

CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE OF ITALIAN LISTED FIRMS. THE RESULTS OF AN EMPIRICAL RESEARCH

Matteo Rossi, Marco Nerino*, Arturo Capasso**

Abstract

Corporate governance has become a popular topic in the international scene. The recent financial scandals (Enron, Parmalat, Tyco, and WorldCom) have increased the interest on the relationship between Corporate Governance and performance, due to its apparent importance for the economic health of companies and its effect on society in general. The paper aims to verify a possible relationship between the corporate governance of Italian listed companies and their financial performance. Creating a quality index for corporate governance, called CGQI, we will try to understand if a good corporate governance can lead to better firm results. The target population is composed of all Italian companies listed on the Italian Stock Exchange, in the year 2012. The cross-sectional regression highlights two important results: the negative correlation between Tobin's q and CGQI, and the positive correlation between Return on Equity and CGQI. It is possible to extend the analysis both temporally and spatially, with a comparison between different countries, considering that our index is constructed on the basis of corporate governance guidelines of different countries.

Keywords: Corporate Governance, Financial Performances, Italy, Tobin's Q , ROE, ROA

JEL Code: G34

**University of Sannio*

1 Introduction

Corporate governance represents "the system by which companies are directed and controlled" (Cadbury Report, 1992). It is "the distribution of rights and responsibilities among the different participants in the organization, such as the board, managers, shareholders and stakeholders, and lays down the rules and procedures for decision-making" (OECD, 2004).

Corporate governance has become a popular topic of discussion in the international scene and a number of factors have contributed to increase the focus on this subject: the collapse of a number of corporations, the hostile takeovers, the antisocial behavior of some companies. The widespread belief that corporate governance is able to affect firm performance and increase shareholders protection has therefore led to increasing global attention.

The recent financial scandals (Enron, Parmalat, Tyco, and WorldCom) have increased the interest on the relationship between Corporate Governance and performance, due to its apparent importance for the economic health of companies and its effect on society in general, showing as the implementation of proper corporate governance practices reduces the risk for investors, attracts investment capital and improves corporate performance (Rezaee, 2009).

Furthermore, the current financial crisis and an increasingly competitive business environment have made corporate governance having significant implications for the financial stability and performance of companies.

To understand if implementing an effective corporate governance system could represent a real investment opportunity for the firm, it is essential to measure the quality of the Corporate Governance systems adopted and its impact on firm market value and performance.

Therefore, the main purpose of this research is to analyze how the quality of corporate governance affects the performance of Italian listed companies during the financial crisis in Italy and, through the creation of an our Corporate Governance Quality Index (CGQI), composed by 48 variables, and a cross-sectional regression for the year 2012, to investigate the relationship between firm performance, measured by Tobin's q , Return on Assets and Return on Equity, control variables and those variables of governance on which a company should focus in order to improve its performance.

The paper is organized as follows. First section outlines the literature review on the subject. In the second section we present the research design and methodology and data collection. Finally we present the conclusions and managerial implications.

2 Literature review

The academic world has been shown to be interested in corporate governance, even before the recent scandals. Frequently, the research are focused on one or a few dimensions of corporate governance and examine the relationship between them and some variables that can represent the performance of the company. However, in recent years, a growing interest is devoted to the analysis of the effects of corporate governance on firm performance through the observation of multiple factors and creation of an index, in an attempt to grasp the growing complexity (Gompers et al., 2003; Bebchuk-Cohen-Ferrell, 2004; Aboav et al., 2010).

In particular, Gompers-Ishii and Metrick (2003) developed a quality index, an indicator of protection from hostile takeovers composed by 24 elements of governance, and showed that firms with a limited protection of shareholders had a lower corporate valuation, measured by Tobin's Q, and low equity returns. Bebchuk-Cohen-Ferrell (2004), taking advantage of the IRRC database, constructed an indicator called "entrenchment index", composed by variables of governance all connected to the limitations on voting rights of shareholders and anti-takeover measures. Aboav et al. (2010) analysed the governance quality of Italian Stock Exchange listed firms, and, creating a Corporate Governance Index composed by 76 variables and through a multivariate cluster analysis, showed a positive and statistically significant correlation between governance and firm-value. Following Aboav et al., Bubbico et al. (2012) using their CGI, analysed the governance quality of all Italian financial institutions listed on the Italian Stock Market, finding a positive relationship between corporate governance and market-value of financial institutions.

Therefore, the creation of an index of quality of corporate governance and the analysis of its correlation with the firms performance is more adequate than just consideration of one or a few variables and allows us to understand a phenomenon that in the light of the current crisis is increasingly complex. These reasons justify the choice to adopt this approach and create a new index.

There is no single ideal measure of firm performance, therefore we considered three different measures. On the basis of the literature reported, our research hypothesis are:

H1: There is a positive and statistically significant correlation between corporate governance and firm market value (Tobin's Q)

H2: There is a positive and statistically significant correlation between corporate governance and operating performance (ROE and ROA)

After investigating these relationships, the research will focus on those individual variables of governance that compose our index and have a statistically significant impact on performance.

A first strand of literature has focused on the relationship between the size of Board of Directors and performance.

Board is the "heart" of corporate governance where the outcome of a firm is often determined (Fama and Jensen, 1983; Finkelstein and Hambrick, 1996; Yawson, 2006; Clarke, 2007; Guerra et al., 2009). The principal goal of corporate governance lives on the ability of board to monitor the management avoiding unscrupulous behaviours (Connelly and Limpaphayom, 2004). Berle and Means (1932), in fact, argued that, in practice, managers of firms pursued their own interest rather than the interest of shareholders and highlighted the need to create a set of effective mechanisms to help in resolving the conflict of interests between firm owners and managers improving performance. The board of directors therefore appears the only tool of the company to manage the relationship between shareholders and management (John and Senbet, 1998), but its effectiveness as shareholders monitoring mechanism can only be efficient if bounded with appropriate size, composition and leadership configuration (Lawal, 2012).

Forbes-Milliken (1999) and Goodstein et al. (1994) argued that a greater number of directors provides skills and expertise the individual can't own. In this way boards of larger size can more easily develop new strategic perspectives, counter the power of the CEO and, as stated by Zhara-Pearce (1989), ensure a more effective control over the management. Conversely, Lipton and Lorsch (1992) pointed out that, even if that greater size of the Board increases the monitoring capabilities, the benefits resulting are less than the costs to be incurred: its greater size is, indeed, related to the slowness of decision-making, to the difficulty in coordinating and organizing the team, to the impossibility of maintaining a high motivational level. They recommended a minimum of seven and maximum of nine board memberships.

Jensen (1993), recommending an optimal size of eight, gets to argue that, increasing the size, the boards become less effective transforming themselves, as stated by Hermalin-Weisbach (1991), into organs without any connection with the management process. Therefore, small board size promotes critical, genuine and intellectual deliberation and involvement among members ensuring effective corporate decision making, monitoring and improved performance (Donaldson and Muth, 1998; Lipton and Lorsch, 1992; Jensen, 1993; Yermack, 1996).

Although the idea of negative correlation is predominant: Daily and Dalton (1999) argued that there is a systematic positive correlation between board size and performance, with a higher sensitivity for small businesses. Large board size appear to promote diversity which gives the firm more expertise, experience, skills, resource co-optation, corporate strategy, innovation, creativity and provision of broad services (Dalton et al., 1999; Klein, 2002;

Forbes and Milliken, 1999; Jackling and Johl, 2009; Dalton and Dalton, 2005).

In a second series of studies researchers try to identify a link between the composition of the Board of Directors (measured as a percentage of outside non-executive directors on internal executive directors, directors of the female gender or of different ages, ethnicity and nationality) and corporate performance. Some studies have attempted to assess the contribution of the independent directors, the presence of which is stimulated by the laws of many countries and, even more strongly, by the Codes of best practice. They assume, inspired by the agency theory, that if the component of the independent directors is prevalent, control is more effective. A board could be considered independent if composed by more non-executive directors that do not have material connection with the firm such as family ties, financial relationship, employment, professional services, and interlocked directorship amongst others with the management (Ayuso and Argandoña, 2007). Baysinger and Butler (1985) observe the presence of the best performance in firms whose board includes a higher number of independent directors. However, Yermack (1996) and Bhagat and Black (1999) argue, the presence of a negative relationship between the proportion of independent directors and the company's performance.

Other studies have evaluated the contribution of non-executive directors. Inside directors participate directly in the day to day management of the firm while outside non-executive directors provide check and balances in ensuring that shareholders' interests are protected (Donaldson and Muth, 1998; Wan and Ong, 2005; Klein 2002) and are ready to oppose to that corporate strategy isn't in the interest of shareholders. (John and Senbet, 1998; Laing and Weir 1999). Vafeas and Theodorou (1998), and Laing and Weir (1999), however, show a negative relationship between the presence of non-executive directors and the performance of the investigated companies.

As the European Commission (2011) argued the non-executive members should be selected in the light of specific criteria such as merit, qualifications, experience, personal qualities, independence, gender and geographical origin. In this way, the board of directors would be able to acquire values, points of view, skills and ideas that promote and enrich the debate, preventing the so called "Group-think" (which is the flattening towards a sort of 'collective thinking' not differentiated) and thus potentially improving the quality of decisions (Consob, 2013).

Firstly, the presence of different professional skills within the board of directors is an essential aspect so that the board can effectively carry out its work: different skills let the board better understand the complexity of international markets, the financial goals of the companies, as well as the impact of the activities carried out for the interests of various stakeholders, etc.. Secondly the different geographical origin of the members of the board of directors -

particularly in relation to international companies - appears to be a further significant element that allows the company to have a better understanding of regional markets in which it operates. Although some companies have, however, shown some critical issues related to the different geographical origin of its members (the problems would arise from different cultures and different languages), the European Commission (2011) showed that, even today, on a sample of European listed companies of large size, on average, 29% of board members belonging to countries other than where the company is based.

The third aspect of the composition of the board of directors, discussed in the Green Paper, is the gender diversity. According to data collected by the Commission, the percentage of women on the boards of directors of listed European companies is on average approximately 12%. Although the existence of a causal relationship between the percentage of women on the board of directors and corporate performance is not demonstrated, the presence of women on boards would have, according to the Commission, a positive effect and help to increase the pool of resources from which to draw talents. In addition, there is evidence that women have a different leadership style than men and this factor is one of several tools available to the company to resolve the mentioned problem of "group-think".

There are many works that attempt to estimate the impact of a significant number of women at the top of firms on some variables related to performance, especially after the introduction of gender quotas on company boards in some European countries. The results on the indicators of profitability or market performance are very heterogeneous.

Many analysis identified a positive relationship between the share of women managers or top executives and the performance of firms. Some more recent studies suggest that shareholders assess positively the nomination of women directors in the case of Australia (Adams et al., 2011); in general more women would ensure a greater "monitoring" of the management (Adams and Ferreira, 2009), with positive effects for companies with weaker governance but negative for the other. Companies with more women in the board of directors seem to benefit from a more "stringent" governance, although approximated by very simplified indicators such as the frequency of meetings of the Board.

However, a more rigorous monitoring does not always lead to better performance. Adams and Ferreira (2009) argued that a tougher monitoring, more incentive alignment, and potentially greater participation by directors in decision making could have both positive and negative effects on corporate performance. In particular, too much board monitoring can decrease shareholder value. Adams and Ferreira (2009) point out that greater interference by directors in decision making could lead to a breakdown in communication between managers and directors, so

gender diversity could negatively affect performance. If firms have otherwise strong governance, having a tough board could lead to over monitoring. But if firms have otherwise weak governance, tough boards could be particularly valuable.

Object of interest is also the presence of busy directors, directors who hold executive positions in several boards; even in this case the results are not unique. Beasley (1996) and Fich-Shivadasani (2004) argue that the presence of a number of directors who sit on several boards represents an element of weakness in the corporate governance of companies. Ferris et al. (2002) argue that participation in numerous boards does not affect its ability to fulfill the tasks and responsibilities of the directors. Harris and Shimizu (2004), finally, argue that the directors participating in several boards represent a resource of experience and expertise to the company.

Other studies, inspired by Fama-Jensen (1983), assert that firms characterized by a concentrated structure of leadership (duality) have worse performance because the CEO is able to more easily pursue personal interests to the detriment of the interests of shareholders. Baliga et al. (1996), affirm that the concentration of power is an impediment to the task of supervision of the Board of Directors and evoke a separation of the leadership roles. According to the Agency theorists, CEO Duality creates imbalance in corporate power distribution as heavy concentration of management and control resides with one person which tend to jeopardise board effectiveness (Eisenhardt, 1989). This imbalance makes it inevitably difficult for the corporate board to provide appropriate monitoring or even institute punitive measure against erring CEO due to absence of independence (Jensen and Fama, 1983; Brickley et al., 1997; Keller et al., 2006; Dalton and Kesner, 1987; Shivdasani and Yermack, 1999; Goyal and Park, 2002; Wan and Ong, 2005; Dayton, 1984). Agency theorists thus, argued that the separation of the two positions will reduce the agency cost and promote corporate transparency and accountability (Weir and Laing, 2001). For this reason, the separation of the position of CEO and that of Board Chair is recommended in most corporate governance guidelines around the world (Italian Corporate Governance Code of Best Practices, Borsa Italiana, 2011; Global Principles of accountable Corporate Governance, 2011; OECD Principles of Corporate Governance, 2004 etc).

On the basis of the literature reported, our further research hypothesis are:

H3: There is a negative and statistically significant correlation between board size and performance.

H4: There is a positive and statistically significant correlation between the presence of independent directors and firm performance.

H5: There is a negative and statistically significant correlation between the separation of the

position of CEO and that of Board Chair and firm performance (no Ceo duality).

H6: There is a positive and statistically significant correlation between the institution of the Lead Independent Director and firm performance.

H7: There is a positive and statistically significant correlation between the adoption of the Italian Corporate Governance Code of Best Practices (comply or explain) and firm performance

3 Research design and methodology

The object of the analysis is to verify a possible relationship between the corporate governance of Italian listed companies and their business performance. In summary, creating an our quality index for corporate governance, called Corporate Governance Quality Index (CGQI), we will try to understand if a good corporate governance can lead to better business results, and consequently competitive advantages against competitors.

Therefore in this section, the target population, the sample and the model used are presented, illustrating the variables that compose the CGQI index, the areas they are grouped in and their relative impact on the results in the scoring model.

3.1 Sampling and data collection

In order to study the effect of Corporate Governance on the performance of listed companies in Italy, the target population is composed of all Italian companies listed on Borsa Italiana, the Italian Stock Exchange, in the year 2012, for which the report on corporate governance, remuneration, transactions with related parties, and the statute, are available on the website of Borsa Italiana or on the company's website.

The initial dataset used for the analysis was composed of 256 firms. The first necessary step was to remove from the sample of the analysis those listed companies for which it was not possible to find the related reports. The second necessary step was to remove those firms that did not adopt a traditional model of corporate governance, but the monistic or dualistic one (only 8 companies), which have characteristics too different from the majority of companies, and this could affect the validity of the analysis.

The cleaned dataset, therefore, is made of 215 firms, all adhering to the traditional model of governance. The scoring model used for the assessment of the quality of the Corporate Governance system requires in input only data which is publicly available. The documents used to collect data are the annual report, the corporate governance, remuneration and transactions with related parties reports, the statute; in limited number of cases, also internal dealing report and the ethical code are used.

3.2 The variables

In order to study the relationship between corporate governance and performance, we proceed to the creation of an index of quality (CGQI index) composed by 48 variables, that have been selected on the basis of:

1. Paper of economy and finance, Banca d'Italia, 2013;
2. Italian Corporate Governance Code of Best Practices, Borsa Italiana, 2011;
3. Global principles of accountable Corporate Governance, CalPERS (The California Public Employees' Retirement System), 2011;
4. Green Paper, European Commission, 2011;
5. Principles of Corporate Governance, OECD, 2004;
6. Literature on the subject (Bubbico et al., 2012; Bussoli, 2009; Baghat et al. 2008; Drobotz et al. 2004; Brown, 2003; Gompers et al. 2003).

These variables can be grouped into three categories:

1. dummy variables assuming value 0 or 1;
2. percentage variables assuming value in percentage format;
3. statistical index : The Gini index of heterogeneity

Inspired by Aboav et al. (2010), all the variables are grouped in 3 macro areas: Board, Compensation, Shareholder and Stakeholder's Rights.

The Board area analyses the organizational structure, composition and functioning of the board of directors and other committees; for instance, the board dimension, the age, professional background, geographical and gender diversity of board members, the board structure in terms of presence of executive, non-executive and independent members, the presence of various committees and their characteristics, the adoption of the Italian Corporate Governance Code of Best Practices etc.

The Compensation area analyses the instruments implemented to align directors' interests with shareholders' interests; the type and quality of remunerations of executive, non executive directors and top management are investigated.

The Shareholder and Stakeholders' Rights area analyses the level of protection for shareholders and stakeholders; for instance, the presence of poison pills, golden, pension and silver parachutes, greenmail, the annual election of directors etc.

The table 1 lists the variables used in the analysis.

Table 1. Variables of governance

	Variables
Board area	1. Size of the board: no fewer than 6 and no more than 15 members
	2. Percentage of non-executive directors
	3. Percentage of independent directors
	4. Age diversity of the Board members
	5. Professional diversity of directors
	6. Different geographical origin of directors
	7. Gender diversity of directors
	8. Percentage of "busy" directors: more than 5 positions in other companies
	9. Percentage of directors elected by the minority shareholders
	10. Percentage of auditors elected by the minority shareholders
	11. The president of the Board of auditors is elected by the minority shareholders
	12. Natural logarithm of the number of meetings of the Board of directors
	13. Natural logarithm of the number of meetings of the Board of auditors
	14. Director Attendance: at least 75% of the board and key committee meetings, or a valid excuse for non-attendance
	15. Independent Executive Session: at least one time per year
	16. Presence of the Nomination Committee
	17. Presence in the Nomination Committee of a majority of independent directors
	18. Presence of the remuneration committee
	19. Presence in the Remuneration Committee of only independent directors
	20. Alternatively presence in the Remuneration Committee of non-executive directors, the majority of whom are independent. The chairman of the committee in this case must be chosen among independents
	21. At least one member of the Remuneration Committee has knowledge and experience in financial matters or compensation policies
	22. Natural logarithm of the number of meetings of Remuneration Committee
	23. Presence of the Control and Risks Committee
	24. Presence in the Control and Risks Committee of only independent directors

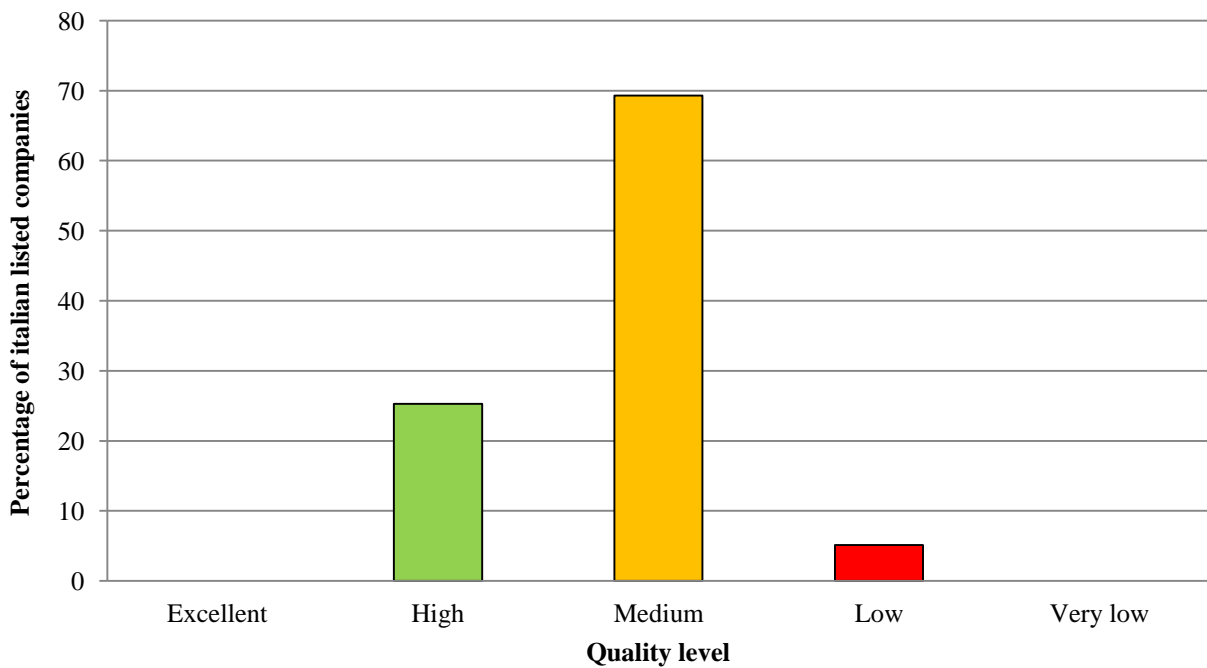
Table 1. Variables of governance (continued)

	25. Alternatively presence in the Control and Risks Committee of non-executive directors, the majority of whom are independent. The chairman of the committee in this case must be chosen among independents
	26. At least one member of the Control and Risks Committee has knowledge and experience in accounting and finance or risk management
	27. Natural logarithm of the number of meetings of Control and Risks Committee
	28. Separation between President of the board and Ceo
	29. Institution of the Lead Independent Director between the directors of the company
	30. Adoption of the Italian Corporate Governance Code of Best Practices (comply or explain)
	31. Presence of an accounting firm chosen by the companies among the "Big Four": PricewaterhouseCoopers - Deloitte & Touche - Ernst & Young – KPMG
Compensation Area	32. Remuneration of executive directors is composed by fixed and variable components (mix of cash and equity): they receive all or a portion of their fees in stock (es. stock options)
	33. There are maximum limits for the variable component of remuneration
	34. Temporal deferral of the variable remuneration: Vesting Period of at least three years
	35. Mechanisms of share retention, lock up: directors are obliged to maintain, until the end of the mandate, a portion of the shares acquired by exercising those rights (e.g. stock options, phantom stock)
	36. Option repricing should be prohibited
	37. "Evergreen" or "Reload" provisions should be prohibited
	38. Clawback Policy: Companies should recapture incentive payments that were made to executives on the basis of having met or exceeded performance targets during a period of fraudulent activity or a material negative restatement of financial results for which executives are found personally responsible
	39. Non-executive directors are not beneficiaries of share-based compensation plans, only fixed component, not variable
Shareholder and Stakeholders' Rights area	40. Shareholder Approval: shareholder vote on the report on remuneration (the so-called principle say on pay)
	41. One share one vote: all investors must be treated equitably
	42. Poison pill (e.g. golden, pension and silver parachutes etc) should be prohibited
	43. Greenmail should be prohibited
	44. Annual directors election: every director should be elected annually
	45. Election of the investor relator and possibility to find his contact on the company website
	46. Shareholders approval in the case of transactions with related parties (excluding the related shareholder vote) representing + 5% of the company asset or that have a significant impact on profits or turnover. ("Whitewash")
	47. Adoption of the passivity rule, art. 104 of the Italian Financial Code
48. Adoption of the breakthrough rule, art. 104-bis of the Italian Financial Code	

The quality of governance of the companies analyzed is expressed by the sum of the values assumed by the variables in the year 2012. Therefore, the Index values range between 0 and 65 points. To better understand the quality of corporate governance of each company we express an evaluation based on 4 categories: excellent, high, medium, low and very low.

The Figure 1 underlines that the majority of Italian listed companies, in total the 94,88 %, adopt a governance model of a medium-high quality, confirming an Italian context characterized by tougher laws on the subject, better shareholders defense mechanisms and a more rigid control exercised by the creditors.

Figure 1. The quality of governance of the sample in 2012



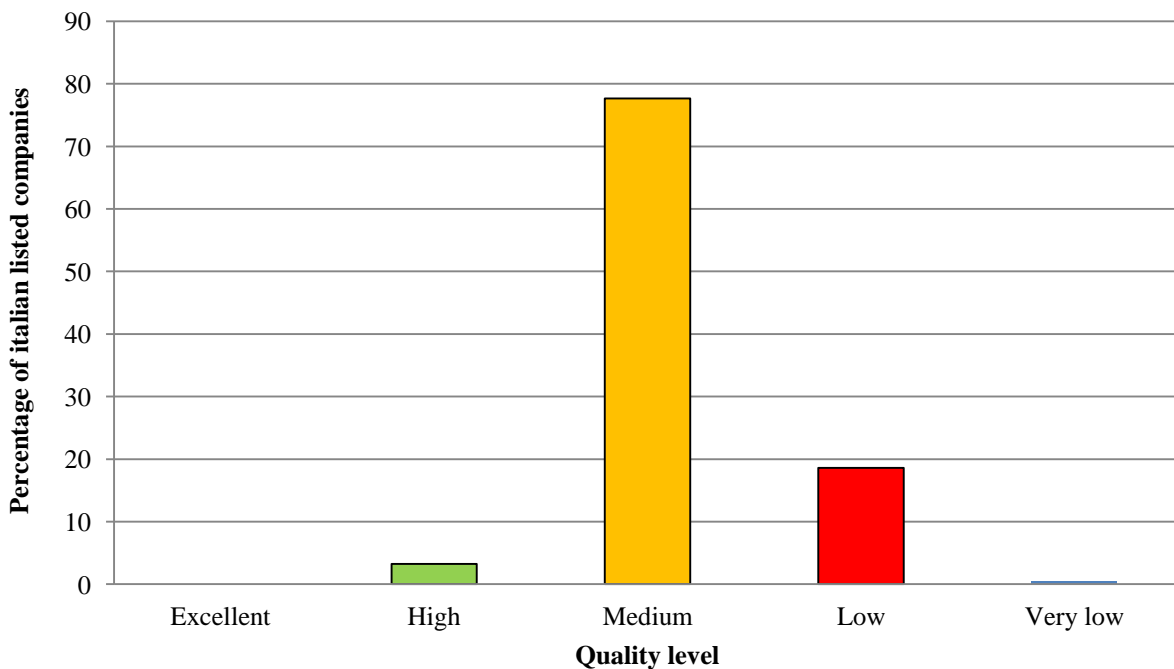
Below is the incidence of each area of analysis on the final score, in order to identify the strengths and weaknesses, in terms of governance, of Italian listed companies.

The Board area is composed by 31 variables. It ranges between 0 and 50 points. To better understand the quality of the board and other committees characteristics, for each company, we express an

evaluation based on 4 categories: excellent, high, medium, low and very low.

The majority of Italian listed companies, in total the 80.93%, adopt a structure, organization and composition, of the different boards and committees, of a medium-low quality, while only 7 companies, the 3.26%, comply with the recommendations of the codes of best practices used in the analysis.

Figure 2. The Board area quality of the sample in 2012

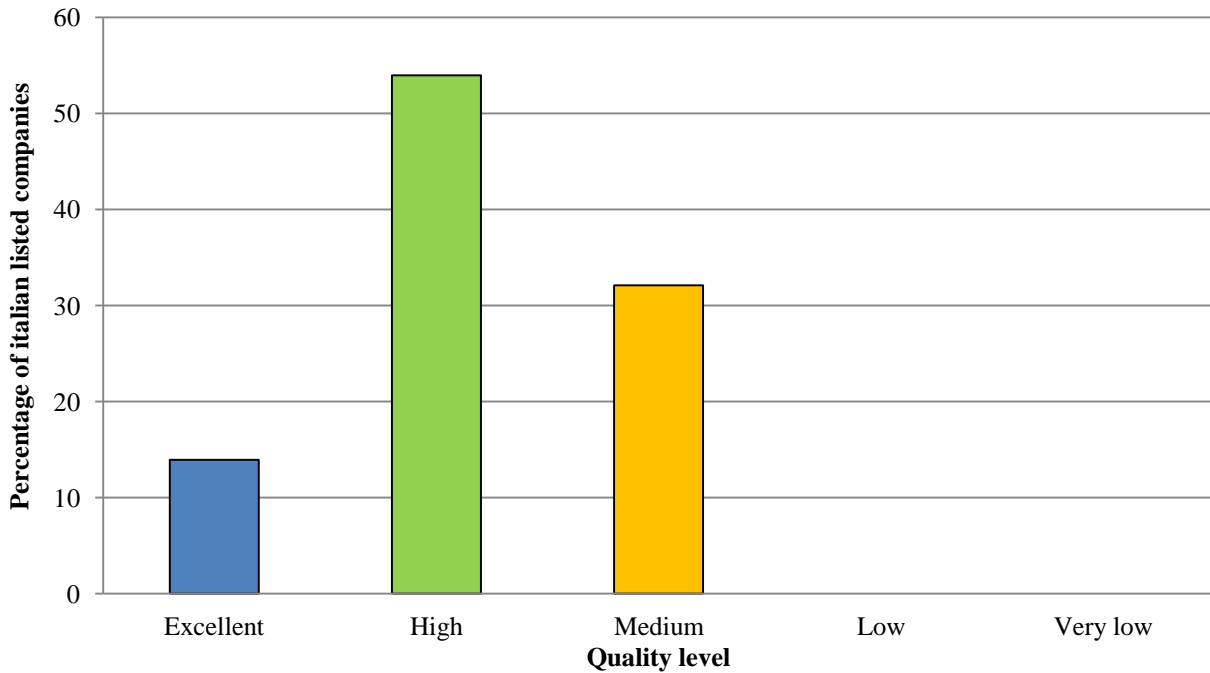


The Compensation area is composed by 9 variables. It ranges between 0 and 9 points being composed by only dummy variables.

Results underline that all Italian listed companies adopt an adequate system of remuneration in accordance with the recommendations of the codes of

best practices used in the analysis, and therefore able to meet the need for an alignment of interests between shareholders and management. The 13.95 % of companies fully complies with the principles of best practices, while the 86.04 % guarantees a system of remuneration of medium-high quality.

Figure 3. The Compensation area quality of the sample in 2012

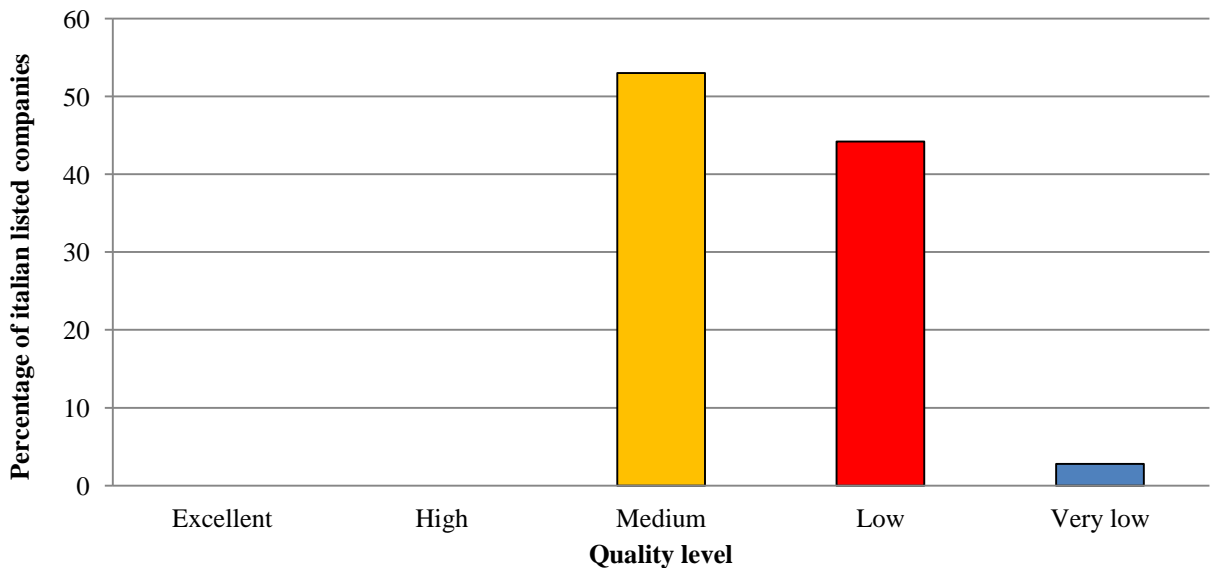


The Shareholder and Stakeholders' Rights area is composed by 8 variables. It ranges between 0 and 8 points being composed by only dummy variables.

Results underline that in the majority of Italian listed companies, in total the 97.21%, the protection of shareholder and Stakeholders' rights is medium-low,

while in only 7 companies, the 2.79%, it is very low, not being complied with the recommendations of the codes of best practices used in the analysis. Of the three areas considered, this is the one that would need increased efforts.

Figure 4. The Shareholder and Stakeholders' Rights area quality of the sample in 2012



Therefore, analyzing the corporate governance index of the sample, it turned out that the majority of Italian listed companies adopt an efficient model of governance, where the compensation system is a point of strength, and improvements should be made in the structure and functioning of boards and committees, but especially in the protection of stakeholder and shareholders' rights (e.g. poison pills).

The descriptive analysis of the variables considered in our governance index highlights that the board of directors is composed on average by 10 members, the composition of the boards analyzed is characterized on average by a sufficient number of independent and non-executive directors, over 50%, a good heterogeneity in terms of professional background and age, 0.81 and 0.75 respectively, but low diversity in terms of gender and geographical origin, 0.38 and 0.16 respectively in a range between 0 and 1 (the Gini index of heterogeneity), and low presence of members elected by the minority shareholders, on average fewer than 20%. The adoption of the Italian Corporate Governance Code of Best Practices is high, on average the 92% of the Italian listed companies, and there is a good efficiency of the boards in terms of number of meetings held.

While the Board area has on average high percentages, other areas analyzed, the Compensation area and Shareholder and Stakeholders' Rights area, as shown in the previous paragraph, have the lowest percentages, demonstrating the need to make greater efforts in these. In particular, unsatisfactory results have been observed regarding the presence of maximum limits for the variable component of remuneration, vesting period of at least three years, mechanisms of share retention (lock up), poison pills, adoption of the breakthrough rule (art. 104-bis of the Italian Financial Code), annual directors election, shareholders approval in the case of transactions with related parties ("Whitewash").

3.3 Research methods

In order to verify the existence of a relationship between corporate governance and performance, in accordance with the literature, we use a cross-sectional econometric model (OLS), in which the dependent variable is represented alternatively by accounting or market-based performance measures.

Therefore, the following regression model has been used:

$$Y_{ik} = \alpha + b_1CGQI_i + b_2OC_i + b_3SG_i + b_4\ln(CAP)_i + b_5\ln(AGE)_i + b_6ET_i + b_7FO_i + u_i \quad (1)$$

$$u_i = a_i + \varepsilon_i$$

Where: Index $i = 1, \dots, 215$ identifies the listed Italian companies included in the analysis;

Y_{ik} is a measure of performance expressed through k independent variables;

b_1, b_2, \dots, b_7 are the parameters that must be estimated with the model;

α is the constant of the model;

u_i is the error term and it is the sum of firm specific effect (a_i) and white noise (ε_i).

The model variables are hereinafter described.

The dependent variables are:

1. Return on Assets (ROA). This parameter suggests how efficient management is at using its assets to generate earnings. It is calculated as the ratio between net income and the value of the assets.

$$ROA = \frac{Net\ Income}{Total\ Assets} \quad (2)$$

2. Return on Equity (ROE). This parameter measures accounting earnings for a period of shareholders' equity invested. It is calculated as the

ratio between net income and the value of shareholders' equity.

$$ROE = \frac{Net\ Income}{Equity} \quad (3)$$

3. Tobin's Q (Q_i), defined as the ratio between the market value of a firm and the cost of the share buy-back; in this work is calculated, using a proxy from the literature reference (Bussoli, 2009; Selvam, 2006; Peni e Vähämaa, 2010; Mayur Saravanan, 2006; Grove et al., 2010), as:

$$Q_i = \frac{Total\ Assets - Book\ value\ of\ equity + Market\ Capitalization}{Total\ Assets} \quad (4)$$

These dependent variables are considered alternately, then the model is replicated three times. Below are the regression equations considered:

$$Q_i = \alpha + b_1CGQI_i + b_2OC_i + b_3SG_i + b_4\ln(CAP)_i + b_5\ln(AGE)_i + b_6ET_i + b_7FO_i + u_i \quad (5)$$

$$ROA_i = \alpha + b_1CGQI_i + b_2OC_i + b_3SG_i + b_4\ln(CAP)_i + b_5\ln(AGE)_i + b_6ET_i + b_7FO_i + u_i \quad (6)$$

$$ROE_i = \alpha + b_1CGQI_i + b_2OC_i + b_3SG_i + b_4\ln(CAP)_i + b_5\ln(AGE)_i + b_6ET_i + b_7FO_i + u_i \quad (7)$$

The independent variables, chosen considering the reference literature (Bubbico et al., 2012), are listed below:

1. $CGQI_i$ is our Corporate Governance Quality Index, composed by 48 variables;
2. OC_i is the ownership concentration, measured by Cr4 index, and its effect on the value is not clear; in fact, high concentration is expected to produce high monitoring exercised by the controlling shareholders over the management (Sheifer and Vishny, 1986), and therefore better performances, but, at the same time, have also a negative impact on value in the case of minority expropriation from controlling shareholders;
3. SG_i is the annual sales growth rate; a high sales growth rate can affect positively company value, because it means the company has been able to catch better investment opportunities (Lehman et al., 2000), but, simultaneously, lead the company to incentivize managers to invest in projects that increase the dimension but not the profitability;
4. $\ln(Cap)_i$ is the natural logarithm of market capitalization. Large size allows to exploit economies of scale (Baumol, 1959) but could also produce worse performance due to organization inefficiency (Leibenstein, 1966);
5. $\ln(AGE)_i$ is the natural logarithm of years since IPO. This variable allows to take into account

the experience of the company on capital markets. A negative coefficient could be expected because more recently listed firms are likely to be faster-growing, and perhaps more intangible asset-intensive (Black et al., 2003);

6. ET_i is the capital structure defined as Equity over Total Assets. A negative relationship could be expected, because financing with the debt could incentivize managers to operate in an efficient manner (Grossman and Harte, 1982; Jensen, 1986);

7. FO_i is the Foreign ownership. The presence, among significant shareholdings (> 2% of equity), of foreign investors could have a positive influence on performance, due to a more stringent control over the management.

It can be noted that, except $CGQI_i$, these variables are control variables not related to corporate governance and are used in the model in order to account for other effects on firm value.

3.4 Results

The results of the econometric model are shown below, starting from the first of the three equations of regression considered:

$$Q_i = \alpha + b_1CGQI_i + b_2OC_i + b_3SG_i + b_4\ln(CAP)_i + b_5\ln(AGE)_i + b_6ET_i + b_7FO_i + u_i \quad (8)$$

Where Index $i = 1, \dots, 215$ identifies the listed Italian companies included in the analysis;

Q_i is the Tobin's Q;

b_1, b_2, \dots, b_7 are the parameters that must be estimated with the model;

α is the constant of the model;

u_i is the error term and it is the sum of firm specific effect (a_i) and white noise (ϵ_i).

Table 2. First Cross-Sectional regression for the 2012

	Independent variables	b_i	Std. Error	t-ratio	P-value
Tobin's Q	$CGQI_i$	-0,6321	0,2522	-2,51	0,013**
	$\ln(Cap)_i$	0,16407	0,02362	6,94	0,000***
	$\ln(AGE)_i$	-0,12866	0,05154	-2,5	0,013**
	ET_i	-1,0858	0,1621	-6,7	0,000***
	R-SQUARED	37,5%			

Note: ***, **, and * indicate 1, 5 and 10% significance levels, respectively. In this analysis, we considered the natural logarithm of Tobin's q and the index of governance in order to increase the linearity and the effectiveness of the model.

The table 2 shows some important evidences:

- The first research hypothesis H1 is not confirmed. The regression analysis shows a negative and statistically significant correlation (*coefficient* = -0.6321 and *p-value* = 0.013) between Tobin's Q and Corporate Governance. A reason of this result may be due to the fact that managers of firms pursue their own interest rather than the interest of shareholders, as stated by the agency theory, and have incentives to invest firm's resources undertaking projects that bring benefits to them, but have a negative impact on shareholders wealth (Berle and Means, 1932; Jensen and Meckling, 1976; Fama and Jensen, 1983), focusing on the increase and the maximization of the

firm's market-value (Q_i) in the short term, thereby diverting the attention from medium and long term to the detriment of shareholders and stakeholders. Indeed there is a negative and significant correlation between the quality of the *Compensation* area (*coefficient* = -0.3851 and *p-value* = 0.072), the *Shareholder and Stakeholders' Rights* area (*coefficient* = -0.3429 and *p-value* = 0.008) and Tobin's Q. This highlights as a strict compensation system, characterized by limits to the variable components of the remuneration, vesting period of at least 3 years and mechanism of share retention and lock up, leads, at least potentially, to managerial behavior oriented towards maximizing value for shareholders over the long term, avoiding speculative operations in the short term. Furthermore

the greater protection of shareholders' rights leads to a efficient and non-speculative behavior of the management in order to reduce the risk of being the subject of a hostile takeover and be replaced. Therefore, the structure of the remuneration and the protection of Shareholder and Stakeholders' rights should promote sustainability in the medium and long-term, but this could have a negative effect on firm's value in the short term.

This negative relationship may also be explained by the fact that companies with a low market-value should implement a better system of governance in order to appear more attractive on the stock market;

The table 3 shows the relationship between the different areas of governance considered in our analysis and Tobin's q and confirms the results shown in the Table 2.

Table 3. First Cross-Sectional regression for the 2012 – areas of governance

Tobin's Q	Independent variables	b_i	Std. Error	t-ratio	P-value
	Compensation area	-0,3851	0,2126	-1,81	0,072*
	Shareholder and Stakeholders' Rights area	-0,3429	0,1287	-2,66	0,008***
	$\ln(\text{Cap})_i$	0,16235	0,02381	6,82	0,000***
	$\ln(\text{AGE})_i$	-0,12726	0,05119	-2,49	0,014**
	ET_i	-1,1067	0,162	-6,83	0,000***
	R-SQUARED	39,3%			

Note: ***, **, and * indicate 1, 5 and 10% significance levels, respectively. In this analysis, we considered the natural logarithm of Tobin's q and the index of governance in order to increase the linearity and the effectiveness of the model.

Hereinafter the results of the second equation of regression considered are shown.

$$ROA_i = \alpha + b_1CGQI_i + b_2OC_i + b_3SG_i + b_4\ln(CAP)_i + b_5\ln(AGE)_i + b_6ET_i + b_7FO_i + u_i \quad (9)$$

Where Index $i = 1, \dots, 215$ identifies the listed Italian companies included in the analysis;

ROA_i is the Return on Assets ;

b_1, b_2, \dots, b_7 are the parameters that must be estimated with the model;

α is the constant of the model;

u_i is the error term and it is the sum of firm specific effect (a_i) and white noise (ϵ_i).

Table 4. Second Cross-Sectional regression for the 2012

ROA	Independent variables	b_i	Std. Error	t-ratio	P-value
	SG_i	0,022359	0,009369	2,39	0,019**
	$\ln(\text{Cap})_i$	1,3744	0,8088	1,7	0,092*
	R-SQUARED	14%			

Note: ***, **, and * indicate 1, 5 and 10% significance levels, respectively. In this analysis, we considered the natural logarithm of the index of governance in order to increase the linearity and the effectiveness of the model.

The table shows an important evidence:

- The second research hypothesis H2 is not fully confirmed. There is not a statistically significant correlation between Return on Assets and our Corporate governance index ($CGQI_i$);

Results show the relationship between the different areas of governance considered in our analysis and Return on Assets and confirms the results shown in the Table 4.

Hereinafter the results of the third equation of regression considered are shown.

$$ROE_i = \alpha + b_1CGQI_i + b_2OC_i + b_3SG_i + b_4\ln(CAP)_i + b_5\ln(AGE)_i + b_6ET_i + b_7FO_i + u_i \quad (10)$$

Where Index $i = 1, \dots, 215$ identifies the listed Italian companies included in the analysis;

ROE_i is the Return on Equity ;

b_1, b_2, \dots, b_7 are the parameters that must be estimated with the model;

α is the constant of the model;

u_i is the error term and it is the sum of firm specific effect (a_i) and white noise (ϵ_i).

Table 5. Third Cross-Sectional regression for the 2012

ROE	Independent variables	b_i	Std. Error	t-ratio	P-value
		$CGQI_i$	13,367	7,404	1,81
	OC_i	3,667	1,901	1,93	0,055*
	ET_i	403,9	138,1	2,92	0,004***
	R-SQUARED	8,4%			

Note: ***, **, and * indicate 1, 5 and 10% significance levels, respectively. In this analysis, we considered the natural logarithm of the index of governance in order to increase the linearity and the effectiveness of the model.

The table shows an important evidence:

- The second research hypothesis H2 is partially confirmed. There is a positive and statistically significant correlation (coefficient = 13.367 and p-value = 0.073) between Return on Equity and our corporate governance index ($CGQI_i$). This result is in accordance with Gompers et al. (2003), Drobetz et al. (2004), Aboav et al. (2010), Bubbico et al. (2012), which founded a positive relationship between governance and performance, and it can be analyzed with the result found for Tobin's q. A good governance leads, at least potentially, to a efficient and non-speculative behavior

of the management, so a lower firm market-value (Q_i) in the short-term, but at the same time better operating performance (ROE_i);

Results show the relationship between the different areas of governance considered in our analysis and Return on Equity and confirms the results shown in the Table 5.

After investigating these relationships, the tables 6, 7, 8 show those individual variables of governance that compose our index and have a statistically significant impact on performance. The research will focus only on those variables most discussed in the literature.

Table 6. First Cross-Sectional regression for the 2012 – variables of governance

Tobin's Q	Variables of governance	b_i	Std. Error	t-ratio	P-value
	Independent Executive Session: at least one time per year	0,3577	0,2092	1,71	0,093*
	No Ceo duality: separation between President of the board and Ceo	0,4736	0,2354	2,01	0,049**
	Institution of the Lead Independent Director	0,4930	0,2631	1,87	0,066*
	Option repricing should be prohibited	1,5441	0,7915	1,95	0,056*
	Poison pill (e.g. golden, pension and silver parachutes etc) should be prohibited	0,5383	0,2532	2,13	0,038**
	Adoption of the passivity rule, art. 104 of the Italian Financial Code	-0,7312	0,2552	-2,87	0,006***
	SG_i	0,00092	0,0004	2,17	0,035**
	$\ln(\text{Cap})_i$	0,20735	0,0450	4,61	0,000***
	$\ln(\text{AGE})_i$	-0,3176	0,1019	-3,12	0,003***
	ET_i	-0,8514	0,3388	-2,51	0,015**
R SQUARED	75,2				

Note: ***, **, and * indicate 1, 5 and 10% significance levels, respectively

Table 7. Second Cross-Sectional regression for the 2012 – variables of governance

ROA	Variables of governance	b_i	Std. Error	t-ratio	P-value
	Number of board directors	1,4741	0,8482	1,74	0,088*
	Size of the board: no fewer than 6 and no more than 15 members	15,023	4,851	3,10	0,002***
	Professional diversity of directors	-21,9	10,73	-2,04	0,046**
	Gender diversity of directors	-13,078	7,19	-1,82	0,075*
	Natural logarithm of the number of meetings of the Board of directors	-14,064	6,896	-2,04	0,046**
	Presence of an accounting firm chosen by the companies among the "Big Four"	13,247	7,039	1,88	0,065*
	One share one vote: all investors must be treated equitably	7,135	4,267	1,67	0,097*
	SG_i	0,04581	0,01217	3,76	0,000***
	R SQUARED	65,4%			

Note: ***, **, and * indicate 1, 5 and 10% significance levels, respectively

Table 8. Third Cross-Sectional regression for the 2012 – variables of governance

ROE	Variables of governance	b_i	Std. Error	t-ratio	P-value
	Professional diversity of directors	355,9	205,4	1,73	0,085*
	Presence of the remuneration committee	451,6	254,5	1,77	0,078
	Natural logarithm of the number of meetings of Control and Risks Committee	195,7	107	1,83	0,070*
	Adoption of the Italian Corporate Governance Code of Best Practices (comply or explain)	619,2	222,3	2,79	0,006***
	Mechanisms of share retention, lock up	256,3	120,1	2,13	0,035**
	Shareholders approval in the case of transactions with related parties (“Whitewash”)	308,2	149,2	2,07	0,041**
	OC_i	171,4	102	1,68	0,095*
	$\ln(\text{Cap})_i$	4,951	2,053	2,41	0,017**
R SQUARED	53,4%				

Note: ***, **, and * indicate 1, 5 and 10% significance levels, respectively

The tables show some important evidences:

- The third research hypothesis H3 is not confirmed. There is a positive and statistically significant correlation (coefficient = 1.4741 and p-value = 0.088) between Return on Assets and the size of the Board of directors. The result is in accordance with researchers like Forbes-Milliken (1999) and Goodstein et al. (1994), which argued that a greater number of directors provides skills and expertise the individual can't own. In this way boards of larger size can more easily develop new strategic perspectives, counter the power of the CEO and, as stated by Zhara-Pearce (1989), ensure a more effective control over the management. In addition, Daily-Dalton (1992) argued that there is a systematic positive correlation between board size and performance, with a higher sensitivity for small businesses. Therefore large board size promotes diversity which gives the firm more expertise, experience, skills, resource co-optation, corporate strategy, innovation, creativity and provision of broad services (Dalton et al., 1999; Klein, 2002; Forbes and Milliken, 1999; Jackling and Johl, 2009; Dalton and Dalton, 2005).

Furthermore, there is a positive and statistically significant correlation (coefficient = 15.023 and p-value = 0.002) with a size of the Board of directors comprised between a minimum of six and a maximum of fifteen members. The significance of this variable is very high (p-value < 0,01) and leads us to suggest creating boards of directors respecting that range. This result partly confirms the suggestions of the literature. Lipton and Lorsh (1992) recommended a minimum of seven and maximum of nine board memberships. Shaw (1981) suggested board size of five; Bennedson et al. (2008) argued that optimal board size is a function of many variables such as firm age, size, industrial classification as well as the degree of monitoring and value addition required amongst others (Connelly and Limpaphayom, 2004); Jensen (1993) recommended an optimal size of eight;

- H4 is partially confirmed. There is a positive and statistically significant correlation (coefficient = 0.3577 and p-value = 0.093) between Tobin's Q and

Independent Executive Session (at least one time per year). For Independent Executive Session we mean periodical meetings of the independent directors (at least once a year) without the CEO and the other directors. Some studies have attempted to assess the contribution of the independent directors, the presence of which is stimulated by the laws of many countries and, even more strongly, by the Codes of best practice. They assume, inspired by the agency theory, that if the component of the independent directors is prevalent, control is more effective. In particular, Baysinger and Butler (1985) observe the presence of the best performance in firms whose board includes a higher number of independent directors. In our work, we have not found a statistically significant correlation between performance and number of independent directors and we cannot affirm that a positive or negative relationship exists, but this result shows partly as independent directors have a positive influence, at least indirectly, on performance. A reason of this result could be that more independent executive sessions during the year let independent directors discuss more on management performance, exchange ideas and make a more effective control over the management;

- The fifth research hypothesis is not confirmed. There is a positive and statistically significant correlation (coefficient = 0.4736 and p-value = 0.049) between Tobin's Q and the separation of the positions of CEO and Board Chair (absence of CEO duality). This result is in accordance with Fama-Jensen (1983), Baliga et al. (1996), Yermack (1996), Daily-Dalton (1998) and Mazzotta (2008). According to the Agency theorists, CEO Duality creates imbalance in corporate power distribution as heavy concentration of management and control resides with one person which tend to jeopardise board effectiveness (Eisenhardt, 1989), so the CEO is able to more easily pursue personal interests to the detriment of the interests of shareholders. This imbalance makes it inevitably difficult for the corporate board to provide appropriate monitoring or even institute punitive measure against erring CEO due to absence

of independence (Jensen and Fama, 1983; Brickley et al., 1997; Keller et al., 2006; Dalton and Kesner, 1987; Shivdasani and Yermack, 1999; Goyal and Park, 2002; Wan and Ong, 2005; Dayton, 1984). Agency theorists thus, argued that the separation of the two positions will reduce the agency cost and promote corporate transparency and accountability (Weir and Laing, 2001). Therefore the separation of the position of CEO and that of Board Chair is recommended in most corporate governance guidelines around the world (e.g. Italian Corporate Governance Code of Best Practices, Consob, 2011; Global Principles of accountable Corporate Governance, 2011; OECD Principles of Corporate Governance, 2004 etc);

- The sixth research hypothesis is confirmed. There is a positive and statistically significant correlation (coefficient = 0.4930 and p-value = 0.066) between Tobin's Q and the institution of the Lead Independent Director. This result is in accordance with the recommendations of most corporate governance guidelines and studies, and confirms the result found before for the Ceo duality. The Lead Independent Director is an "Independent Director" appointed by the Board of Directors to serve in a lead capacity to coordinate the activities of the other Independent Directors and to perform such other duties and responsibilities as the Board of Directors may determine. In recent cases (which involved leading companies such as AIG and Morgan Stanley), the role of the lead director has been important in the resolution of business crisis, which culminated in the replacement of the CEO (Ferrarini, 2006). This figure is required by corporate governance guidelines (e.g. Italian Corporate Governance Code of Best Practices, Consob, 2011) especially when the chairman of the board of directors is also the CEO of the company. As seen before, according to the Agency theorists, CEO Duality leads to a heavy concentration of management and control resides with one person which tend to jeopardise board effectiveness (Eisenhardt, 1989), able to more easily pursue personal interests to the detriment of the interests of shareholders. The Lead Independent director has the function of presiding over the Independent executive sessions, which are, we will see after, an important tool of monitoring over the management. This figure therefore ensures a better functioning of the internal committees, a more important role of independent directors in the board of directors, a stronger monitoring over the management and consequently higher investor protection and firm market-value;

- The seventh research hypothesis is confirmed. There is a positive and statistically significant correlation (coefficient = 619.2 and p-value = 0.006) between Return on Equity and the adoption of the Italian Corporate Governance Code of Best Practices (comply or explain). This result and its significance should be an incentive for Italian companies to adopt the Italian code.

4 Conclusion

This research analyzes whether, and how the quality of the corporate governance impacts on the performance of Italian listed companies, in order to increase the understanding of the relationship between corporate governance, measured by Corporate Governance Quality Index (CGQI), investor protection and firm's performance during the financial crisis in Italy.

The aim of this work is identify those variables of governance on which a company should focus in order to improve its performance. To this purpose, we created a Corporate Governance Quality Index (CGQI) composed by 48 variables, and through a cross-sectional regression for the year 2012, we proceeded to the analysis of the relationship between firm performance, measured by Tobin's q, Return on Assets and Return on Equity, control variables and our governance index.

The cross-sectional regression highlights, firstly, two important results, the negative correlation between Tobin's q and CGQI, and the positive correlation between Return on Equity and CGQI, and only partially confirms the research hypothesis formulated. However, these contrasting results confirm that Corporate Governance positively impacts on firm performance. Indeed, a good governance leads, at least potentially, to a efficient and non-speculative behavior of the management, that can lead to a lower firm market-value (Tobin's q) in the short-term, but at the same time better operating performance (ROE).

Ascertained that corporate governance has a positive impact on performance, the research has focused the attention on the individual variables of governance and control considered. We have identified some provisions that are positively or negatively correlated with performance, all supported by an extensive literature and most corporate governance guidelines around the world (e.g. Italian Corporate Governance Code of Best Practices, Borsa Italiana, 2011; Global Principles of accountable Corporate Governance, CalPERS, 2011; OECD Principles of Corporate Governance, 2004 etc), demonstrating how choosing the right variables of governance, during the current crisis, is crucial for the company. Hence, the analysis has reported as a better protection of shareholders (e.g. one share one vote, prohibition of poison pills, etc.), an appropriate composition of the board of directors (in terms of presence of independent directors and internal committees, gender and professional diversity, etc.) and an appropriate remuneration policy (e.g. limits to variable components of remuneration, mechanisms of share retention and lock up, etc.) lead to better performance. The right mix of different variables of governance represents a new competitive factor to gain an advantage over the competition, so investments to implement effective governance

systems give net positive benefit and should therefore be pursued by the Italian companies. Anyway, the quality of the Italian companies is medium-high, as shown by the descriptive analysis, and the 92.1% of them adopt the Italian Corporate Governance Code of Best Practices. Furthermore, the cross-sectional regression has shown as there is a positive and statistically significant correlation (coefficient = 619.2 and p-value = 0.006) between Return on Equity and the adoption of the Italian Code, so this result and its significance should be an incentive for Italian companies to invest for a good governance.

The CGQI index provides a measure that can be used by researchers in the next studies on the subject, and being composed by 48 variables, is able to express, with a good significance (first R squared = 0.752; second R squared = 0.654; third R squared = 0.534), the quality of governance of a company, comparing with governance indexes composed by few variables that do not allow to understand the phenomenon in all its complexity. We suggest to extend the analysis both temporally and spatially, with a comparison between different countries, considering that our index is constructed on the basis of corporate governance guidelines of different countries.

Furthermore, the CGQI could be a useful tool both for the investors, who become able to make their investments with greater awareness and reduced risk, and for companies, permitting them to evaluate their corporate governance structure and increase the attractiveness of its shares on the stock market ensuring greater protection of shareholders.

References

- 1 Aboav M., Colarossi F., Giorgino M., Viviani D., "Corporate governance and financial distress during the subprime crisis: empirical evidence from Italy", Corporate Governance & the Global Financial Crisis Conference, The Wharton School, 2010.
- 2 Adams B. R., Ferreira D., "Women in the boardroom and their impact on governance and performance", Journal of Financial Economics, n.94, 2009.
- 3 Adams R., Gray S., Nowland J., "Does Gender Matter in the Boardroom? Evidence from the Market Reaction to Mandatory New Director Announcements", 2011.
- 4 Ayuso S., Argandoña A., "Responsible Corporate Governance: Towards a Stakeholder Board of Directors?", IESE Business School Working Paper No. 701, 2007.
- 5 Baliga B.R., Mayer R.C., Rao R.S., "CEO duality and firm performance: what's the foss?", in Strategic Management Journal, n.17, 1996.
- 6 Baumol W.J., "Business Behavior, Value and Growth", Macmillan New York, 1959.
- 7 Baysinger B. D., Butler H. D., "Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition," Journal of Law, Economics and Organization n.1, 1985.
- 8 Beasley, M.S., "An empirical analysis of the relation between the board of director composition and financial statement fraud", The Accounting Review (October), 1996.
- 9 Bebchuk L.D., Cohen A., Ferrell A., "What matters in corporate governance? ", Discussion Paper n. 491, Harvard Law School, 2004.
- 10 Bennedsen M., Kongsted H.C., Nielson K.M., "The causal effect of board Size in the performance of small and medium-sized firms", Journal of Banking and Finance, n.32, 2008.
- 11 Berle A., Means G., "The Modern Corporation and Private Property", Harcourt, Brace & World, 1932.
- 12 Bhagat S., Black B., "The uncertain relationship between board composition and firm performance", Business Lawyer, 54(3), 1999.
- 13 Bhagat S., Black B., "Board independence and long term firm performance", CLES Working Paper, n. 143, 2000.
- 14 Bhagat S., Bolton B., "Corporate governance and firm performance", Journal of Corporate Finance, n.14, 2008.
- 15 Black B.S., Jang H., Kim W., "Does Corporate Governance Affect Firm Value? Evidence from Korea", The Journal of Law, Economics, & Organization 22, n.2, 2003.
- 16 Brickley J.A., Coles J.L., Jarrel G., "Leadership structure: separating CEO and Chairman of the board", Journal of corporate Finance, n.3, 1997.
- 17 Bubbico R., Giorgino M., Monda B., "The impact of Corporate Governance on the market value of financial institutions: empirical evidences from Italy", Politecnico di Milano, Management, Economic and Industrial Engineering Department, 2012.
- 18 Byrd J., Hickman K., "Do outside directors monitor managers? Evidence from tender offer bids", Journal of Financial Economics, n.32, 1992.
- 19 Cadbury A., "The report of the Committee on the Financial Aspects of Corporate Governance", The London Stock Exchange, 1992.
- 20 Clarke, T., "International Corporate Governance: A comparative approach", Abingdon, UK, 2007.
- 21 Consob, "Codice di autodisciplina", Borsa Italiana, 2011.
- 22 Connelly, J. T., Limpaphayom, P., "Environmental reporting and firm performance: evidence from Thailand", The Journal of Corporate Citizenship, n.13, 2004.
- 23 Daily C.M., Dalton D.R., "The Relationship between governance structure and corporate performance in entrepreneurial firms", Journal of Business Venturing, n.7, 1992.
- 24 Daily C.M., Johnson J.L., Dalton D.R., "On the measurements of board composition: Poor consistency and a serious mismatch of theory and operationalization", Decision Sciences, n.30(1), 1999.
- 25 Dalton C.M., Dalton D.R., "Boards of directors: Utilizing empirical evidence in developing practical prescriptions", British Journal of Management, n.16, 2005.
- 26 Dalton D.R., Kesner I.F., "Composition and CEO Duality in Boards of Directors: An International Perspective", Journal of International Business Studies, Vol 18, No 3, 1987.
- 27 Donaldson L., Muth M.M., "Stewardship theory and board structure: A contingency approach", Corporate Governance- An International Review, n.6(1), 1998.
- 28 Dayton N.K., "Corporate Governance: the other side of the coin", Harvard Business Review, n.62(1), 1984.

- 29 Drobetz W., Schillhofer A., Zimmermann H., “Corporate Governance and Expected Stock Returns: Evidence from Germany”, WWZ/Department of Finance, Working Paper No. 2, 2003.
- 30 Eisenhardt, K.M., “Agency theory: An assessment and review”, *Academy of Management Review*, n.14(1), 1989.
- 31 European Commission, “Green Paper”, The EU corporate governance framework, 2011.
- 32 Fama E., Jensen M., “Separation of ownership and control”, *Journal of Law and Economics*, Vol. 26, n. 2, 1983.
- 33 Ferrarini G., “Ruolo degli amministratori indipendenti e Lead Independent Director”, Università di Genova and ECGI, Assogestioni, 2006.
- 34 Ferris S. P., Jagannathan M., Pritchard A.C., “Too busy to mind the business? Monitoring by directors with multiple board appointments”, University of Michigan, John M. Olin Center for Law & Economics, Paper 99-013, 2002.
- 35 Fich E. M., Shivdasani A., “Are Busy Boards Effective Monitors?”, ECGI - Finance Working Paper No. 55, 2004
- 36 Finkelstein S., Hambrick D. C., “Strategic Leadership: Top Executives And Their Effects On Organizations”, South-Western College Pub, 1996.
- 37 Forbes, D.P., & Milliken, F., “Cognition and corporate governance: Understanding board of directors as strategic decision-making groups”, *Academy of Management Review*, n.3, 1999.
- 38 Gillian, S.L., “Recent developments in corporate governance: An overview”, *Journal of Corporate Finance*, n.12, 2006.
- 39 Gompers P., Ishii J., Metrick A., “Corporate governance and equity prices”, *Quarterly Journal of Economics*, Vol. 118, n.1, 2003.
- 40 Goodstein J., Gautam K., Boeker W., “The effect of board size and diversity on strategic change”, *Strategic Management Journal*, 1994.
- 41 Goyal V., Park C., “Board leadership structure and CEO turnover”, *Journal of Corporate Finance*, n.8, 2002.
- 42 Grossman S., Hart O., “Corporate Financial Structure and Managerial Incentives”, *The Economics of Information and Uncertainty*, 1982.
- 43 Guerra S., Fischmann A., Filho C.A.P.M., “An agenda for board research. *Corporate Ownership and Control*”, n. 6(3), 2009.
- 44 Harris I. C., Katsuhiko S., “Too Busy To Serve? An Examination of the Influence of Overboarded Directors”, *Journal of Management Studies*, Volume 41, n.5, 2004.
- 45 Hermalin B.E., Weisbach M.S., “The effects of board composition and direct incentives on firm performance”, *Financial Management*, 1991.
- 46 Jackling B., Johl S., “Board structure and firm performance: Evidence from India's top companies”, *Corporate Governance: An International Review*, 17(4), 2009.
- 47 Jensen M., “Agency Costs of Free Cash Flow, Corporate Finance and Takeovers”, *American Economic Review* 76, n.3, 1986.
- 48 Jensen M., “The modern industrial revolution, exit, and the failure of internal control systems”, *Journal of Finance*, Vol. 48, n.3, 1993.
- 49 Jensen M.C, Meckling W.H., “Theory of the firm: Managerial Behaviour, Agency Costs and Ownership Structure”, *Journal of Financial Economics*, n. 3, 1976.
- 50 John, K., & Senbet, L.W., “Corporate governance and board effectiveness”, *Journal of Banking and Finance*, n.22, 1998.
- 51 Laing D., Weir C.M., “Governance structures, size and corporate performance in UK Firms”, *Management Decision*, n.37(5), 1999.
- 52 Lawal B., “Board Dynamics and Corporate Performance: Review of Literature, and Empirical Challenges”, Caledonian School of Business & Society, Glasgow Caledonian University, 2012.
- 53 Lehmann E., Weigand J., “Does the Governed Corporation Perform Better? Governance Structures and Corporate Performance in Germany”, *European Finance Review* 4, 2000.
- 54 Keller H., Peck S., Ruigrok W., “Board characteristics and involvement in strategic decision making: Evidence from Swiss companies”, *Journal of Management Studies*, 43 (5), 2006.
- 55 Klein A., “Audit committee, board of director characteristics, and earnings management”, *Journal of Accounting and Economics*, 33, 2002.
- 56 Klein P., Shapiro D., Young J., “Corporate Governance, Family Ownership and Firm Value: the Canadian evidence”, *Corporate Governance* 13 (6), 2005.
- 57 Lipton M., Lorsh J., “A modest proposal for improved corporate governance”, *The Business Lawyer*, Vol. 48, n. 1, 1992.
- 58 Mazzotta R., “La corporate governance e le performance aziendali. Una analisi sulle società italiane quotate in borsa”, Franco Angeli, Milano, 2008.
- 59 OECD, “OECD principles of Corporate Governance”, 2004.
- 60 Rezaee Z., “Corporate Governance and Ethics”, John Wiley & Sons Inc, 2009.
- 61 Shaw, M., “Group Dynamics: The Psychology of Small Group Behaviour”, Sydney: McGraw-Hill, 1981.
- 62 Shivdasani A., Yermack D., “CEO Involvement in the selection of new board members: An empirical Analysis”, *Journal of Finance*, n.54, 1999.
- 63 Vafeas N., Theodorou E., “The relationship between board structure and firm performance in the UK”, *British Accounting Review*, n.30, 1998.
- 64 Wan D., Ong C.H., “Board structure, process and performance: Evidence from public listed companies in Singapore”, *Corporate Governance - An International Review*, n.13(2), 2005.
- 65 Weir C., Laing D., “Governance structures, director independence and corporate performance in the UK”, *European Business Review*, n.13(2), 2001.
- 66 Yawson, A., “Evaluating the characteristics of corporate boards associated with layoff decisions”, *Corporate Governance: An International Review*, n.14(2), 2006.
- 67 Yermack D., “Higher Market Valuation of companies with a small board of directors”, *Journal of Financial Economics*, n. 40, 1996.
- 68 Zahra S., Pearce J., “Boards of directors and corporate financial performance: A review and integrative model”, *Journal of Management*, n.15(2), 1989.