery	9	12,9	3,060
Construction	10	14,3	1,059
Chemicals	2	13,0	1,414
Engineering	5	12,6	2,510
Aerospace & Defense	1	16,0	0

Table 6. Summary of the Research Variables

CODE	VARIABLE	DEFINITION	N	Mean	Median	Std Dev	**Min**	**Max**
GROWTH	Future Growth Opportunities	Average sales growth in the last 3 years	93	0,07	0,05	0,16	-0,36	0,72
SIZE	Firm Size	Log of net sales	95	5,69	5,67	0,82	3,82	7,60
GOV-I	Corporate Governance Index	Index composed by 25 binary questions	97	13,38	14,00	2,77	4,00	21,00
BSZ	Board Size	Total number of board members	97	10,67	10,00	3,78	3,00	20,00
BIN	Board Independence	% of independent and external directors	97	0,36	0,33	0,19	0,00	0,87
CEO-CHAIR	CEO and Chairman are not the same person	1 if the CEO and the Chairman are not represented by the same person; 0 otherwise	97	0,41	0	0,49	0	1
OWNCON	Ownership Concentration	Σ % of shares owned by the controlling shareholders (shareholders with more than 5% stake in the firm)	97	0,62	0,66	0,22	0,03	0,97
OWNmain	Ownership of the main shareholder	% of shares owned by the main shareholder	97	0,32	0,25	0,23	0,01	0,94
Q	Tobin's q	Ratio of the market value of equity plus the book value of debt to book value of total assets	92	1,22	0,98	0,79	0,07	4,64
TANG	Composition of firm's assets	Fixed assets / Net Sales	97	1,16	0,73	1,61	0,05	13,43
IBEX-35	Belong to the IBEX-35	1 if the company belongs to the IBEX-35; 0 otherwise	97	0,26	0	0,44	0	1
INTSM	Listing in an International Stock Market	1 if the company is listed in an American or European (non-Spanish) stock market; 0 otherwise	97	0,33	0	0,47	0	1

TABLE 7. Correlation matrix between Governance mechanisms and Tobin's Q

	I-GOV	Tobin's Q	OWN CON	OWNmain	BIN	BSZ
Tobin's Q	0,0366	1				
	(0,7292)					
OWN CON	-0,1109	-0,0055	1			
	(0,2796)	(0,9585)				
OWNmain	-0,0617	0,1355	0,6443***	1		
	(0,5486)	(0,1979)	(0,0000)			
BIN	0,2516**	0,0240	-0,2082**	-0,1098	1	
	(0,0129)	(0,8205)	(0,0407)	(0,2843)		
BSZ	0,3036***	0,0129	-0,0793	-0,0876	-0,0649	1

	(0,0025)	(0,9027)	(0,4402)	(0,3933)	(0,5277)	
CEO-CHAIR	0,2716***	0,0798	0,0363	0,1407	-0,0588	0,0958
	(0,0071)	(0,4495)	(0,7239)	(0,1693)	(0,5671)	(0,3507)

This table reports Pearson correlation coefficients between Tobin's *q* and the governance mechanisms for the year 2004. The variables are described in Table 4. Significance at the 10, 5 and 1 percent levels is indicated by * , ** and *** respectively.

Board independence (BIN) is related to the number of independent directors in the board and the percentage is obtained considering all independent and external directors over the total number of directors. The best practices in corporate governance recommend that at least 50% of the directors compounding the board be independent. And, independent means with no relation with any shareholder or executive of the firm. In the case of Spain, the companies must inform if the director is executive, external indicated by a shareholder, or external and independent. This separation is extremely important, because investors are able to understand the dynamics of ownership and control within the target company just by reading the Corporate Governance Annual Report issued by the firms.

We can appraise the independence of the Spanish boards with an average independence of 36,28%. It means that, on average, 4 out of 10 directors are independent in sample firms. It can and should be improved by the companies, mainly because there are firms with no independent directors and because the Aldama code strongly recommends the increase in the number of independent directors in the boards of the public companies. Finally, in 41,24% of the companies compounding the sample the CEO and the Chairman are not the same person, which means that in 58,76% of the inquired companies they are represented by the same person.

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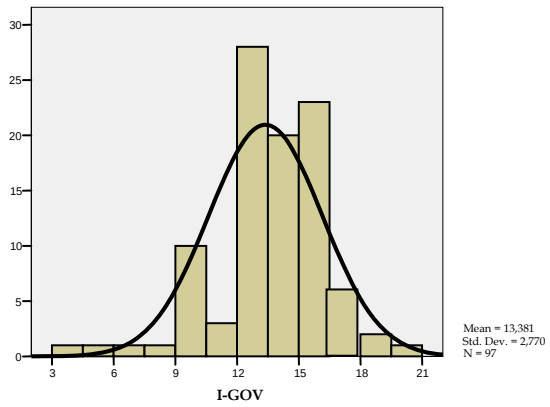
TABLE 8. Descriptive Statistics for the Board Structure variables

	BOARD STRUCTURE			
	BSZ	BIN	CEO-Chairman	N (Companies)
Mean	10,67	36,28%	41,24%	97
Std Dev	3,78	19,32%	-	
Median	10,00	33,33%	-	
Min	3,00	0,00%	-	
Max	20,00	86,67%	-	

Figure 2. Histogram and Normal Curve of the I-GOV



This table shows the distribution of the GOV-I for the 97 listed companies in the "mercado continuo" of the MSE. The index was constructed based on a questionnaire with 25 binary questions that were designed to proxy four categories of governance: (1) *Access to information,*(2) *Board structure,* (3) *Ownership and control,* and (4) *Progressive practices*. Better-governed firms have higher index scores.

4.2. The Governance Index (I-GOV) description

The mean for the GOV-I is 13,38 with a standard deviation of 2,77. A mean of 13,38 out of 25 (53,53%) can be interpreted as "low" if we consider that many questions compounding the index were related to basic concepts of corporate governance, such as access to information and transparency.

Besides, one can observe that the questions with higher percentage of firms with a "yes" are those recommended by the Spanish codes of best practices on corporate governance (Aldama and Olivencia Codes). The company with the higher score is Arcelor which is actually a company that operates within the regulation of Netherlands[12], in this sense it is expected that Arcelor shows a higher standard of governance. Table 8 describes in detail the percentage of "yes" obtained in each question.

The results showed in Table above show that virtually all companies are concerned about governance issues, since 94,85% provide information in the corporate website about its governance system. On the other hand, only 64,95% provide the same information in English, many times we can see the icon "English" in the home page of the company, but after accessing the link what appears is a message such as "information not available" or "page under construction". Question 4 is related to the disclosure of information about the company's future strategies and the projection of the results, it also shows a low rate (59,79%) of positive answers, mainly if taken into account that the sample is composed by the biggest publicly traded corporations in the country that are supposed to disclosure this kind of information.

The publication of the Corporate Governance Annual Report (question 22) is a question with a high percentage of positive answers, but one important point to mention is that many companies produce a very low quality report; it seems that they are just complying with an obligation, not to be "out of the market". Moreover, question 5 "Does the company disclosure information about its next or tree-year ROA or ROE targets?" presents a disappointing 0%. This is the type of information that should be disclosed if the companies were interested in attract new capital, or even to renew the outstanding debt or equity. Since the main function of the managers is precisely to create value for the company, they were expected to disclose information about the creation or destruction of value.

In question 9, "Is the Chairman an independent, non executive director?" only 9% of the companies have an independent director as the Chairman of the board, which is actually a progressive practice in Western Europe and highly recommended as a good governance practice. As a contrast, in question 17, "The Chairman and the CEO are not represented by the same person", 41,24% of the companies have nominated the CEO as also the Chairman of the board. Considering the traditional ownership structure of the Spanish companies, as to say "familiar ownership structures", the CEO as Chairman can clearly create favorable conditions to the appropriation of the benefits of control by the majority shareholders. The same is valid for question 8, "Are the audit committee and the nominating committee exclusively composed by independent outside directors? ", for which only a quarter of the companies said yes.

Question 10, "Does the CEO serve on no more than one additional board of other public company?", shows an interesting phenomenon: the cross participation of the same individuals in many boards. Analyzing the composition of the boards, one can figure out that the same names appear many times in different boards. There are Chairmen appearing in more than twenty five boards, and a question that naturally rises from this fact is if they have time to manage their own company if they are so busy participating in so many board meetings during the year. Another point is that, in question 10, we only consider the participation in boards other than those of the companies' same group, which aggravates the problem. Questions 13 (Golden Parachutes) and 20 (Casting Vote) also show the power of the Chairman/CEO with 45,36% and 39,18% of the companies presenting these provisions, respectively.

In relation to the board composition and functioning, question 11 "Is the board composed by no less than 5 and more than 15 members?" shows a 85,57% of the companies compounding the sample with an acceptable board size. This question is complemented by question 12 "Is shareholder approval required for changing the board size?", which is actually dictated by the bylaws of the firms and, as a consequence, presents a 100% of positive answers. Question 14 shows a 80,41% of the companies not having representatives of banks in the board. This is an important question because having representatives of banks in the board is very negative and 20% of the companies present such problem. Nevertheless, in the Spanish case, banks play an important role as shareholders and, in order to adapt the research to this reality, the companies that have a "no" in question 14 are only those who inform that besides the equity relationship they also maintain commercial relations with the bank. In any case, this situation should be avoided by the firms, since there is a clear conflict of interests between the companies and the banks. Finally, question 15 shows that the Spanish public companies are far from having an independent board, since in only 31,96% of the firms compounding the sample the independent directors account for more than 50% of the board. In the item "are board members elected annually?" (question 16) another disappointing 1,03%.

In terms of the directors' remuneration, question 18 points that only 16,49% of the firms believe in the stock options as a mechanism of governance capable of aligning the interests of managers and shareholders. Question 19 deserves deeper research on the causes of such problem, since only 29,90% of the boards have a percentage ranging between 1% and 30% of the total outstanding shares in their hands.

[12] The headquarters of Arcelor are located in the Netherlands and the company is subject to the legislation of this country.

Table 9. I-GOV Questions

Dimension of Governance	#	QUESTION OF THE GOVERNANCE INDEX (GOV-I)	Percentage of firms with a "YES" in the Question
Access to Information	1	Does the company website provide information about its governance system?	94,85%
	2	Does the company have an English version of its website where results and corporate governance related information are promptly updated (no later than one business day)?	64,95%
	3	Does the company have an Investors Relation Department?	87,63%
	4	Does the company disclosure enough information or analysts' presentations with what any investor can make projections for the company?	59,79%
	5	Does the company disclosure information about its next or tree-year ROA or ROE targets?	0,00%
	6	Does the company publish/announce quarterly reports within two months of the end of the quarter?	90,72%
	7	Has the public announcement of results promptly published in the web page of the company?	96,91%
Board Structure	8	Are the audit committee and the nominating committee exclusively composed by independent outside directors?	27,84%
	9	Is the Chairman an independent, non executive director?	9,28%
	10	Does the CEO serve on no more than one additional board of other public company?	40,21%
	11	Is the board composed by no less than 5 and more than 15 members?	85,57%
	12	Is shareholder approval required for changing the board size?	100,00%
	13	Have the Board approved any Golden Parachute Provision for the senior executives?	45,36%
	14	Does the board include no direct representative of banks and other large creditors of the company? (having any representatives is negative)	80,41%
	15	Do independent, non-executive directors account for more than 50% of the board?	31,96%
	16	Are board members elected annually (they have a unified mandate of one year and the reelection is not automatic?)	1,03%
Ownership Structure and Control	17	The Chairman and the CEO are not represented by the same person.	41,24%
	18	Do directors receive part of their remuneration in stocks/stock options?	16,49%
	19	Is directors' stock ownership at least 1% but not over 30% of total outstanding shares?	29,90%
	20	Does the Chairman have Casting Vote?	39,18%
Progressive Practices	21	Does the company offer *tag along* to the minority shareholders?	3,09%
	22	Does the company publish the "Corporate Governance Annual Report" (as stated by the Aldama Code)?	90,72%
	23	Does the board have outside advisors?	84,54%
	24	Do directors term limits exist?	71,13%
	25	Does mandatory retirement age for directors exist?	48,45%

Progressive practices in corporate governance were assessed through questions 21 to 25. Three questions reached a high rate of positive answers (questions 22, 23 and 24) showing that the companies are progressively incorporating the Aldama Code suggestions and are now publishing the Corporate Governance Annual Report (90,72%), establishing directors term limits (71,13%), and hiring outside advisors to assist the directors when necessary (84,54%). On the other hand, only half of the companies have mandatory retirement age for the directors (48,45%), for the rest it is still a problem, mainly in the case of family companies. Nevertheless, the critical point within this dimension is definitely the fact that practically no company (3,09%) offers tag along to the minority shareholders.

4.3. Empirical results

The empirical analysis proceeds with the estimation of Equation (1) using ordinary least squares (OLS) in order to assess whether there is a relationship between the variables selected as possible determinant factors and the level of governance adopted by the sample firms.

4.3.1. Determinants of governance

Table 9 presents the results from the regressions of GOV-I on the selected variables as its determinants. The results of the regressions show that future growth opportunities and composition of firm's assets have a statistically significant positive effect on the quality of governance. Size also presents a positive effect on governance for the sample firms, but it is not statistically significant. Moreover, performance also has a positive effect on the quality of governance showing that firms with higher performance adopt higher standards of governance. These findings support Hypothesis 1, since these are the factors described in the literature as the possible determinants of governance.

The effect of ownership concentration is ambiguous, so no signal was expected for this variable. For instance, a firm with a more concentrated ownership structure could present poorer quality of governance due to the high level of ownership concentration of the main shareholder; nevertheless, this fact could also take the company to adopt better governance practices to compensate for the higher likelihood of expropriation of the minority shareholders. We found a negative effect of both proxies of ownership concentration (OWN concentration and OWN main shareholder) on the quality of governance, this result is maintained for the three proxies of performance: Q, ROA and EBITDA. These results suggest that the quality of governance could be a function of the probability of expropriation of the minority shareholders due to the company's ownership structure and control. Besides, the coefficients indicate that the negative effect on governance is more accentuated for the ownership concentration in the hands of the main shareholder than for the ownership concentration of blockholdings.

In summary, Table 9 presents six columns. Column (1) shows the results for the regressions of GOV-I on the selected variables along with Q and OWNCON. Column (2) shows the results for the regressions of GOV-I on the selected variables along with Q and OWNmain. Columns (3) and (4) show the results for the EBITDA and OWNCON and OWNmain respectively. Finally, Columns (5) and (6) show the results for the ROA as a proxy of performance and OWNCON and OWNmain respectively.

TABLE 9. Possible Determinants of the Quality of Governance (GOV-I)

	Dependent variable=GOV-I					
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)
Constant	11,876*** (0,003)	11,818*** (0,002)	13,552*** (0,001)	13,530*** (0,000)	14,093*** (0,000)	13,871*** (0,000)
GROWTH	3,901*** (0,003)	4,016* (0,056)	3,719* (0,089)	3,721* (0,082)	3,788* (0,077)	3,768* (0,074)
SIZE	0,677 (0,251)	0,695 (0,230)	0,511 (0,383)	0,500 (0,389)	0,462 (0,428)	0,468 (0,418)
TANG	0,547* (0,010)	0,630* (0,059)	0475 (0,157)	0,536 (0,111)	0,465 (0,160)	0,525 (0,114)
IBEX-35	0,387 (0,736)	0,224 (0,844)	0,383 (0,739)	0,231 (0,841)	0,498 (0,664)	0,324 (0,779)
INTSM	-0,374 (0,765)	-0,518 (0,676)	0,132 (0,910)	0,147 (0,899)	-0,042 (0,971)	0,006 (0,996)
Q	1,284** (0,030)	1,444** 0,015				
EBITDA			2,055 (0,368)	2,372 (0,296)		
ROA					3,835 (0,187)	3,911 (0,176)
OWNCON	-0,721 (0,613)		-0,853 (0,557)		-1,137 (0,430)	
OWNmain		-2,028 (0,155)		-1,590 (0,296)		-1,633 (0,251)
Industry	Included	Included	Included	Included	Included	Included
Adjusted R^2	0,198	0,220	0,151	0,162	0,162	0,171
Probability F	0,018	0,011	0,048	0,038	0,037	0,031
Companies (N)	90	90	92	92	92	92

This table reports the results from OLS regressions of GOV-I on its determinants. The definition of the variables is provided in Table 4. Control variables for 17 industries (IND) were included in the regressions but do not appear here due to the limitation of space. The data is relative to the year 2004 and the GOV-I was constructed based on information relative to the year 2005. The numbers in parentheses are probability values for two-sided F test. ***, **, * denotes statistical significance at the 1%, 5% and 10% level respectively.

5. Discussion and Conclusions

The main objective of this paper is to assess whether the quality of governance is determined by some firm specific and observable characteristics. In order to create a measure for the quality of governance, we construct a governance index composed by twenty-five questions covering four dimensions, (1) access and content of the information; (2) structure of the board; (3) ownership structure and control; and, (4) progressive practices. The population under scrutiny is the Spanish non financial publicly traded companies, which resulted in a final sample of 97 firms.

The GOV-I first dimension, *access and content of the information*, intends to capture the relevance firms put on transparency and the results show that the Spanish public companies are paying great attention to this issue. Over 85% of the companies in the sample comply with at least 4 questions out of 6 (approximately 70% of the total). The only exception is for question 5, "Does the company disclosure information about its next or tree-year ROA or ROE

targets?", with a 0% as the rate of positive answers. It indicates that the firms do not disclosure information about their projections of future creation or destruction of value, but also about their strategic plans.

The second and third dimensions can be grouped in a broader dimension, *the decision making process of the top executives through the use of the Board and the control and ownership of shares*. And, in this scenario, the Spanish companies show a divergent behavior from the one previously described. Compared with the first dimension, only 16,5% of the companies in the sample comply with at least 6 questions out of 9 (approximately 70% of the total) for the second dimension (board structure) and 10,3% of the companies comply with at least 3 questions out of 4 (75% of the total) for the third dimension (ownership and control). In contrast with those companies offering a lot of information in their websites and showing themselves as really concerned about governance matters and transparency, after reading the procedures, bylaws and annual reports, one finds out the other face of these companies, as to say, a very tied structure of ownership and control, nothing to do with the "transparent company" that disclosures information in its corporate webpage. Furthermore, after a quick scrutiny, it is clear that the questions with higher percentages of "yes" in the I-GOV are those recommended by the codes of best practices (Aldama and Olivencia Codes). This fact could indicate that the companies are just following the normative to be "adjusted" to the market, and raises concern about whether they are really committed to governance matters.

In the second part of the paper, we empirically assess the determinants of the quality of governance in Spain. The vast majority of studies in the field of corporate governance are focused in the US and emerging markets sets. Only recently, we are witnessing the appearance of this type of study for the European countries. The main contribution of this paper is to provide a picture of the Spanish corporate governance system. Spain is a very interesting set for exploring governance matters due to its particularities: (1) high levels of ownership concentration; (2) the boards are inefficient; (3) the capital markets are underdeveloped; (4) the market for corporate control is practically nonexistent; and, (5) there is a low degree of investor legal protection.

Our most important result supports our hypothesis that there is a significant relationship between the selected factors and the level governance adopted by the companies. This result is also in consonance with the literature. Specifically, Tobin's q has a statistically significant positive impact in governance what can indicate that performance drives governance. Another conclusion is that presenting higher future growth opportunities present better governance standards; this result is also in accordance with the literature. Firm size has a positive effect in the quality of governance, which means that bigger firms adopt higher standards of governance. Nevertheless, composition of firm's assets showed a divergent relationship than the hypothesized one. The results indicate that, in the case of Spain, firms with a more "hard" assets structure tend to present better governance structures. This result can indicate two things: (1) a sample selection bias, since the companies compounding the sample are the biggest companies in the country with a high participation of fixed assets in its assets structure; or, (2) intangible assets can also be proxy by R&D investments, which means that there is a close relationship between intangibility and the extent to which firms investment in research and development, and, Spain is known by the low rate of investments in R&D. Due to this fact, it is conceived that the results show a inverse relationship between tangibility of assets and quality of governance.

Overall, our results confirm the positive relationship between governance and the determinant factors: performance, future growth opportunities and size what can be interpreted as evidence that the Spanish firms adopt better standards of governance to compensate for the low level of investor protection holding in the Spanish institutional environment. On the other hand, as was expected, our result show a negative relationship between quality of governance and the extremely high levels of ownership concentration holding in Spain. The study has also important implications for the practitioners that want to improve the governance of its companies and to investors and analysts that now have a more complete picture of the Spanish corporate governance system.

References

1. Alchian, A. and H. Demsetz (1972) "Production, information costs and economic organization", *American Economic Review*, (62) pp. 777-795.
2. Berle, A. Jr. and G. Means (1932) *The Modern Corporation and Private Property,* New York: Macmillan.
3. Beiner, S. Drobetz, W., Schmid M. and H. Zimmermann (2006) "An Integrated Framework of Corporate Governance and Firm Valuation", *European Financial Management,* Vol. 12 (2) pp. 249–283.
4. Black, B. (2001) "The corporate governance behavior and market value of Russian firms", *Emerging Markets Review*, (2) pp. 89-108.
5. Black, B., H. Jang and W. Kim, (2005) "Does corporate governance predict firms' market values? Evidence from Korea", *Journal of Law, Economics and Organization* (forthcoming).
6. Bøhren, Ø. and B. Ødegaard (2003) "Governance and Performance Revisited", *ECGI Working Paper Series in Finance* nº28/2003.
7. Brown, R. and L. Caylor (2004) "Corporate Governance and Firm Performance", *Working Paper*, Georgia State University.
8. Chi, J. (2005), "Understanding the endogeneity between firm value and shareholder rights", *Financial Management*, Financial Management Association, Winter 2005 pp. 65-76.

9. Cho, M. H. (1998) "Ownership structure, investment and corporate value: An empirical analysis", *Journal of Financial Economics,* (47) pp.103–121.
10. Coase, R.H. (1937) "The Nature of the Firm", *Economica*, IV, New Series pp.386-405.
11. Cremers, M.K. and V.B. Nair (2005) "Governance Mechanisms and Equity Prices", *The Journal of Finance*, Vol. 60 (6) pp. 2859-94.
12. De Miguel, A., J. Pindado and C. de la Torre (2003) "Ownership Structure and firm value: New evidence from the Spanish corporate governance system", *EFMA 2003 Helsinki Meetings*. http://ssrn.com/abstract=393464 access 02/5/2006.
13. De Miguel, A., J. Pindado and C. de la Torre (2005) "How do Entrenchment and Expropriation Phenomena Affect Control Mechanisms?", *Corporate Governance: An International Review,* (13) 4 pp.505-516.
14. Demsetz, H. (1983) "The structure of ownership and the theory of the firm", *Journal of Law and Economics*, (26) pp. 375-390.
15. Demsetz, H. and B. Villalonga (2001) "Ownership structure and corporate performance", *Journal of Corporate Finance*, (7) pp.209-233.
16. Demsetz, H. and K. Lehn (1985) "The structure of corporate ownership: Causes and Consequences", *Journal of Political Economy*, (93) 6 pp. 1155-1177.
17. Durnev, A. and H. Kim, (2005), "To steal or not to steal: firm attributes, legal environment, and valuation", *The Journal of Finance,* (60) 3 pp.1461-1493.
18. Fama, E. and M. Jensen (1983), "Separation of ownership and control", *Journal of Law and Economics*, (26) pp. 301-327.
19. Gillan, S.L. (2006) "Recent Developments in Corporate Governance: An Overview", *Journal of Corporate Finance* (12) 381-402.
20. Gompers, P., J. Ishii, and A. Metrick (2003) "Corporate governance and equity prices", *Quarterly Journal of Economics,* (118) pp.107-155.
21. Hermalin, B.E. and M.S. Weisbach (1991) "The effects of board composition and direct incentives on firm performance", *Financial Management*, (21) 4 pp.101-112.
22. Himmelberg, C., G. Hubbard and I. Love (2002) "Investor Protection, ownership and the cost of capital", *World Bank Policy Research Working Paper* nº 2834, April 2002.
23. Himmelberg, C., G. Hubbard, and D. Palia (1999) "Understanding the determinants of managerial ownership and the link between ownership and performance", *Journal of Financial Economics,* (53) pp.353–384.
24. Jensen, M. C. (2001) "Value maximization, stakeholder theory, and the corporate objective function", *Journal of Applied Corporate Finance*, (14) 3, pp. 8-21.
25. Jensen, M. C. and J. Warner (1988) "The distribution of power among corporate managers, shareholders and directors", *Journal of Financial Economics*, (20) pp. 3-24.
26. Jensen, M. C. and W. Meckling (1976) "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Journal of Financial Economics* (3) pp. 305-360.
27. Klapper, L.F., and I. Love (2004) "Corporate governance, investor protection, and performance in emerging markets", *Journal of Corporate Finance*, (10) 203–28.
28. La Porta, R., F. Lopez-de-Silanes and A. Shleifer (1999) "Corporate ownership around the world", *The Journal of Finance*, (54) pp. 471-517.
29. La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny (1998) "Law and Finance", *Journal of Political Economy*, (106) pp.1113-1155.
30. La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny (2002) "Investor protection and corporate valuation", *The Journal of Finance*, (57) 3 pp. 1147-1170.
31. La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny (2000) "Investor Protection and Corporate Governance", *Journal of Financial Economics* (58) pp.3-27.
32. Leal, R. and A. Carvalhal-da-Silva (2004) "Corporate governance index, firm valuation and performance in Brazil", *Working Paper* COPPEAD/UFRJ.
33. McConnell, J. and H. Servaes (1990) "Additional evidence on equity ownership and corporate value", *Journal of Financial Economics*, (27) pp.595-612.
34. Mørck, R., A. Shleifer, and R. Vishny (1988) "Management ownership and market valuation: an empirical analysis", *Journal of Financial Economics*, (20) pp.293-315.
35. Rajan, R.G. and L. Zingales (2004) *Saving capitalism from the capitalist*, London: Random House.
36. Shleifer, A. and R. Vishny (1997) "A Survey of Corporate Governance", *The Journal of Finance,* (52) 2 pp.737-783.
37. Silveira, A. (2004) "Governança Corporativa e Estrutura de Propriedade: Determinantes e Relação com o Desempenho das Empresas no Brasil", *Doctoral Dissertation*, Universidade de São Paulo, Brasil.
38. Stulz, R.M. (1988) "Managerial control of voting rights: Financing policies and market for corporate control", *Journal of Financial Economics*, (20) pp.25-54.
39. Tirole, J. (2001), "Corporate Governance", *Econometrica*, Vol.69 (1): 1-35.

APPENDIX 1

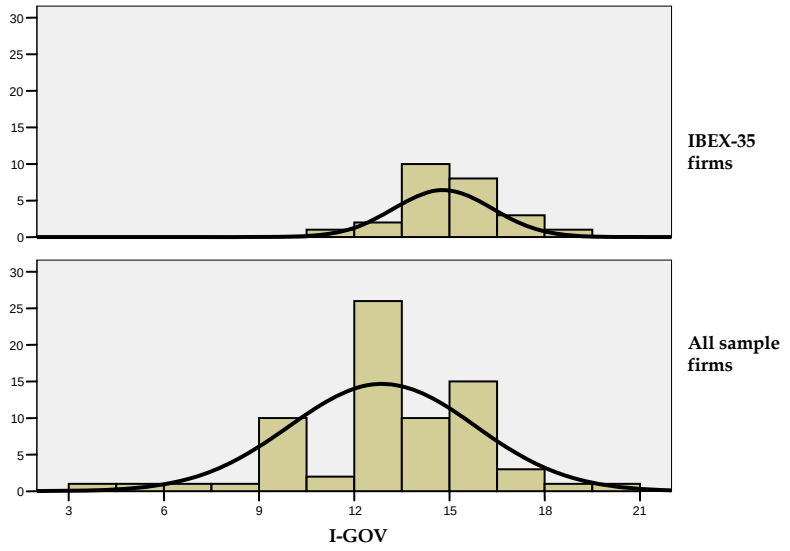
Questions Used in the Construction of the Governance Index (GOV-I)

DIMENSION OF GOVERNANCE	#	QUESTIONS THAT COMPOSE THE GOVERNANCE INDEX (GOV-I)
Access and Content of the Information	1	Does the company website provide information about its governance system?
	2	Does the company have an English version of its website where results and corporate governance related information are promptly updated (no later than one business day)?
	3	Does the company have an Investors Relation Department?
	4	Does the company disclosure enough information or analysts' presentations with what any investor can make projections for the company?
	5	Does the company disclosure information about its next or tree-year ROA or ROE targets?

	6	Does the company publish/announce quarterly reports within two months of the end of the quarter?
	7	Has the public announcement of results been promptly published in the web page of the company?
Board Structure	8	Are the audit committee and the nominating committee exclusively composed by independent outside directors?
	9	Is the Chairman an independent, non executive director?
	10	Does the CEO serve on no more than one additional board of other public company?
	11	Is the board composed by no less than 5 and more than 15 members?
	12	Is shareholder approval required for changing the board size?
	13	Have the Board approved any Golden Parachute Provision for the senior executives?
	14	Does the board include no direct representative of banks and other large creditors of the company? (having any representatives is negative)
	15	Do independent, non-executive directors account for more than 50% of the board?
	16	Are board members elected annually (they have a unified mandate of one year and the reelection is not automatic?)
Ownership Structure and Control	17	The Chairman and the CEO are not represented by the same person.
	18	Do directors receive part of their remuneration in stocks/stock options?
	19	Is directors' stock ownership at least 1% but not over 30% of total outstanding shares?
	20	Does the Chairman have a Casting Vote?
Progressive Practices	21	Does the company offer *tag along* to the minority shareholders?
	22	Does the company publish the "Corporate Governance Annual Report" (as stated by the Aldama Code)?
	23	Does the board have outside advisors?
	24	Do directors term limits exist?
	25	Does mandatory retirement age for directors exist?

APPENDIX 2

Histogram and Normal Curve of the I-GOV - Comparative



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	IBEX-35	N	Mean	Std. Deviation	Std. Error Mean
I-GOV	0	72	12,889	2,934	0,346
	1	25	14,800	1,555	0,311