CORPORATE GOVERNANCE AND PERFORMANCE: AN ANALYSIS OF ITALIAN LISTED COMPANIES

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Abstract

In recent years, both corporate governance and performance management have been subjected to considerable changes. In this dynamic context, it is interesting to study the evolution of the relationship between performance and governance. Does governance still affect performance? The purpose of this paper is to verify the presence and intensity (extent) of the relationship between corporate governance and performance in Italian listed companies by using both accounting and non-accounting performance measures. The purpose of this paper is to investigate the effects of prior firm performance on board composition and governance structure of some companies listed on the Italian stock exchange, analysing how a governance approach influences the performance of sample companies. For the research the methodology used is quantitative and we used regression analysis on a sample of 23 Italian listed companies: mechanical companies and public utilities to find that the company's performance was positively related to the size of the board. The empirical analysis conducted allowed us to verify the hypothesis according to which the increase in Corporate Governance Best Practices influences company performance. However, the results we have received do not allow us to arrive at completely unequivocal interpretations. The results showed we have received do not allow us to arrive at completely unequivocal interpretations; the main limit is the sample size used in this study was relatively small.

Keywords: Corporate Governance, Firm Performance, Board of Directors, Public Utilities

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1. INTRODUCTION

Studies on governance have undergone rapid development since the last decades of the twentieth century when entrepreneurs, managers and administrators of large companies began to pay considerable attention to the subject. The actual debate develops as a result of the numerous financial scandals connected to the use of illegal practices by entrepreneurs and administrators who have contributed to the search for optimal models of governance able to increase information transparency of companies and safeguard the interests of many stakeholders who come into contact with it. Just think of the failures of Fanny Mae, Tyco, Northern Rock, Enron, Adelphia, Arthur Anderson, Freddy Mac, WorldCom, Goldman Sachs, Marconi, Parmalat, Lehman Brothers and Yukos (Duke & Kankpang, 2011). Most reported cases of corporate failure are attributed to corporate

governance practices (Appiah, 2013). This recognition has led to a broader approach or perspective of corporate governance, not only on satisfying the interests of shareholders but with an awareness that involves corporate responsibilities at a whole (Huse, 2007). What has just been said, together with the privatization processes, the importance of the role of institutional investors in the risk capital of large companies, and the progressive integration of financial markets, raise corporate governance to a distinctive element for the company. Then lead also to the conclusion that the best-governed company is a less risky and certainly more competitive company. Good governance soon becomes synonymous with economic success or good business performance (Donaldson, 2019).

The awareness that good governance is equivalent to good performance contributes to the rapid development by the many industrialized countries, each according to its own peculiarities, of adequate codes of conduct (soft law) which, together with the different laws (hard low), they try to prevent and/or mitigate the many cases of business failure.

There are several studies in support of the fact that good corporate governance contributes to economic stability by enhancing the performance of companies and increasing their access to outside capital. Moreover, these studies state that the long-term market value and profitability of companies can be maximized through the adoption of good governance practices (Khumani, Stone, & Hurly, 1998; Banerjee, Gokarn, Pattanayak, & Sinha, 2009); for example, state that good corporate governance is necessary in all economic transactions that companies want to put in place. However, scholars to this day are not perfectly in agreement if the adoption of good governance rules has a positive or negative impact on company results. In fact, some studies show a positive relationship (Bebchuk & Weisbach, 2010); others highlight a negative relationship (Bøhren & Strøm, 2010) and others do not report any relationship (Darmadi, 2011; Alvarado, Briones, & Ruiz, 2011) between corporate governance and business performance (Ghabayen, 2012). Many instead recognize the importance of the board of directors increased due to its fundamental oversight role (Leblanc & Gillies, 2005; Minichilli, Gabrielsson, & Huse, 2007). Indeed, boards are increasingly considered as fundamental and essential assets for companies with the potential to contribute to sustainable competitive advantage (Huse, 2005; Minichilli et al., 2007). In light of what has just been said, the idea of the work originates that trying to analyse in detail the governance of some companies listed on the Italian stock exchange, analysing through a quantitative approach how the different composition and structure of the board influences the performance of examined companies, i.e. those of our survey sample: mechanical companies and public utilities.

In the context outlined, public service companies have changed their corporate structures through the legal transformation of capital companies and the entry of private shareholders into the share capital with the immediate consequence that the corporate structure has become articulated and heterogeneous; each member has very different characteristics, aims and weight. Thus, other stakeholders are used alongside traditional stakeholders: small investors, institutional investors and banks, financial analysts, and not least the State as a regulator. In this context, it is clear that convergent interests are increasing and rules and rules of conduct dictated by the collection of risk capital in the stock market are added. Therefore, even in public utility companies, the debate on the topic of corporate governance has taken on an increasingly important role both in terms of defining the structure, composition and appointment processes of the governing bodies, and in terms of the activity carried out and in terms of dissemination of the results achieved and of the procedures that have enabled it to be achieved.

In public utilities, corporate governance assumed much more complex and relevant role than in other companies: market regulation, public-private ownership, political connections and multiple agency relationships may change the company's objectives and relationships.

For this reason, we have considered appropriate to investigate the effects of prior firm performance on board composition and governance structure. For the research the methodology used is quantitative and we used regression analysis on a sample of some Italian listed companies: mechanical companies and public utilities to find that the company's performance was positively related to the size of the board.

The empirical analyses conducted suggest that the appropriate size of the board of directors, the right distribution of independent directors, and the cost-benefit analysis in conducting frequent meetings can help public utilities improve their performance.

In the elaboration of the dataset, as far as governance data is concerned, the analysis of the corporate governance reports published annually by each company was used, while, for the performance data, only one important financial statement indicator was used, i.e. the ROE. The variables taken into consideration were divided into tables according to a criterion that led to interesting conclusions, proceeding to a regression and correlation analysis. The study also found the presence of dummy variables; in this regard, a selection was made of those variables which could be more significant than others.

2. RELATIONSHIP BETWEEN BOARD AND FIRM PERFORMANCE: LITERATURE REVIEW

Taking a historical overview, the topic of governance is already detected by the first classical economists: Adam Smith and Marshall. The evolution of corporate governance has allowed an increase in institutional communications. The purpose of this is to establish effective relationships with social interlocutors to obtain clear, comprehensible and truthful answers to the information needs of the stakeholders. In addition to the communication of the financial statements, the social report, the sustainability report, the report on corporate governance, etc. were added. On the subject of corporate governance, there are many different strands of institutional theory, from micro-level

sociological approaches, which focus mainly on internal organizational dynamics (DiMaggio & Powell, 1991) to economic and socio-economic macro-approaches that seek to connect the behaviour firm to wider social realities. One of the main concerns of the first concerns the incorporation of organizational processes and routines and the way in which these are legitimized (Greenwood & Hinings, 1996). Meanwhile, the latter focuses on the relationship between institutions at the social level – and the dominant patterns they take – and company-level practices (Wood, Dibben, & Ogden, 2014; Ciftci, Tatoglu, Wood, Demirbag, & Zaim, 2019). In the national context, Borsa Italiana S.p.A. prescribes the preparation of an annual report on governance, for the compilation of which numerous organizations. In particular, Borsa Italiana, Assonime and Emittenti Titoli S.p.A. have prepared specific guidelines and formats aimed at facilitating companies. The governance report must show a description of the corporate structure, highlighting the functions and powers of the bodies as a meeting, administrative bodies and control bodies, in addition to the procedures required for the choice of the directors, of those who deal with control and their term in office. In general, the existing literature on boards of directors, ownership and performance has tended to focus on changes in internal corporate governance mechanisms within liberal market frameworks and on exploring the ways in which shareholder rights can be applied to maximize shareholder value (Ciftci et al., 2019). It should be noted that the information received from the governance reports is the basis for different studies and analyses of an important economic matrix; specifically, the examination of the relationship between the specific influences of the corporate governance of the institutions and the performance of the company, measured using market-based accounting performance indicators, provides a methodological contribution towards a better articulation of the performance link between corporate governance and companies in the context of an emerging market economy (Singh, Tabassum, Darwish, & Batsakis, 2018; Ciftci et al., 2019).

Khamis, Hamdan, and Elali (2015) found that there is a significant relationship between performance and ownership measured by ROA. Ahmed and Hamdan (2015) also investigated the impact of corporate governance on the performance of listed companies in Bahrain and their results show that corporate governance is significantly correlated with company performance. Another study in China (Sami, Wang, & Zhou, 2011) discussed the link between operations performance and corporate governance. The results show a positive relationship between company governance measures and operational performance. Other research claims the opposite. In Sri Lanka Guo and Kga (2012) test how the impact of good governance practices affects business performance. It was found that the size of the board is negatively associated with the value of the company. Just as the results of a research conducted in Malaysia, Fooladi and Nikzad Chaleshtori (2011) who studied the effects of corporate governance on the performance of local businesses show that corporate governance is negatively associated with ROA.

Veliyath (1999) the board should monitor managers "behaviors for shareholders" interests, make important decisions, employ teams and superintend firms to obey the law. Eisenberg, Sundgren, and Wells (1998) and Singh and Davidson (2003) reveal that the board's dimensions are negatively correlated to company performance.

However, Bacon (1973) has an opposite view that implies broader advise members with different backgrounds and views, which is useful for the quality of decisions; Fama and Jensen (1983) detect that internal directors, by virtue of their positions, possess more information, are likely to collude with managers and make decisions against shareholders. By comparison, external directors in a neutral position, acting as supervisor, are good for eliminating principal-agency problem.

The subject of numerous studies is also the duality of the Chief Executive Officer (CEO); the duality refers to the non-separation of roles between CEO and Chairman of the Board. In a situation of normality, the cards with the duality of the CEO are perceived as ineffective because a conflict of interest could arise. This is often attributed to the nature of family-run businesses in developing countries (Soliman & Elsalam, 2012). From the following study, it emerges that the duality of the roles of CEO and president is able to improve the monitoring mechanisms of performance linked to management; according to other scholars, the question of the duality of the CEO tells us little about whether he/she is a member of the family or not, which can have a stronger effect on the relations of the board of directors (Ciftci et al., 2019). Still, on the subject of corporate governance, some studies state that effective corporate governance reduces the "control rights" of how much shareholders and creditors confer on managers, increasing the likelihood that managers invest in projects of positive net value (Shleifer & Vishny, 1997), suggesting that the best-governed companies have better operational performances, our first prosecutor for solid performance (Brown & Caylor, 2009).

The corporate governance mechanisms, which are already a delicate issue for listed companies in general, seem even more complex for public utilities, in which the interests of local communities and public institutions that represent them tend by their nature to diverge from those of investors, financial and securities markets. As already stated, the governance in these companies should allow us to satisfy a triple interest, namely to guarantee respect for the legality and transparency of administrative action, protect the public shareholder and the interest of the community that the company is serving, ensuring a balanced distribution of powers within the institutional bodies of the company.

Shleifer and Vishny (1997) argue that in these types of companies the composition of the board often has a staff that is dimensioned above where policy administrators do not pursue any social purpose by focusing their attention on pursuing popular consensus. Their theory is based on the fact that companies controlled by a public body, such as the companies we analyse, are pushed to adopt employment expansion strategies for political ends.

Agrawal and Knoeber (2001) instead focused their studies on the figure of external administrators who seem to have a negative effect on company performance from their research; this effect seems to be motivated by the fact that a greater number of the board, enlarged for political reasons, leads to the presence of too many external members.

Political influence due to the inclusion of outsiders in the board, and this is one of the reasons for bigger board size does not affect firm performance positively (Agrawal & Knoeber, 1996).

In such companies, the corporate governance assumed a particular connotation that should allow for the satisfaction of a threefold interest; to the establishment of the public bodies of the company. In a public utility company, there are two different approaches to the need to reconcile different interests and situations of abuse by the majority shareholders appearing to be fundamental in the context of government bodies (in particular within the management board). Public subjects that hold, by law, by statutes, a significant amount of shares, represent the majority shareholders. It is precisely the management board, in such companies, that fulfils the role of protection and negotiation of the different interests presented among the stakeholders.

3. PURPOSE OF STUDY

The purpose of this work is to analyse the way in which corporate governance influences the performance of the companies that are the object of our analysis, namely mechanical companies and public utilities.

It was decided to analyse the engineering companies listed on the Italian Stock Exchange in view of the increase in exports and volumes. The metalworking industry plays a particularly important role in Italy both in terms of employment and international exchanges and for the strategic role it fulfils, contributing decisively to the development of the country and to the preservation of the levels of competition of the entire industrial sector. Furthermore, it concerns the totality of investment assets in machines and equipment through which it transmits technological innovation to all branches of industry and other sectors of the economy.

Public utilities have been chosen as companies that deal with the provision and management of public services to the community. Particularly interesting is the evolution of the regulatory process that concerns them. The liberalization process that led to the division and management segmentation of the production, distribution and sales chain, to operate more and more like private companies, with the consequent and constant reduction of public capital in the shareholding accompanied by the intent to re-launch investments by private entities, all through the creation of new governance structures.

To share these companies is the chosen administrative and control model, that is the traditional one which envisages the presence of a Board of Directors, the Board of Statutory Auditors and an external auditor.

4. METHODOLOGY

In Italy the studies on Corporate Governance are latest than in the other countries of the world; what has been said stems from the fact that the national literature on the subject is quite recent. Tendentiously, the studies are articulated in particular on three aspects: analysis of the problems linked to the structure of the Italian economic system; analysis on the size and composition of the Board of Directors; analysis of the correlations between governance and performance.

In recent years, several researches have been carried out to verify the hypothesis that the increase in Corporate Governance Best Practices influences company performance.

The empirical analysis conducted allowed us to verify the hypothesis according to which the increase in Corporate Governance Best Practices influences company performance. However, the results we have received do not allow us to arrive at completely unequivocal interpretations.

The sample considered consists of 10 companies in the mechanical sector in particular: Biesse, Brembo, Carraro, Emak, Fincantieri, Leonardo, Piaggio, Pininfarina, Prima Industrie, Sabaf and 13 companies belonging to the public utility sector, in particular, A2a, Acea, Alerion, Ascopiave, Edison, Enel, Erg, Hera. Iren, KRenergy, Terna, Ternienergia, FalckRenewables.

The dataset analysed in the following study examines some companies related to the public utility sector, characterized by companies that operate purely in the national territory in a particularly complex and engineering and regulatory framework; in this case, the metalworking industry plays a particularly important role in Italy both in terms of employment and international exchanges, and for the strategic role it fulfils, decisively contributing to the development of the country and to the preservation of the levels of competition of the entire industrial sector. The methodology used is quantitative. We analysed the governance relationships of the companies in the sample for the three-year period (2015-2017). To share these companies is the chosen administrative and control model, that is the traditional one which envisages the presence of a Board of Directors, the Board of Statutory Auditors and an external auditor.

In the elaboration of the dataset, with regard to the governance data, the analysis of the corporate governance relations published annually by each company was used, while, for the performance data, only one important indicator of the balance sheet was used, namely the ROE. To correlate the governance variables to the company performance we used a single financial statement indicator: the ROE (accounting measure), the most popular financial measure was used.

The ROE has been employed largely by scholars to investigate the relationship between performance and corporate governance (Gompers, Ishii, & Metrick, 2003; Baysinger & Butler, 1985) since it shows how much profit a company has.

The study also found the presence of dummy variables; in this regard, a selection was made of those variables that could be more significant than others.

5. DISCUSSION

The companies analysed are companies listed on the Italian Stock Exchange and concern the engineering sector and the public utilities sector.

The companies chosen are the administration and control model chosen, that is the traditional one which envisages the presence of a Board of Directors, the Board of Statutory Auditors and an external auditor.

The analysed dataset concerns the three-year period (2015, 2016 and 2017). The variables taken into consideration were divided into tables according to a criterion that led to interesting conclusions. Starting with the engineering companies, we obtained the results shown in Table 1.

Table 1. Correlation matrix

	Bsize	*BM*	*Avg. B. age*	*OWN*	*NMD*	*NA*	*NAI*	*ROE*
Bsize	1							
BM	0.066	1						
Avg. B. age	0.182	0.118	1					
OWN	0.158	-0.201	0.053	1				
NMD	0.221	0.482	0.222	-0.546	1			
NA	0.112	0.061	-0.070	0.232	-0.141	1		
NAI	0.060	0.055	0.0190	0.198	-0.139	0.956	1	
ROE	0.278	-0.053	-0.030	-0.203	0.132	-0.344	-0.344	1

Note: Bsize = board size; BM = board meetings; Avg. B. age = average age of the board of directors for the firm in the current year; OWN = percentage of shares held by the first shareholder; NMD = number of minority directors; NA = number of newly appointed directors; NAI = number of newly appointed independent directors; ROE = return on equity.

Table 1 demonstrates that R2 equals 0.488. That is why we can say that the regressors predict very well the value of the dependent variable.

The correlation between ROE and the size of the Board of Directors is positive and assumes a good value, equal to 0.278, i.e. the increase in the number of members of the Board increases the profitability of the companies. In fact, a larger Board has greater supervisory power over managers due to the greater number of people who control management operations and the behaviour of managers. The number of meetings of -0.053 is negatively correlated with the ROE.

Even the average age correlates negatively to the dependent variable of -0.029, while minority directors positively correlate for a value of 0.132. The percentage of shares held by the first shareholder has a negative influence on the ROE for a value of -0.203.

Table 2. Correlation matrix

	ED	*END*	*IB*	*CEOs*	*CEO is Chair and President*	*Chair ex*	*ROE*
ED	1						
END	-0.544	1					
IB	-0.430	0.656	1				
CEOs	-0.028	0.045	0.081	1			
CEO is Chair and President	0.357	-0.463	0.182	0.167	1		
Chair ex	0.448	-0.410	-0.657	0.111	-0.167	1	
ROE	0.133	0.157	0.139	0.046	-0.042	0.063	1

Note: ED = number of executive directors; END = number of non-executive directors; IB = independents on board; CEO = chief executive officers on board; CEO is Chair and President = indicator equals 1 if the CEO is not the Chair and President of the board of directors otherwise 0; Chair ex = indicator equals 1 if the President of the board is also executive director, otherwise indicator equals 0; ROE = return on equity.

In Table 2 the regression analysis leads to the achievement of homogeneous results, i.e. all the governance variables have very high significant values except for the variable indicating the number of executive directors.

The determination coefficient is equal to 0.117 and this means that the proportion of total variation of the dependent variable explained by the independent variable is modest. The number of executive directors is positively correlated with the ROE and is equal to 0.133, so the profitability of the company increases as the number of executive directors increases. The number of non-executive directors is also positively correlated with r = 0.157. There is a positive correlation of 0.139 between the number of independent directors and the ROE. This positive influence is due to the fact that the Boards of Directors, composed of a significant number of independent members, reduce the managerial power and the information asymmetry, increasing the vigilance on any opportunistic behaviour of the management and appropriately protecting the interests of all shareholders.

Among the managing directors and the ROE, there is a positive correlation, but rather small, equal to 0.046 and therefore it is agreed that the increase in the managing directors on profitability is not particularly significant. There is a negative correlation r = -0.042 among managing directors who can also play the role of chairman and ROE. This result is in line with the studies carried out in 2011 by Dey, Engel, and Liu, which documents the lower return that is achieved by not dividing the role of the chief executive officer from that of chairman, resulting in the reduced possibility of making investments to the advantage of shareholder capital.

The duality CEO, in fact, reduces the performance of the company because the CEO could filter the information available to the other members of the Board, preventing effective control. It could also happen that the CEO duality, taking advantage of its decision-making and operational power, can undertake opportunistic behaviours in contrast with minority shareholders. There is also a negative correlation of -0.063 between the executive chair and the ROE.

Table 3. Correlation matrix

	WB	*PW*	*W_E*	*W_NE*	*W_NEI*	*FW*	*FWP*	*FWE*	*FWNE*	*FWNEI*	*ROE*
WB	1										
PW	0	1									
W_E	0.122	0	1								
W_NE	0	0	0	1							
W_NEI	0	0	0	0	1						
FW	-0.016	0	0.764	0	0	1					
FWP	0	0	0	0	0	0	1				
FWE	-0.016	0	0.764	0	0	1	0	1			
FWNE	0	0	0	0	0	0	0	0	1		
FWNEI	0	0	0	0	0	0	0	0	0	1	
ROE	0.328	0	0.250	0	0	0.149	0	0.149	0	0	1

Note: WB = number of women on board; PW = indicator equals 1 if the woman is President of the board of director, otherwise the indicator equals 0; W_E = indicator equals 1 if the woman is executive director of the board, otherwise the indicator equals 0; W_NE = indicator equals 1 if the woman is not executive director of the board, otherwise the indicator equals 0; W_NEI = indicator equals 1 if the woman is not Independent executive director of the board, otherwise the indicator equals 0; FW = indicator equals 1 if the woman is related with the family of the owner, otherwise the indicator equals 0; FWP = indicator equals 1 if the woman is related with the family of the owner and is President of the board of director, otherwise the indicator equals 0; FWE = indicator equals 1 if the woman is related with the family of the owner and is executive director of the board, otherwise the indicator equals 0; FWNE = indicator equals 1 if the woman is related with the family of the owner and is not executive director of the board, otherwise the indicator equals 0; FWNEI = indicator equals 1 if the woman is related with the family of the owner and is not executive independent director of the board, otherwise the indicator equals 0; ROE = return on equity.

In Table 3 the coefficient of determination R^2 is equal to 0.153. The presence of women on the Board of Directors is very positively correlated with the profitability of the companies for a value of r equal to 0.328.

It also experiments how, as women become more executive directors, the ROE increases, in fact, the correlation value is equal to 0.250.

This value comes out because the entry of women on the Board of Directors has brought some improvement on the boards: the female representation has increased the percentage of graduates in addition to the decrease in the average age. But the most important consideration is precisely what this analysis revealed: the improvement in the companies' economic performance. The motivation is to be found in the fact that a selection process was carried out which did not fully take into account the gender but, rather, the competencies.

Table 4. Correlation matrix

	NID	*F_P*	*F_E*	*F_NE*	*F_NEI*	*ROE*
NID	1					
F_P	0.087	1				
F_E	0.087	1	1			
F_NE	0.947	-0.120	-0.120	1		
F_NEI	0.833	-0.089	-0.089	0.745	1	
ROE	0.208	-0.001	-0.001	0.186	0.190	1

Note: NID = number of directors of the board who are not Italian; F_P = indicator equals 1 if the President of the board of director is a foreign person, otherwise, the indicator is equal to 0; F_E = indicator equals 1 if the executive the board of director is a foreign person, otherwise, the indicator is equal to 0; F_NE = indicator equals 1 if the non-executive the board of director is a foreign person, otherwise the indicator is equal to 0; F_NEI = indicator equals 1 if the non-executive independent the board of director is a foreign person, otherwise the indicator is equal to 0; ROE = return on equity.

Table 4 shows that the number of foreign directors is positively related to ROE for a value of 0.208.

Bringing together very different members in the Board of Directors can improve business results because it stimulates creativity, innovation and the ability to solve problems.

The non-executive directors also correlate positively with the profitability of the companies for r = 0.186.

In fact, the presence of non-executive directors with different professional profiles, personal data or instructions can optimize the control capacity of the Board of Directors.

The same applies to foreign directors who hold non-executive and independent positions, the correlation that emerges from the analysis is 0.190. However, it is analysed, how the degree of diversity changes considerably between the executive and non-executive directors, in favour of the latter and, in fact, the correlation analysis between these and the ROE is negative for a value of -0.00094.

Table 5. Correlation matrix

	NDOA	*OA*	*OA_P*	*OA_E*	*OA_NE*	*OA_NEI*	*ROE*
NDOA	1						
OA	0.191	1					
OA_P	0.132	0.631	1				
OA_E	0.210	0.567	0.945	1			
OA_NE	0.461	0.901	0.523	0.505	1		
OA_NEI	0.483	0.788	0.329	0.299	0.937	1	
ROE	0.129	-0.303	-0.008	0.0005	-0.049	0.120	1

Note: NDOA = number of directors appointed in other companies; OA = average of appointment in other companies; OA_P = number of other appointment in other companies with the position of President of the board of directors; OA_E = number of other appointment in other companies with the position of executive director of the Board; OA_NE = number of other appointment in other companies with the position of non-executive director of the board; OA_NEI = number of other appointment in other companies with the position of non-executive independent director of the board; ROE = return on equity.

In Table 5 the variables that have a higher significance value are those that concern the other offices of the executive directors and the non-executive ones equal respectively to 0.948 and 0.983. The coefficient of determination is quite high, that is, equal to 0.738 and this means that the regressors predict well the value of the dependent variable.

The number of directors with other positions correlates very positively with the ROE for a value of r = 0.129 while the average of the other positions negatively influences the profitability of the companies for r = -0.303.

The positive correlation between directors with other positions and performances is linked to the greater experience and expertise that the directors acquire from other Boards of Directors.

The possibility that presidents may have other tasks has a negative influence on the ROE of r = -0.008. In the event that both positions of managing director and chairman of the board converge into a single member, this is referred to as CEO duality.

Although many years have passed since the first empirical study on the correlation between CEO duality and performance, this relationship is still a cause of debate in the discussions concerning corporate governance.

With regard to the dataset relating to public utility companies, it was agreed to these results.

Table 6. Correlation matrix

	Bsize	*BM*	*Avg. B. age*	*OWN*	*NMD*	*NA*	*NAI*	*ROE*
Bsize	1							
BM	0.116	1						
Avg. B. age	0.268	0.240	1					
OWN	-0.475	-0.249	0.015	1				
NMD	0.313	0.272	0.151	-0.701	1			
NA	-0.125	0.071	-0.250	0.083	0.035	1		
NAI	0.152	0.315	-0.033	-0.123	0.255	0.656	1	
ROE	0.149	-0.079	0.058	0.005	0.293	-0.156	-0.034	1

Note: Bsize = board size; BM = board meetings; Avg. B. age = average age of the board of directors for the firm in the current year; OWN = percentage of shares held by the first shareholder; NMD = number of minority directors; NA = number of newly appointed directors; NAI = number of newly appointed independent directors; ROE = return on equity.

In Table 6 we have R2 which is equal to 0.280. We can say, therefore, that the regressors predict very well the value of the dependent variable.

The correlation between ROE and the size of the Board of Directors is positive and assumes a value of 0.149, i.e. the increase in the number of members of the Board increases the profitability of the companies. In fact, a larger Board has greater supervisory power over managers due to the greater number of people who control management operations and the behaviour of managers. On the other hand, the number of meetings of -0.079 is negatively correlated to the ROE.

The average age correlates positively with the dependent variable of 0.058, while the minority directors correlate very positively with a value of 0.293.

Table 7. Correlation matrix

	ED	*END*	*IB*	*CEOs*	*CEO is Chair and President*	*Chair ex*	*ROE*
ED	1						
END	-0.244	1					
IB	0.092	0.614	1				
CEOs	0.444	-0.376	-0.243	1			
CEO is Chair and President	-0.179	0.489	0.414	-0.299	1		
Chair ex	0.591	-0.067	0.071	0.170	-0.322	1	
ROE	-0.267	0.305	0.194	0.034	0.341	-0.131	1

Note: ED = number of executive directors; END = number of non-executive directors; IB = independents on board; CEO = chief executive officers on board; CEO is Chair and President = indicator is equal to 1 if the CEO is not the Chair and President of the board of directors otherwise 0; Chair ex = indicator equals 1 if the President of the board is also executive director, otherwise indicator equals 0; ROE = return on equity.

In Table 7 the coefficient of determination is equal to 0.283 and this means that the proportion of total variation of the dependent variable explained by the independent variable is high. The number of executive directors is negatively correlated with the ROE and is equal to -0.267, therefore, as the number of executive directors increases, the profitability of the company decreases. Instead, the number of non-executive directors is very positively correlated with a value of r = 0.305. There is a positive correlation of 0.194 between the number of independent directors and the ROE. This positive influence is due to the fact that the Boards of Directors, composed of a significant number of independent members, reduce the managerial power and the information asymmetry, increasing the vigilance on any opportunistic behaviour of the management. Among the managing directors and the ROE, there is a positive correlation, but rather small, equal to 0.034 and therefore it is agreed that the increase in the managing directors on profitability is not particularly significant. There is a positive correlation r = 0.341 among managing directors who can also play the role of chairman and ROE.

There is a negative correlation between the executive chair and the ROE of -0.131.

Table 8. Correlation matrix

	WB	*PW*	*W_E*	*W_NE*	*W_NEI*	*FW*	*FWP*	*FWE*	*FWNE*	*FWNEI*	*ROE*
WB	1										
PW	-0.082	1									
W_E	0.122	-0.182	1								
W_NE	0.124	0.615	-0.118	1							
W_NEI	0.138	0.642	-0.161	0.912	1						
FW	0.157	-0.144	-0.144	-0.094	0.052	1					
FWP	0	0	0	0	0	0	1				
FWE	0	0	0	0	0	0	0	1			
FWNE	0.157	-0.144	-0.144	-0.094	0.052	1	0	0	1		
FWNEI	0.105	-0.069	-0.069	-0.045	-0.035	0.480	0	0	0.480	1	
ROE	0.082	0.172	-0.493	0.040	0.124	0.068	0	0	0.068	0.076	1

Note: WB = number of women on board; PW = indicator equals 1 if the woman is President of the board of director, otherwise the indicator is equal to 0; W_E = indicator equals 1 if the woman is executive director of the board, otherwise the indicator is equal to 0; W_NE = indicator equals 1 if the woman is not executive director of the board, otherwise the indicator is equal to 0; W_NEI = indicator equals 1 if the woman is not independent executive director of the board, otherwise the indicator is equal to 0; FW = indicator equals 1 if the woman is related with the family of the owner, otherwise the indicator is equal to 0; FWP = indicator equals 1 if the woman is related with the family of the owner and is President of the board of director, otherwise the indicator is equal to 0; FWE = indicator equals 1 if the woman is related with the family of the owner and is executive director of the board, otherwise the indicator is equal to 0; FWNE = indicator equals 1 if the woman is related with the family of the owner and is not executive director of the board, otherwise the indicator is equal to 0; FWNEI = indicator equals 1 if the woman is related with the family of the owner and is not executive independent director of the board, otherwise the indicator is equal to 0; ROE = return on equity.

In Table 8 the coefficient of determination R^2 is equal to 0.306 and indicates a good proportion of the total variation of the performance variable explained by those of corporate governance. The presence of women on the Board of Directors is positively correlated with the profitability of the companies for a value of r equal to 0.172.

This value suggests that the entry of women into the Board of Directors brings some improvement to the boards: female representation has increased the percentage of graduates in addition to the decrease in average age.

Table 9. Correlation matrix

	NID	*F_P*	*F_E*	*F_NE*	*F_NEI*	*ROE*
NID	1					1
F_P	0.882	1				0.882
F_E	0.539	0.441	1			0.539
F_NE	0.576	0.477	0.676	1		0.576
F_NEI	-0.006	-0.039	0.116	0.065	1	-0.006
ROE	1					1

Note: NID = number of directors of the board who are not Italian; F_P = indicator equals 1 if the President of the board of director is a foreign person, otherwise, the indicator is equal to 0; F_E = indicator equals 1 if the executive the board of director is a foreign person, otherwise, the indicator is equal to 0; F_NE = indicator equals 1 if the non-executive the board of director is a foreign person, otherwise the indicator is equal to 0; F_NEI = indicator equals 1 if the non-executive independent the board of director is a foreign person, otherwise the indicator is equal to 0; ROE = return on equity.

From the correlation analysis (see Table 9) it emerges that the number of foreign administrators correlates negatively to the ROE for a value equal to -0.006.

The executive directors also relate positively to the profitability of the companies for r = -0.039. The non-executive directors relate positively to the ROE for a value of r = 0.116.

In fact, the presence of non-executive directors with different professional profiles, personal data or instructions can optimize the control capacity of the Board of Directors.

In the companies under investigation, only a few companies have a foreign president in the Boards of Directors and the correlation with the ROE is negative for r = -0.006.

Table 10. Correlation matrix

	NDOA	*OA*	*OA_P*	*OA_E*	*OA_NE*	*OA_NEI*	*ROE*
NDOA	1						
OA	0.658	1					
OA_P	0.357	0.520	1				
OA_E	0.581	0.651	0.105	1			
OA_NE	0.736	0.762	0.566	0.449	1		
OA_NEI	0.735	0.597	-0.094	0.694	0.548	1	
ROE	0.034	-0.008	0.009	-0.114	0.750	0.090	1

Note: NDOA = number of directors appointed in other companies; OA = average of appointment in other companies; OA_P = number of other appointment in other companies with the position of President of the board of directors; OA_E = number of other appointment in other companies with the position of executive director of the Board; OA_NE = number of other appointment in other companies with the position of non-executive director of the board; OA_NEI = number of other appointment in other companies with the position of non-executive independent director of the board; ROE = return on equity.

Table 10 shows a rather small coefficient of determination that is equal to 0.084 and this means that the regressors do not predict very well the value of the dependent variable.

The number of directors with appointments in other companies is correlated positively with the ROE for a value of r = 0.034. The positive correlation between directors with other positions and performances is linked to the greater experience and expertise that the directors acquire participating in other Boards of Directors.

The possibility that presidents may have other tasks has a positive influence on the ROE of r = 0.009. The other positions held by the executive directors are negatively correlated even though of a very low value equal to -0.114. With regard to non-executive directors, as this governance variable increases, the performance one increases by 0.075. There are better performances in companies where there is a greater presence of non-executive and independent directors who have other offices, for a value of r = 0.090.

After having verified the research hypotheses it is necessary to make some considerations on the most important variables involved in the empirical analysis.

In the event that both positions of managing director and chairman of the board converge into a single member, this is referred to as CEO duality.

Although many years have passed since the first empirical study on the correlation between CEO duality and performance, this relationship is still a cause of debate in the discussions concerning corporate governance.

In the past few years, stock market management companies and companies in charge of controlling listed companies, have pressed companies to avoid overlapping roles in a single person. But not all companies have highlighted these considerations as there is empirical evidence that shows positive effects for the companies that adopt this governance.

This hypothesis holds that the management unit is promoted, especially in the decision-making phase. But more recent studies show that CEO duality has a negative influence on performance because the CEO could hide useful information from other members of the Board.

As for independent administrators, recent studies have begun to show different results compared to those of the past.

The empirical studies of Nguyen and Xu (2010) show that independent directors are an added value for companies and that they are able to show good managerial performance in the Board of Directors and shareholders.

A topic that is very interesting to scholars is that of having inside the boards, administrators who have other assignments in more companies.

Differently from what emerged years ago, more recent studies have shown a negative influence between other tasks and business value, just as this analysis demonstrates.

The size of the Board of Directors is positively correlated to the performance variable because more numerous human capital increases the skills in the company. Another point of the analysis is the presence of women in the Board of Directors.

The study by Byron and Post (2016) highlights the positive correlation between women in the Board of Directors and company performance.

In fact, women are considered positively as a precious element for companies above all because they are able to provide creativity, allowing them to find innovative solutions to corporate problems.

To summarize, from the analysis of economic literature we can deduce, for almost all the variables taken into consideration in the analysis, the presence of conflicting results. However, it is evident that those companies, with weak governance structures and with poor shareholder protection, have agency problems. Therefore, only by having an effective Board of Directors can be reduced or avoided the opportunistic behaviour of managers, trying to outline the objectives of management with those of stakeholders.

Among the various empirical studies, however, different results could be obtained attributable to various differences, such as, for example, the choice of the variables used to measure corporate governance, differences in the institutional context, the period under consideration or the sample of companies analysed.

6. CONCLUSION

This paper aimed to analyse the Italian context and the role of corporate governance in influencing the performance of engineering companies belonging to the public utilities sector listed on the Italian Stock Exchange in the years 2015, 2016 and 2017.

In the research, we saw how the governance variables had a positive influence on the profitability of the companies, including the size of the Board of Directors. From this last item, it was possible to assess that increasing its members corresponds to an increase in the corporate performance, precisely because the greater number of Directors allows greater supervision of managers, dissuading possible opportunistic behaviour which may compromise companies' value.

Then, a larger number of independent directors within the Boards allows for stronger governance as well; this because may adequately monitor the operations of managers and corporate strategies.

As for the CEO duality, on the other hand, a negative correlation was achieved with company performance and this result stems from the fact that the CEO, having both decision-making and operational power, can exploit this "dominant" position to take opportunistic attitudes in contrast with minority shareholders.

Contrary to some research hypotheses, directors with other appointments positively influence the company performance because of greater competence and experience developed participating at different Boards.

The analysis also highlighted the positive influence of the greater presence of women within the Boards of Directors on company performance.

The female presence, however, has been increased thanks to the "pink quotas", a law that represents one of the most significant initiatives implemented in Italy in the field of gender equality. But there is still a long way to go and, in the present analysis, it is demonstrated by the fact that on the sample analysed no woman covers the role of president within the Board of Directors. These

barriers will be break only when gender equality is completely integrated into Italian culture. The results obtained with the empirical analysis, therefore, support the hypothesis of a positive correlation between corporate governance and performance.

This work, therefore, aims to highlight the importance of drafting a satisfactory governance report so that the social partners can be effectively oriented.

The results showed we have received do not allow us to arrive at completely unequivocal interpretations; the main limit is the sample size used in this study was relatively small.

The authors argue that in public service companies the presence of independent subjects is fundamental in the composition of the governing bodies (in particular in the board of directors) in order to balance the various interests.

In public services, it is precisely the board of directors that plays the role of safeguarding and negotiating the various interests between the parties involved, balancing the power of the majority shareholders. For the future, the extension of the sample being analysed allows for more significant results.

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