Internal control & corporate governance index: an empirical analysis of the Italian listed companies

Abstract

Internal control is defined by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) as “a process, effected by an entity’s board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of better effectiveness and efficiency of operations, better reliability of financial reporting and better compliance with applicable laws and regulations. To achieve these objectives, the organization applies the process of Enterprise Risk Management (ERM) in strategy settings and across the enterprise, in order to identify potential events that may affect the entity, and manage risk within its risk appetite”. Thus, it is possible to highlight the importance of Internal control in the Risk assessment process of a company.

Our research analyzed the corporate governance in the Italian context. In particular, the aim of the paper is to analyze the structure of the Internal Control System (ICS) of the Italian listed companies. We constructed a specific index, called “internal Control and Corporate Governance index” that measures the quality of corporate governance composition. The index construction is based on an in-depth literature review and a selection of the international ICS best practices which were more suitable for the Italian context. Secondly, we have investigated the key variables that influence the structure of the Internal control System in the Italian context.

The sample was made up of the listed companies belonging to the Italian Stock Exchange (FTSE Italia All Share). The composition of the index refers to the year 2013 and in total 159 listed companies were analyzed. For each company we have collected 33 items in order to evaluate the internal control system of a company: for each entity, we investigated 7 independent variables divided into performance, size, shareholders’ composition, for-
eign capital, percentage of state capital, leverage and sector variables. In total, we hand collected 5,247 items (33 items multiplied by 159 entities). The methodology used to assess the determinants of the quality of corporate governance is based on the OLS regression model consistent with the main literature review (Cerf (1961); Stanga (1976); McNally, Eng and Hasseldine (1982); Chow and Wong-Boren (1987); Cooke (1991 2 1992); Botosan (1997); Depoers (2000); Glaum and Street (2003)). Results show that the adjusted $R^2$ is equal to 0.300, which is an acceptable value especially when taking into account the nature of the values of the dependent variables (subjective).

Our results suggest that size, state ownership and the presence of several foreign funds in the ownership are significantly and positively related to ICS quality. However, return on assets is significantly and negative related to ICS quality.

In conclusion we can state that the internal control system of the Italian companies is compliant with the international best practices, even if our research suggest some improvements which need to be made.

**Keywords: Governance, internal control system, index of disclosure.**

**JEL Classification: G34**

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**1 Introduction**

The separation between ownership and control, and its consequences is a topic that has fueled a huge debate in the last years. Differently from Coase, 1937, who defines firms as a nexus of contracts, where managers act for reaching exclusively shareholders’ interests, Jensen & Meckling, 1976 argue that companies require monitoring mechanisms in order to minimize agency costs determined by potential risk of irregular activities carried out from top managers. As a result of agency theory, corporate governance has become one of the most debated topic of the century’s last twenty years. During this period, where corporate governance is defined as the way in which suppliers of finance to corporations assure themselves of getting a return on their investment (Shleifer & R. W. Vishny 1997), researchers investigates the link between specific aspect of corporate governance (such as audit committee, independent directors, takeover defenses and minority shareholders protections) and company’s market value or performance.

Starting from the new century, great part of literature continues to investigate the relation between corporate governance and firm value, but introducing new methods of aggregating more attributes on an index as a proxy for company’s corporate governance quality (Ammann, Oesch, & Schmid, 2010; Bebchuk, Cohen, & Ferrell, 2009; Black, Jang, & Kim, 2006; Brown & Caylor, 2006; Cremers & Nair, 2005; Durnev & Kim, 2005; Gompers et al., 2003; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000). The first work using a corporate governance
index is Gompers et al., 2003, which analyzes the companies listed on U.S. financial market developing a quality index based on twenty-four provisions (called G-index), showing that more democratic firms are more valuable. Later, different studies (Bebchuk & Cohen, 2005; Brown & Caylor, 2006; Cremers & Nair, 2005) use similar indexes to associate firm's level corporate governance and firm's valuation.

However, as well as better corporate governance can lead to increase corporate value or at least, avoid the loss in value due to managers who do not act in shareholders' interests, (Jensen & Meckling, 1976) there is a lack in literature investigating which set of factors can influence the adoption of better corporate governance quality, in countries with strong type-two agency conflict as Italy. In this paper we construct an index, named Internal Control and Corporate Governance index (ICCG index), in order to investigate Italian listed companies searching for which set of factors influence the adoption of good corporate governance practices (Black et al. 2012 claims that country characteristics strongly predict which aspects of governance matter).

The sample was made up of the listed companies belonging to the Italian Stock Exchange (FTSE Italia All Share). The composition of the index refers to the year 2013 and in total 159 listed companies were analyzed. For each company we have collected 33 items in order to evaluate the internal control system of a company: for each entity, we investigated 7 independent variables divided into performance, size, shareholders' composition, foreign capital, percentage of state capital, leverage and sector variables. In total, we hand collected 5,247 items (33 items multiplied by 159 entities).

The methodology used to assess the determinants of the quality of corporate governance is based on the OLS regression model consistent with the main literature review (Cerf (1961); Stanga (1976); McNally, Eng and Hasseldine (1982); Chow and Wong-Boren (1987); Cooke (1991 2 1992); Botosan (1997); Depoers (2000); Glaum and Street (2003)).

The reminder of the paper is organized as follows. Section 2 describes corporate governance functions and laws prescribed in Italian context; Section 3 develops the hypotheses; Section 4 discuss the sample and presents the model; Section 5 includes test, regression analysis and results; Section 6 summarizes the main finding of the study.

2 Background

Italian corporate governance framework and rules have been substantially modified since 1998 with the introduction of the Draghi Law. More in general, Corporate Governance Reforms in Europe have been driven by three factors (Enriques & Volpin 2007). First, Kamar 2006 stated that reforms aimed to make national markets more attractive. Secondly (Ferran 2004) the efforts of the European Union was to institute a common framework of rules. Thirdly many of the corporate governance reforms are a response to national and international financial frauds.
and scandals (Enriques 2003). These events have clearly shown the weakness of the worldwide and Italian corporate governance framework for both listed and non-listed companies. Therefore, in order to rectify the situation appropriately, the legislator, has tried to protect minority shareholders of listed companies. However, Italian corporate governance system it is still “considered poor, characterized by an inactive takeover market, weak accounting standards, limited presence of institutional investor and where the legal protection for investors was low” (Buchanan & Yang 2005). Besides, the Italian corporate governance system is characterized by a high degree of direct ownership concentration, both for listed and unlisted companies (Bianco & Casavola 1999; Enriques & Volpin 2007). The Italian corporate governance system may be classified in the Latin sub-group (De Jong 1997). Nevertheless, it has its own unique features, and does not entirely fit into the international standards models (Melis 1999). Finally the Italian corporate governance system is based on pyramidal firm structure. These characteristics emphasize that Italian corporate governance is very far from the Anglosaxon one, considered (La Porta et al. 2000) the strongest system which offering the highest level of legal protection to stockholders.

3 Hypotheses development

As mentioned previously, monitoring mechanisms are implemented to bound agency costs, ensuring to shareholders that managers are acting in their best interest (Jensen & Meckling 1976). These mechanisms are for most part considered by corporate governance. Several studies assert that high quality level corporate governance lead to best performance, or increase firm value (Ammann, Oesch, & Schmid, 2010; Bebchuk, Cohen, & Ferrell, 2009; Black, Jang, & Kim, 2006; Brown & Caylor, 2006; Cremers & Nair, 2005; Durnev & Kim, 2005; Gompers et al., 2003; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000).

However, there is a lack in literature about which set of factors affect implementation of qualitative corporate governance practices, in country with strong type-two agency conflict. Our work want to fill this gap, investigating which group of firm’s characteristics influence a better quality of corporate governance practices in Italy. To achieve this result, we first analyzed international literature, searching for determinants affecting firm level corporate governance. We grouped the determinants into four categories: firm performance, ownership, financial structure and size. By doing so, we considered the particular characteristics of Italian companies as well as political and economic environment.

3.1 Foreign Institutional Investor appeal

According to Shleifer & Vishny 1986 and Karamanou & Vafeas 2005 the presence of blockholders in firm’s ownership positively affect corporate governance processes, introducing an additional monitoring mechanism. McConnell &
Servaes 1990 and Xu & Wang 1999 find that institutional investor appear to be more effective than individual shareholders in monitoring firm’s performances. Among these blockholders, Balasubramanian et al. 2010 identifies foreign investors as having a very important role; higher corporate governance is in their interest, and they are able in forcing the achievement of this goal due to the fact that are willing to pay an higher price for equity, exerting greater pressure on managers. Khanna & Palepu 2000 argue that foreign-invested firms are likely insist on higher governance standards and on protection of minority rights. Foreign investors are able to inhibit fraud for Chinese Financial market (Chen et al. 2006). Moreover, Bianchi et al. 2011 report for Italian market, that higher levels of effective compliance to Italian code of Corporate governance (summarizing worldwide accepted good practices of corporate governance) tend to be found in companies with relevant holdings by institutional investors (particularly foreign investors) who participate in general shareholder meetings. Bianchi et al. 2011 claims that foreign investors are able to monitor the firms they invest in, helping to discourage financial fraud and improve the effectiveness of internal control system. Bianchi et al. 2011 find positive relation between effective compliance to corporate governance code and foreign investors participating in annual meeting, for Italian listed companies. We expect higher corporate governance standards for firms registering the presence of foreign investor in corporate ownership.

In this study, in order to investigate factors affecting corporate governance quality, we use the number of foreign funds holding relevant shares of the firm (NUMBERFOREIGNFUND) as a proxy for foreign fund interest in the firm.

**H1.** There is a positive relation between presence of foreign institutional investors and ICCG index.

### 3.2 State ownership

Ben Ali & Lesage 2013 shows that audit fees are negatively associated with state ownership in France. This result is consistent with Sun & Tong 2003 research, about the role of state ownership in preventing fraud and expropriation of wealth for minorities. The researchers claim that state representatives should effectively control managers, since in case of failure they may bear reputation costs, improving the quality of monitoring mechanisms. Black et al. 2013 find that fractional ownership held by the state is the most strongly predicting variable of corporate governance quality, proxied by their pooled corporate governance index (pool observations across Brazil, India, Korea, and Turkey, treat the country Corporate Governance indices as if they capture the same underlying construct). In order to avoid reputational costs, we claim that State stake can drive management in introducing higher corporate governance standards. In accordance with Black et al. 2013, we expect a positive relation between state ownership and corporate governance quality.

**H2.** There is a positive relation between firm’s state ownership and ICCG index.
3.3 Family ownership

Dyck & Zingales 2004 shows that ownership is more concentrated in countries in which private benefits of control are greater, or rather countries with weak legal protection of investors like Italy (La Porta et al. 1999). In these countries ownership concentration is an efficient form of governance mechanism in order to control manager activities, but it potentially leaves minority investors unprotected (Shleifer & R. W. Vishny 1997). Indeed, large controlling shareholders could use their influence on management to assure the return on their investment even at expense of minorities’ expropriation, defining the type-two agency conflict (La Porta et al. 1999). This assumption is confirmed by Boubakri et al. 2005 and Bai et al. 2004, asserting that concentrated ownership gives to largest shareholders substantial discretionary power to use the firm’s resources for personal gain at the expense of other shareholders. Moreover, Hope et al. 2010 argues that it is easier extract private benefits for major family owners, that can strongly influence the board or have the possibility of electing. Several studies show that large shareholders expropriation of minority shareholders wealth is even more achievable when companies record a poor quality of corporate governance and internal control system. For example, Chen & Jaggi 2000 find that family ownership may reduce the independent directors effectiveness in convincing management to disclose more comprehensive information. Cheng & Firth 2006 find weak corporate governance and controls exercised by outside blockholders and independent non-executive directors due to the overwhelming power of executive directors in family firms. Anderson & Reeb 2003 find that for S&P 500 firm, outside directors are more prevalent in nonfamily firms than in family firms. Moreover, the researchers find evidences suggesting that if families seek to entrench themselves and extract private benefits from the firm, the lack of strong external monitors and discipline agents potentially permits them to pursue this path. Conversely, corporate governance and the control system are directed to pursuit the interests of all categories of shareholders, as well as corporate governance deals with the way in which all the suppliers of finance to corporations assure themselves of getting a return on their investment (Shleifer & R. W. Vishny 1997). Thus, in order to maintain the private benefit of control and pursue the return of their investment, large shareholders need a lower quality of corporate governance and internal controls. In accordance with these assumptions, we expect that in family firms the alignment between majority ownership and control is tighter, thus obviating the needs of comply to formal corporate governance practices and disclosure, aimed at protecting all stakeholders.

H3. There is a negative relation between ICCG index and Families ownership

3.4 Interest expenses on Financial debts

As previously mentioned, Jensen 1986 claims that financial leverage influence management choices, thus in companies characterized by high financial debts,
managers have less discretion in using generated cash flows. As a result, non-optimal investments are less probable. As well as leverage can be used as a tool for regulate managers’ behavior, inasmuch as missing the debt repay can lead to bankruptcy (Shleifer & R. Vishny 1997), increasing debt level leads to a rise in interest expenses.

Anderson et al. 2004 find that the cost of debt financing is negative related to board independence and audit committee independence, size and meeting frequency. Their study focuses on bondholders’ situation and thus on the accounting-based debt covenant interpretation. Specifically, they conclude that bondholders consider the board and audit committee’s monitoring effectiveness as a source of greater assurance with respect to the integrity of accounting numbers. Moreover, Bhojraj & Sengupta 2003 provides evidence linking corporate governance mechanisms to higher bond ratings and lower bond yields. Governance mechanisms can reduce default risk by mitigating agency costs and monitoring managerial performance and by reducing information asymmetry between the firm and the lenders. Moreover, Piot et al. 2007 finds empirical findings revealing that corporate governance quality has a significant reducing effect on the cost of debt, whereas audit quality does not. In summary, As well as financial debts are a tool to regulate management behavior, increase the quality of corporate governance is useful in order to mitigate interest expenses. However, improve corporate governance is more useful for more levered firms.

**H4.** There is a positive relation between firm’s interest expenses for financial debt and ICCG index.

## 4 Sample selection and research design

The previously stated hypotheses are tested using a sample of companies adopting the “traditional” corporate governance system, listed on the Italian Stock Exchange at the end of 2013. In Italy, financial markets are managed by Borsa Italiana Spa, that has been part of the London stock exchange group since 2007. This private institution suggest to all listed domestic companies the voluntary adhesion to the Codice di autodisciplina per le società quotate, which contains some of corporate governance’s international best practices. In addition, bylaw requires for every single company listed on the stock exchange to draft an evaluating document on the degree of compliance with the Code, and disclose it to the market.

### 4.1 The Sample

The Italian financial market can be divided into specific segments, identified by related indices (FTSE). Our sample was built considering the firms listed on FTSE Italia All-share, the stock index which excludes companies with the lowest capitalization (FTSE Micro Cap). Afterwards, we exclude foreign companies
listed abroad (following Barucci & Falini 2005), because they are subject to different corporate governance and disclosure regulations. In the next table is shown the sample’s procedure selection.

<table>
<thead>
<tr>
<th>Items</th>
<th>N. groups</th>
<th>% sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition of the FTSE All-Share</td>
<td>211</td>
<td>100%</td>
</tr>
<tr>
<td>Listed firms using non “traditional” corporate governance system</td>
<td>(7)</td>
<td></td>
</tr>
<tr>
<td>Foreign listed firms</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>Domestic listed firms with uncompleted or unavailable data</td>
<td>(34)</td>
<td></td>
</tr>
<tr>
<td>Financial (bank and insurance companies, defined by Italian stock exchange)</td>
<td>(17)</td>
<td></td>
</tr>
<tr>
<td><strong>Sample Analyzed</strong></td>
<td><strong>150</strong></td>
<td></td>
</tr>
</tbody>
</table>

As we can see in the table, the sample was made up of the listed companies belonging to the Italian Stock Exchange (FTSE Italia All Share). The composition of the index refers to the year 2013 and in total 159 listed companies were analyzed. We excluded from the sample companies that did not draw up the consolidated financial statements and companies that do not have a traditional model of corporate governance (dualistic and monistic model). We excluded from the sample, companies that did not draw up the consolidated financial statements and companies that do not have a traditional model of corporate governance (dualistic and monistic model). In order to define the Internal Control & Corporate Governance index, we collected data from corporate governance report, while other informations (for example about Big 4 audit firm or not), were collected from the consolidated financial statements. All these document refer to year 2013.

For the 150 firms of the sample, we gathered hand-collected data from the mandatory documents published on institutional websites. We exclude banks and insurance companies because are subject to different regulations and supplementary controls (for ex. from Banca d’Italia).  

4.2 Dependent variables: Internal Controls and Corporate Governance index

Like Gompers et al. 2003, (and several other researches creating an own quality index) that developed for the U.S. listed firms a corporate governance index, our Internal Control and Corporate Governance index (from here, IC&CGi) summarizes the formal adoption of every sample’s firm to 13 corporate governance provisions. Most part of these practices originate from the Italian code of corporate governance “Il codice di autodisciplina”, grouping the recommendations suggested by the Italian stock exchange “Borsa Italiana S.p.a.”. We integrate our in-
index with others international accepted best practices, like the independence of board’s chairman or the composition of the board, with at least 33% of independent directors. We grouped the 13 provisions of our ICCG index in four categories: Board structure, Committee structure, other Control bodies structures and Minority shareholders’ representation. The CGI&IC index includes 6 factors that either 1 or 0 depending on whether or not the single firm’s governance practice is in line with the provisions analyzed. For remaining 7 factors of the CGI&IC index, we use dummy variable by recoding the values, of which 4 elements (regarding the internal subcommittee) with 4 intervals associated to better level of compliance to the governance practices, others 2 elements (others control bodies) with 3 intervals, and finally 1 element (Minority shareholders’ representation) with 5 intervals.

4.2.1 Board of Directors structure

Fama & Jensen 1983 expanded on argued that a higher proportion of independent directors on corporate boards would result in more effective monitoring of boards and limit the managerial opportunism. Beasley 1996; Uzun et al. 2004 found that firms with a high percentage of outside directors reduces the likelihood of financial fraud. Chen & Jaggi 2000 found a positive association between the proportion of independent directors on corporate boards and financial disclosures. Currently, board independence is still considered the core element of corporate governance (Dahya & Mcconnell 2008; OECD 2004). Klein 2002 finds a negative relation between board independence and abnormal accruals. This means that a board composed in majority by independent directors can improve the integrity of financial reporting, and also of the internal control system. (Peasnell et al. 2005) finds that firms with a high proportion of outsiders in the board are less likely to engage in opportunistic earnings management. In our index we assessed the presence of non-executive director and independent director. Accordingly to international best practices, a balanced board of director should be composed by at least half of independent members (for example in Australia, the Australian financial market regulator require that the majority of board members be independent from management). We considered a best practice the case in which more than 33% of Board members are independent. Cortese 2009 reveals that boards of director for listed firms of ASX50, Australian stock index, are composed on average by 80% of non-executive directors. Also ACSI (Australian council of super investor) in a research paper of 2010 (ACSI 2010) analyzing governance best practices for S&P/ASX 100 index in 2009, reveals that since 2005 the presence of non-executive directors are more than 80% of the total directors. We considered a best practice the case in which more than 80% of Board members are non-executive. Other provision like CEO duality (Brickley et al. 1997), presence of Lead Independent director and the independence of the chairman are recurring topics, considered in different corporate governance issues (Black et al. 2012; Henry 2010). One of the recommendation of Italian code of Corporate governance is the balance of power within the board,
thus the separation between CEO and chairman is advisable. In the case of CEO duality (or the case which Chairman is the person who owns the firm) is suggested to appoint a Lead Independent Director, in order to rebalance the powers within the Board of Director. In UK and US, the dual appointment of chairman and CEO is seen to give too much power to the individual (Jensen 1993). Moreover, the Italian code of Corporate governance consider a best practice the introduction of Lead independent director. We evaluate an higher governance quality the cases in which:

- there is separation between CEO and board’s chairman;
- chairman of the board of director is independent;
- lead independent director is instituted.

4.2.2 Board’s Committees structure

The importance of sub-committee in the board, has rose in the recent years and is now strongly established. Kesner 1988 claims that most important board decisions originate at the committee level, and Vance 1983 argues that the institution of four board committees (audit, executive, compensation, and nomination committee) can greatly influence corporate activities. Moreover, Klein 1998 finds that overall board composition is unrelated to firm performance but that the structure of the accounting and finance committees does impact performance. Several academic researches argue (Dechow et al. 1996; Beasley 1996) that audit committees were associated with lower levels of fraud. Moreover, Davidson et al. 1998 find that the composition of a firm’s compensation committee influences the market’s perception of golden parachute adoption. In Italy, the Italian code of corporate governance suggest to every firm listed on Italian stock exchange the institution of four sub-committees, Audit, Remuneration, Nomination and Related Party transaction committees. We evaluated as good corporate governance practice the introduction of every committee suggested by the Italian code of corporate governance.

An audit committee entirely composed by independent directors is an international best practice. In support of this assumption, Klein 2002 find a negative relation between audit committee independence and abnormal accruals. Thus, an audit committee composed in majority by independent directors, can improve the integrity of financial reporting. Krishnan 2005 and others researches on internal controls fields (Bédard et al. 2004; Abbott et al. 2000; Uzun et al. 2004) find that independent audit committees are significantly less likely to be associated with the incidence of internal control problems and reduce the likely of fraud or aggressive financial statement actions. In addition, Italian code of corporate governance suggest to structure the internal board committees using independent directors. In accordance with these assumptions, we considered committees composed entirely of non-executive directors, the majority of whom are independent, two good corporate governance practices.
4.2.3 Other control bodies Adequacy

In compliance with the Italian Legislative Decree 231/2001 listed firms should establish a supervisory body whose primary duty is to ensure the functioning, effectiveness and enforcement of company’s Model of Organization. This body is vested with all necessary powers to guarantee accurate and efficient supervision over the functioning of the Organizational Model and Code of Ethics adopted, and compliance therewith, in accordance with the provisions of Art. 6 of Legislative Decree 231/2001. The supervisory body consists of three to five members, appointed by the Board among qualified and experienced individuals, including non-executive Directors, qualified auditors, executives or external individuals. As well as others control bodies, in order to ensure the objectivity of judgment on the suitability of the organizational model adopted by the company and on its effective functioning, we have considered the appointment of independent subjects in the supervisory body a best practice. Moreover, in accordance with Al-Malkawi et al. 2014, we considered the audit from a Big 4 firm, a corporate governance best practice.

4.2.4 Minority shareholders’ representation

La Porta et al. 1999 shows that countries characterized by poor investor protection, typically exhibit more concentrated control of firms than do countries with good investor protection. Indeed, widely held corporations are more usual in rich common law countries, where regulations ensure best legal protection of minority shareholders (La Porta et al. 1998). Chemin 2004 argues that in countries with good investor protection, controlling shareholders have less fear of being expropriated themselves in the event that they ever lose control through a takeover, encouraging the sale of shares and the reduction of ownership in order to diversify. In contrast, in countries with poor investor protection, lose the control becoming a minority shareholder may be such a costly proposition in terms of surrendering the private benefits of control. For La Porta et al. 1998, the agency problem in closely held firms is shifted between majority and minority shareholders, with the former having the potential to expropriate wealth from the latter. This is the prevalent situation in Italy (Melis 2000). Until 2005, independent directors were almost always elected from controlling shareholders. But, as well as minority shareholder is the weak subject in countries registering the type two agency conflict, introducing directors ensuring the consideration of minority shareholders’ interest lead to an increase in investor protection. This was the assumption that led Italian government to introduce in 2005 the law 262, also known as “law on saving”, that required among other provisions, the introduction of at least one director appointed by minorities in the board of directors (by using the mechanism of “voting lists”) (Zattoni 2006). After the introduction of 262 law, Bianchi et al. 2011 find higher levels of effective compliance to corporate governance practices for Italian listed companies where minority share-
holders have appointed one or more directors. This fact underlines the important monitoring role of minority directors in reducing the type-two agency conflict. In accordance with these assertions, we argue that in companies registering the presence of qualified minorities, the appointment of directors elected by minority shareholders is a strong element of corporate governance.

4.3 Explanatory variables

We regress a number of 10 independent variables, of which 4 as explanatory variables and 6 as control variables. As previously stated, we considered explanatory variables NUMBERFOREIGNFUND as the number of foreign investment funds who hold shares of the company, moreover STATEOWNERSHIP as measuring the percentage of shares held by state and FAMILYOWNERSHIP as the percentage of shares held by family or individuals. In addition, FINANCIALINTEREST represent the ratio between financial interest expenses on total revenues.

We introduced these two last variables (FAMILYOWNERSHIP and FINANCIALINTEREST) in order to study the special features of the Italian context, in which there are many family businesses and (consequently) many entities using financial debts as preferred source to finance investments.

4.4 Control variables

As control variables, we used firm characteristics (firm performances, leverage and firm size) and other variables considered by several studies as potentially affecting corporate governance quality. In particular we treated the following aspects: firm performances, ownership, financial debts and firm size.

4.4.1 Firm performances

Past literature asserts that good corporate governance practices positively affect firm performance (Ammann et al. 2010; Bebchuk et al. 2009; Cremers & Nair 2005; Core et al. 2006; La Porta et al. 2000; Black et al. 2006; Durnev & Kim 2005; Brown & Caylor 2006; Gompers et al. 2003). Black 2001 find a strong positive correlation between firm-level corporate governance and market capitalization in emerging markets. Also Gompers et al. 2003 find a positive correlation between market value and corporate governance practices. While some researches find consistent results using as a proxy of firm market value Tobin’s Q and market-to-book ratio (Black 2001; Gompers et al. 2003; Black et al. 2012), Bebchuk et al. 2009 find also a positive and sizeable relation between corporate governance quality and return on assets. Moreover, Klappe r & Love 2012 use two different measures: Tobin’s Q as a measure of firm’s market valuation and return on assets (ROA) as a measure of operating performance. They find a posi-
tive relationship between corporate governance behavior and firm performance, as measured by ROA, consistent with results find in Gompers et al. 2003 (where firms with weaker corporate governance have relatively lower operative profits in the United States).

In this study, in order to investigate factors affecting corporate governance quality, we use return on assets (ROA, measured as ratio between ebit on total assets) as well as return on equity (ROE, measured as ratio between net income on equity) as two proxy for firm performances.

### 4.4.2 Leverage

Jensen, 1986, claims that financial leverage influence management choices, thus in companies characterized by high financial debts managers have less discretion in using generated cash flows. As a result, non-optimal investments are less probable. In other words, leverage can be used as a tool for discipline managers’ behavior, inasmuch as missing the debt repay can lead to bankruptcy (Shleifer & R. W. Vishny 1997). Furthermore, greater use of borrowings improves lenders’ monitoring activities (Henry, 2010). Black et al. 2003 and Aggarwal et al. 2009 include in their works measures of firm financial structure as control variables, for monitoring specific firm’s financial risk.

### 4.4.3 National institutional investor ownership

In Italy banks often take large equity positions in firms, including firms to which they made loans. Theoretically, if institutions who are equity holders and lenders to the same firm are more effective monitors. Previous research argues that lenders occupy a unique governance position given their monitoring and control abilities. In particular, the argument has been made that banks have a comparative advantage in monitoring corporations due to their access to inside information. The bank lenders’ access to superior information, relative to the information available to bondholders, reduces potential agency costs of debt financing (Fama 1985).

### 4.4.4 FTSE MIB

As well as firm size, the market capitalization is observed in several studies as having an effect on corporate governance. In Italy, FTSE MIB is the index which aggregate the listed companies belonging to the Italian Stock Exchange registering the high market capitalization. In particular, the index measures the performance of the 40 entities listed on the Italian market that have the highest market capitalization. We expect that the entities belonging to FTSE-MIB influence positively and significantly the adoption of good corporate governance practices.
4.4.5 Firm Size

Past literature finds a relation between firm’s size and corporate governance quality. Large companies have to implement better corporate governance practices because they register greater agency problem, which result in greater information asymmetry. In order to contrast those problems, comes up the need to increase the effectiveness of monitoring mechanisms. This hypothesis is confirmed by empirical evidences by Klapper & Love 2004 and Doidge et al. 2004. Moreover, larger firms tend to attract more attention and may be under greater scrutiny by the public, leading to assert that size may affect governance structure (Durnev & Kim 2005). Barucci & Falini 2005 finds for Italian listed firms a positive relation between firm size and some corporate governance best practices, such as CEO and chairman separation, institution of audit and remuneration committee and the appointment of statutory auditors from minority shareholders. Finally, Black et al. 2006 find a positive relation between firm size and corporate governance quality. In this study, we use the natural logarithm of revenue to test the firm size variables.

4.5 Data and methodology

Information and data about the provisions of the IC&CG index were collected from the corporate governance report published by every listed firm on its institutional websites. In order to complete the requested information of IC&CG index (for example, information about Big 4 audit firm or not) we used data provided by firm’s annual report. Instead, information about independent variables were gathered from official databases; in particular for ownership structure we used data provided by CONSOB website (the Italian financial market regulator) while for financial data we used Aida - Bureau van Dijk database.

The methodology used in our research is based on the following OLS regression model consistent with the main literature review (Cerf 1961; Stanga 1976; McNally, Eng & Hasseldine 1982; Chow & Wong-Boren 1987; Wallace 1987; Cooke 1991; Cooke 1992; Botosan 1997; Depoers 2000; Glaum & Street 2003):

\[
ICCG_{Index_i} = \alpha + \alpha_1 ROA_i + \alpha_2 (ROE)_i + \alpha_3 (Number Foreign Fund)_i + \alpha_4 (State Ownership)_i + \alpha_5 (Family Ownership)_i + \alpha_6 (Institutional Ownership)_i + \alpha_7 (Leverage)_i + \alpha_8 (Financial Interest)_i + \alpha_9 (Ftse_Mib)_i + \alpha_{10} (Ln_{Rev})_i + \varepsilon_i
\]
Where:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Formula</th>
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<tbody>
<tr>
<td>ROA</td>
<td>Return On Asset equal to Ebit on Total assets</td>
</tr>
<tr>
<td>ROE</td>
<td>Return On Equity equal to Net income on Equity</td>
</tr>
<tr>
<td>Number Foreign Fund</td>
<td>Number of external foreign found holding Shares</td>
</tr>
<tr>
<td>State Ownership</td>
<td>State Ownership equal to the total number of share owned by state (or state agency) on total number of shares outstanding</td>
</tr>
<tr>
<td>Family Ownership</td>
<td>Family Ownership equal to the total number of share owned by a family (or a single person) divided by the total number of shares outstanding</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>Institutional Ownership equal to the total number of share owned by national institutional investors divided by the total number of shares outstanding</td>
</tr>
<tr>
<td>Leverage</td>
<td>Ratio between financial debt and total assets</td>
</tr>
<tr>
<td>Financial Interest</td>
<td>Financial Interest equal to financial interest on the total revenues</td>
</tr>
<tr>
<td>Ftse_Mib</td>
<td>Firms belonging to the FTSE MIB Index</td>
</tr>
<tr>
<td>LnRev</td>
<td>Natural logarithm of revenue</td>
</tr>
</tbody>
</table>

All the variables are then described.

The variable ROA represents the level of performance registered by the firm, as the ratio of Ebit to Total Assets. The coefficient on ROA (α₁) thus captures the corporate governance level related to firm performance. As prior literature states a positive relation between firm level corporate governance and firm’s performance, we expect α₁ to be positive.

The variable ROE represents the level of performance registered by the equity investors, as the ratio of Net Income to Total Equity. The coefficient on ROE (α₁) thus captures the corporate governance level related to firm performance. As prior literature states a positive relation between firm level corporate governance and firm’s performance, we expect α₁ to be positive.

Moreover, the test variable for H₁ is NUMBERFOREIGNFUND and represent the foreign investor appeal of a firm, as proxied by the number of foreign funds owning shares of the firm. The coefficient on NUMBERFOREIGNFUND (α₃) thus captures corporate governance level related to firm’s financial structure. As H₁ states a negative relation between firm level corporate governance and firm’s foreign investor appeal, we expect α₃ to be positive. In addition, the test variable for H₂ is STATEOWNERSHIP, and represent the state stake of in the firm, as the percentage of shares owned by the state. The coefficient on STATEOWNERSHIP (α₄) thus captures the corporate governance level related to the state stake of in
the firm. As H3 states a positive relation between firm level corporate governance and state ownership, we expect $\alpha_4$ to be positive.

In addition, the test variable for $H_3$ is FAMILYOWNERSHIP, and represents the family or individual stake in the firm, as the percentage of shares owned by family or individuals. The coefficient on FAMILYOWNERSHIP ($\alpha_4$) thus captures the corporate governance level related to the family or individual stake in a firm. As H3 states a positive relation between firm level corporate governance and family or individual ownership, we expect $\alpha_4$ to be positive.

The variable INSTITUTIONALOWNERSHIP represents the national institutional investor stake in a firm, as percentage of shares owned by national institutional investor. The coefficient on INSTITUTIONALOWNERSHIP ($\alpha_6$) thus captures the corporate governance level related to institutional investor stake. As prior literature states a positive relation between firm level corporate governance and institutional investor stake, we expect $\alpha_6$ to be positive.

The variable LEVERAGE represents the financial structure of a firm, as proxied by the ratio of financial debts to Total Assets. The coefficient on LEVERAGE ($\alpha_7$) thus captures corporate governance level related to firm's financial structure. As prior literature states a positive relation between firm level corporate governance and firm's financial structure, we expect $\alpha_7$ to be positive.

In addition, the test variable for $H_4$ is FINANCIALINTEREST, and represents the cost of financial debts, as the ratio of financial interest expenses to total revenues. The coefficient on FINANCIALINTEREST ($\alpha_8$) thus captures the corporate governance level related to the cost of financial debts. As H4 states a positive relation between firm level corporate governance and cost of financial debts, we expect $\alpha_8$ to be positive.

The dummy variable FTSEMIB represents the most important listed firms, as the firm classified in FTSE MIB index, aggregating the most capitalized firms. The coefficient on FTSEMIB ($\alpha_9$) thus captures the corporate governance level related to firm's capitalization. As prior literature states a positive relation between firm level corporate governance and firm capitalization, we expect $\alpha_9$ to be positive.

The variable LOGREV represents the firm size of a firm, as the natural logarithm of revenues. The coefficient on LOGREV ($\alpha_{10}$) thus captures the corporate governance level related to firm size. As prior literature states a positive relation between firm level corporate governance and firm size, we expect $\alpha_{10}$ to be positive.
5 Test and Results

5.1 Descriptive statistics

The main items of descriptive statistics are shown below.

<table>
<thead>
<tr>
<th></th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>25% percentile</th>
<th>75% percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICCG index</td>
<td>0.2440</td>
<td>0.8460</td>
<td>0.5677</td>
<td>0.5580</td>
<td>0.127</td>
<td>0.4735</td>
<td>0.6670</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.6892</td>
<td>0.3017</td>
<td>0.0160</td>
<td>0.0290</td>
<td>0.095</td>
<td>0.0683</td>
<td>0.0630</td>
</tr>
<tr>
<td>ROE</td>
<td>-3.9844</td>
<td>4.8158</td>
<td>-0.0419</td>
<td>0.0339</td>
<td>0.658</td>
<td>0.0683</td>
<td>0.1200</td>
</tr>
<tr>
<td>Number of Foreign</td>
<td>0.00</td>
<td>6.00</td>
<td>0.9400</td>
<td>1.00</td>
<td>1.136</td>
<td>0.00</td>
<td>1.2500</td>
</tr>
<tr>
<td>Founds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Ownership</td>
<td>0.00</td>
<td>0.6900</td>
<td>0.0152</td>
<td>0.00</td>
<td>0.136</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Family Ownership</td>
<td>0.00</td>
<td>0.8970</td>
<td>0.3977</td>
<td>0.5100</td>
<td>0.256</td>
<td>0.1262</td>
<td>0.5832</td>
</tr>
<tr>
<td>Institutional</td>
<td>0.00</td>
<td>0.4300</td>
<td>0.0265</td>
<td>0.00</td>
<td>0.057</td>
<td>0.00</td>
<td>0.0300</td>
</tr>
<tr>
<td>ownership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>0.00</td>
<td>1.7168</td>
<td>0.3466</td>
<td>0.3060</td>
<td>0.257</td>
<td>0.1805</td>
<td>0.4539</td>
</tr>
<tr>
<td>Financial interest</td>
<td>0.00</td>
<td>0.4290</td>
<td>0.0371</td>
<td>0.0166</td>
<td>0.061</td>
<td>0.0083</td>
<td>0.0374</td>
</tr>
<tr>
<td>expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTSE MIB</td>
<td>0.00</td>
<td>1.00</td>
<td>0.1733</td>
<td>0.00</td>
<td>0.379</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Natural logarithm of</td>
<td>0.6900</td>
<td>11.660</td>
<td>5.8583</td>
<td>5.6131</td>
<td>2.074</td>
<td>4.3207</td>
<td>7.1956</td>
</tr>
<tr>
<td>revenues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table illustrates, with regard to the 150 firms observed in the year 2013, the descriptive statistics for the variables under consideration. Data regarding ICCG index show a stable distribution of the 150 firms of the sample. On average, ICCG index reaches a value of 56.8%, a lowest value of 24.4% and a highest of 84.6%. 75% of the observations have ICCG index value lower than 66.70%. This means that in the Italian case the measurement of corporate governance quality is still an important topic, and for this reason it is interesting to evaluate which are the main determinants affecting our IC&CG index.

Data on Roa suggest that 25% of firms sample have registered in 2013 a negative value. Moreover, the average value has been 1.6%, with a lowest value of -68.9% and an highest value of 30.2%. This value, together with ROE registering a mean value of -4.19% shows that in 2013, Italian listed groups' performances are affected by the crisis as well as all over the world.
With reference to the presence of foreign investor funds, descriptive statistics shows that 82 firms out of 150 has a foreign fund holding more than 2 % of total shares. In 37 companies there are two or more foreign funds holding at least 2% of shares (each). Instead, 68 firms have not registered the presence of a relevant amount of share from a foreign fund.

Family Ownership, is based on the presence of a family, an individual, or an intermediate company representing a family, holding a relevant amount of firm shares. Average is about 39.77%. This data provide evidence that Italian stock market is composed mostly of family firms as well as it is coherent with the Italian market

With reference to leverage, we have not found negative values, but we found two firms totally using equity capital as financial source. The italian listed firms of our sample have a financial structure composed, on average, by 35.26% from financial debts, on the other hands the average weight of equity on total assets is about 28.7%, confirming the widespread conception that Italian companies have one of the lowest level of equity, compared to total assets among the large economies (Melis 2000).

5.2 Regression analysis and results

Next table show the result of the OLS regression.

<table>
<thead>
<tr>
<th>Dependent variable: ICCGindex</th>
<th>Predicted sign</th>
<th>OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanatory variables</td>
<td>Beta</td>
<td>Standard error</td>
</tr>
<tr>
<td>Constant</td>
<td>0.041</td>
<td>10.773</td>
</tr>
<tr>
<td>ROA</td>
<td>+ -0.171**</td>
<td>0.106</td>
</tr>
<tr>
<td>ROE</td>
<td>0.059</td>
<td>0.015</td>
</tr>
<tr>
<td>NUMBERFOREIGNFUND</td>
<td>+ 0.197***</td>
<td>0.009</td>
</tr>
<tr>
<td>STATEOWNERSHIP</td>
<td>+ 0.141*</td>
<td>0.080</td>
</tr>
<tr>
<td>FAMILYOWNERSHIP</td>
<td>- -0.077</td>
<td>0.042</td>
</tr>
<tr>
<td>INSTITUTIONALOWNERSHIP</td>
<td>+ -0.007</td>
<td>0.172</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>+ 0.010</td>
<td>0.040</td>
</tr>
<tr>
<td>FINANCIALINTERESTEXPENSES</td>
<td>+ 0.148*</td>
<td>0.181</td>
</tr>
<tr>
<td>FTSE MIB</td>
<td>+ 0.196**</td>
<td>0.031</td>
</tr>
<tr>
<td>LOGREV</td>
<td>+ 0.275***</td>
<td>0.006</td>
</tr>
</tbody>
</table>

Sample 150
R-square 0.347
F-statistics 7,395

* Significant p < 0.10 (two-tailed)
** Significant p < 0.05 (two-tailed)
*** Significant p < 0.01 (two-tailed)
As we can see from previous table, only some variables strongly influence the Internal Control & Corporate Governance index. In particular, there are two variables that significantly affect the quality of Corporate Governance in the Italian context: the number of foreign funds and the natural logarithm of revenues. The results show that the presence of foreign funds significantly (p<0.01) and positively (B=.197) influence our index. Moreover, the bigger is the number of foreign funds, higher is the quality of corporate governance practices.

In second place, the natural logarithm of revenues significantly (p<0.01) and positively (B=.257) influence our index. This is an interesting result, showing that Italian firms registering higher value of revenues have introduced better corporate governance practices. Moreover, the membership to the FTSE MIB index is significantly (p<0.05) and positively (B=.196) correlated to corporate governance quality. The companies belonging to the most important Italian financial index registered an higher quality level of corporate governance, in particular with regard to the presence of non-executive directors, presence of independent directors and CEO duality.

The independent variable Roa is the only one significantly (p<0.05) but negatively (B=-.171) correlated with our IC&CG index. This finding refute our predicted sign, suggesting that firms with higher ROA did not pursued the implementation of the best corporate governance practices. Finally, State Ownership and Financial Interest Expenses positively influence Corporate Governance quality, but with lower significance. In details, state ownership significantly (p<0.1) and positively (B=.141) influence our index, as well as Financial interest expenses (registering significative (p<0.1) and positive (B=.148) relation).

This means that higher percentage of financial interest expenses on revenues leads to better Corporate Governance quality, in order to represent both controlling and minority interests.

6 Conclusion

This paper examines which factors influence the implementation of good corporate governance practices for Italian companies. The analyzed factors are: proportion of shares held by families, proportion of shares held by the state, number of foreign funds holding shares, firm’s debt burden.

We tested the hypothesis of a positive effect of state ownership on corporate governance quality. The results confirm the positive relation between percentage of share held by the state and corporate governance quality. Conversely, with regard to family ownership, we tested the hypothesis of a negative effect on corporate governance quality. The results confirm the negative relation between percentage of share held by families and corporate governance quality, but without a strong and relevant correlation. Instead, considering the number of foreign funds holding shares, we tested the hypothesis of a positive effect on corporate governance quality. The results confirm the positive significant relation between number of foreign funds present in the ownership and corporate governance
quality. Finally, with regard to company level of debt, we tested the hypotheses of a positive effect of burden debt, proxied by financial interest expenses, on quality of corporate governance. The results show a moderate effect on corporate governance quality.

These results show that corporate governance quality for Italian firms is influenced by ownership characteristics, in particular positively by state ownership and number of foreign funds, and negatively by family ownership.

These findings highlight that in italian framework, foreign investors can play a key role in increasing the control mechanisms and investors protection for companies of which are shareholder. Moreover, a similar (although less important) effect is obtained in companies registering state ownership. These two assumption can be explained considering that italian financial market has low investor protection, where only more influential third parties have enough power to defend their interests, significantly affecting the management in order to improve corporate governance quality.

Instead, we registered a negative effect of firm performance, proxied by Return on Assets as a control variable, on corporate governance quality in contrast with evidences provided by literature.

Furthermore, it seems that Italian regulator has not yet been able to impose for family owned firms the introduction of higher corporate governance practices, in order to improve minority shareholders rights. Our results confirm that Italian financial market is still marked by the benefits of control.

Endnotes

i In Italy, the traditional model of corporate governance is based on the contraposition between Board of Directors and Board of Statutory Auditors. This model split governance and control. The General Assembly appoints governance and control bodies separately, and independence requirements are disciplined by clear rules. Source: CNDCEC

ii Bankitalia or Banca d’Italia, is the central bank of Italy and part of the European System of Central Banks.

iii All the annual data refer to the year 2013

References


ACSI, 2010. Table of Contents Board Composition and Non-Executive Director Pay in the Top 100 Companies: 2009 Research commissioned by and prepared by ISS Governance Services About the Authors, (October).


