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# Does Corporate Governance matter in CSR Disclosure? Evidence from Italy in the "era of sustainability"

#### **Abstract**

Corporate Governance (CG) has long been the subject of interest for researchers in business administration. Corporate Social Responsibility (CSR) practices decided by Boards of Directors have become a key issue in the decision making process of companies. In this scenario, it is interesting to focus on the relationship between CG structure and CSR policies have become a key issue to define the "strategic view" of the company. In particular, we identify how the characteristics of CG impact on CSR Disclosure.

Findings show that a large board of directors reduces the probability of following practices which involve stakeholders more closely in company activity; while companies with more independent directors have a higher level of stakeholder protection almost by definition, and there is need for additional ways of involving stakeholders in company activity. Our results also confirm that overlap between the role of CEO and Chairman is undesirable in issuing CSR Report.

**Keywords**: Corporate Governance, Corporate Social Responsibility, CSR Disclosure, CSR policies.

#### 1. Introduction

The issue of corporate governance (CG) has long been a subject of interest for researchers in business administration, given that good management is essential for business success in various perspectives.

Some studies have investigated the effect of the composition of the boards of directors in relation to the value of the company, focusing on particular features of the board, such as the numbers of executive directors and independent directors (Brick & Chidambaran, 2010; Kini, Kracaw, & Mian, 1995).

In recent years, research has focused on the composition of boards of directors with the aim of identifying determinants of more accurate and effective business management. These studies often consider diversity from different perspectives, including gender, age, race, culture, competence, professional background and personal characteristics of managers (Boeker, 1997; Erhard, Werbel, & Shrader, 2003). In particular, several studies Board of Directors structure aim at identifying CG system quality using a rating score (Bhagat & Bolton, 2008; Cosma, Mastroleo, &

Schwizer, 2018) or, more generally, through characteristics defining good governance (Rodriguez-Fernandez, 2016).

At the same time, Corporate Social Responsibility (CSR) as governed by boards of directors has become a significant and strategic issue in company decision making processes. Specifically, CSR can be defined as the responsibilities of a company towards society and the environment; a "concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (European Commission, 2001).

The way in which social and sustainable actions are disclosed is extremely relevant for the impact of CSR. Some studies look at benefits from CSR, which include company reputation, customer loyalty and customer-company identification (Calabrese, Costa, & Rosati, 2016). Other studies analyze the impact of CSRD on the relationship between company and stakeholders (Bouten, Everaert, Van Liedekerke, De Moor, & Christiaens, 2011; Searcy & Buslovich, 2014). Some studies investigate why a growing number of companies report their CSR commitment by means of sustainability reports, websites and other CSR communication activities (Kolk & Pinkse, 2010). Others analyze the effectiveness of CSRD (Weber, 2008).

A sizeable part of the literature describes approaches to the measurement of company disclosed CSR commitments (Longo, Mura, & Bonoli, 2005). Many of these studies focus on the importance of engagement in ensuring good and effective disclosure. Font et al. (2016) suggest different frameworks for engagement in CSR. Other research on CSRD focuses on the ?type ?instrument of accountability used by companies, with recent studies investigating the integrated report (Fifka, 2013; Frias-Aceituno, Rodríguez-Ariza, & Garcia-Sánchez, 2014).

In this very wide scenario, it is interesting to focus on the relationship between the CG structure and CSR policies as the result of a "strategic view" of the board of directors of the company. It is particularly important to understand how the quality of the CG system influences and impacts on CSR disclosure and behavior.

Previous studies (Pucheta-Martínez & Gallego-Álvarez, 2019) pointed out that decisions such as allocating resources to companies, CSR commitment to stakeholders and society, maintaining a company's relations with all stakeholders, and CSR strategic actions, that are made by board of directors, may result in a more sustainable business.

A good number of studies examine CG and CSRD separately, but there is little empirical evidence regarding the effects of CG mechanisms and CSRD.

Specifically, the paper aims to investigate the following research hypotheses:

H1: CG characteristics and functioning of boards are positively associated with the presence of CSRD.

H2: CG characteristics and functioning of boards are positively associated with the level of assurance of CSRD.

H3: CG characteristics and functioning of boards are positively associated with the level of detail provided on CSR key elements disclosed in the report.

H4: CG characteristics and functioning of boards are positively associated with the relevance of stakeholder engagement disclosed in the CSR report.

The analysis focuses on Italy, with particular reference to listed companies in 2016. The period analyzed makes it possible to link the quality of CG, represented by specific characteristics of governance, to CSRD before EU Directive 2014/95. This Directive lays down the rules on disclosure of non-financial and diversity information by large companies, and was introduced in Italy by Legislative Decree No. 254 of 2016 to apply to financial statements from fiscal year 2017 onwards.

Moreover, the context of Italy is of particular interest since CG has been the subject of regulatory intervention with reference to both gender aspects and the system of supervision and responsibilities. Regarding gender, Law 120/2011 (Golfo-Mosca Law) promoted gender balance in the governing bodies of listed companies on regulated markets and of non-listed companies controlled by the Government for a limited time period. It is due to expire shortly if no extension is made, which means that there are currently opportunities to investigate the effects of regulatory intervention and how far it will affect the governing bodies of Italian companies in the future.

The study consists of eight sections. After the introduction, Section 2 sets out the theoretical background and Section 3 sets out the research hypothesis. Section 4 describes the research method and Section 5 presents the sample. Section 6 shows our univariate results, while Section 7 includes regression results. Lastly, in Section 8, we summarize our findings and illustrate some limitations and further steps.

## 2. Theoretical background

#### 2.1 CSR studies

Corporate Social Responsibility (CSR) is the responsibility the firm takes for all its stakeholders. Stakeholders can be investors or any subject or group that 'holds a stake' in the firm, in that the firm's activities can have possible positive or negative effects on them (Freeman, 2004; Gray, Kouhy, & Lavers, 1995).

Although CSR can be studied according to different theories, in this paper we mainly consider agency theory. Agency theory has been previously used by studies on the usefulness of devoting corporate resources to social initiatives, ?some of which ? many of which ?which find that the

presence of CSR leads to higher levels of management autonomy (Atkinson & Galaskiewicz, 1988). In recent years, the number of studies on CSR has increased. Many have focused on the relationship between business and society, and the role of business with regard to CSR (Garriga & Melé, 2004; Scherer & Palazzo, 2007). But despite the strategic role of communication in CSR, little attention has been paid this aspect (S. J. Brammer & Pavelin, 2006). The commitment to informing and involving stakeholders requires an adequate flow of communication, focusing on relevant content. Many companies have thus gradually implemented social and sustainability reporting in order to establish a positive channel for communicating their CSR to stakeholders (Hsu, Lee, & Chao, 2013). Nowadays, in Italy, Legislative Decree No. 254 of 2016 requires "public interest entities" to supplement statutory financial statements with disclosure of environmental, social and governance strategies with regard to documents from financial year 2017 onwards. CSRD is thus moving from a voluntary activity to one which is required by law.

## 2.1. Corporate Governance

CG defines the function, structure, and role of the board of directors in the ways in which companies are organized. Robust CG has been shown to mitigate agency problems and to encourage managers to operate properly; and one of the most widely discussed issues in academic literature is in fact how to appropriately structure the board of directors in order to influence board actions or corporate performance.

Assessing the quality of CG and making decisions about the way to improve it are other important matters. Quality assessment of CG and summarizing the various dimensions of the phenomenon into a single score has become important for many reasons. It can enable companies to assess the quality of their own governance and signal their governance quality to stakeholders; allow for more accurate investment decisions, especially for institutional investors; mitigate agency problems between managers and shareholders and lastly reduce conflicts of interest between minority shareholders and majority shareholders or between external and internal stakeholders (Cosma et al., 2018).

Board composition, which is believed to impact on the effectiveness of board monitoring, can be expressed in terms of size, independence (expressed by the percentage of independent and minority directors), diversity, gender and nationality, and in terms of duality, when ?for example a CEO also holds the position of the chairman of the board.

#### Board size

Board size is one of the most widely studied board characteristics for two main reasons. First, the number of directors may influence functioning of the board and hence corporate performance. Second, researchers can study boards of directors as decision-making groups making reference to literature on group dynamics and workgroup effectiveness. Increasing the number of directors

provides a larger pool of expertise because larger boards are likely to have more knowledge and skills at their disposal. Besides, large boards may be able to draw on a variety of perspectives on corporate strategy and may make the CEO less dominant (Forbes & Milliken, 1999). Some authors (Guest, 2009; M. Lipton & Lorsch, 1992) on the other hand, maintain that when a board has too many members, they inevitably take on a purely symbolic role and their activities become disjointed from management processes.

### CEO Duality

Different theoretical arguments have been used to either challenge or support CEO duality. Drawing on agency theory, the opponents (Dayton, 1984; Levy, 1981) suggest that CEO duality diminishes the monitoring role of the board of directors over the executive manager, and this in turn may have a negative effect on corporate performance. On the other hand, advocates of CEO duality (Davis, Schoorman, & Donaldson, 1997) find that corporate performance can be enhanced, as conflict becomes less likely when the executive manager has full authority over his corporation by also serving as the chairman. Other authors such as Brickley, Coles and Jarrell (1997) argue that there is no one optimal leadership structure as both duality and separation perspectives have related costs and benefits.

#### Independent directors

Much of the academic research on boards of directors focuses on the role and the proportion of inside, outside and independent directors. It is widely recognized that independent directors have an important role to play, especially in those areas where there is a potential for conflicts of interest, such as financial control, nomination and remuneration. In general, two theories form the basis for the reliance on insider or outsider-dominated boards. Agency theory focuses on the conflicts of interest that occur among the shareholders (principals) and the managers (agents), stemming from the separation of ownership and control. Outsider-dominated boards are more involved in restructuring decisions (Johnson, Hoskisson, & Hitt, 1993) and positively influence diversification strategies (Baysinger & Hoskisson, 1990).

## Gender

Most recent legislation is based on the idea that the presence of women on boards of directors can significantly influence the quality of the CG system. Diversity in the boardroom can enhance the quality of governance processes, leading to a broader perspective in decision-making, reducing the group-thinking phenomena, and increasing creativity and innovation (Furlotti, Mazza, Tibiletti, & Triani, 2019; Robinson & Dechant, 1997). The presence of women as a group has an effect on different aspects of the board, such as greater attention to conflict management (D. A. H. Brown, Brown, & Anastasopoulos, 2002), better understanding of company's problems and contribution in

bringing different, and often wider and more innovative perspectives, in relation to the resolution of complex problems (DiTomaso, Post, & Parks-Yancy, 2007; Westphal & Milton, 2000).

CG structure specifies the distribution of rights and responsibilities among different participants in the corporation, and defines the rules and procedures for making decisions on corporate affairs. In the literature, several studies focus on the link between CG and the ethical practices in the business and the responsiveness of an organization to its stakeholders, defined as CSR issues (Elkington, 2006; Harjoto & Jo, 2011). Drawing on stakeholder theory, this paper examines the relationship between CG characteristics and functions and CSRD, analyzing, in particular, whether good CG and CSRD can be seen as complementary mechanisms of legitimacy that companies can use to dialogue with stakeholders, as found by Jo and Harjoto (2012) and Michelon and Parbonetti (2012).

## 2.1. Corporate governance and CSR Disclosure

CSRD has been an important focus of academic interest since the 1980s (Wiseman 1982; Gray, Kouhy and Lavers, 1995; Deegan and Gordon 1996) and there are several existing overview studies, which specifically review CSRD literature (Fifka, 2013; Parker, 2014).

Focusing on the more recent CSRD studies, the numerous articles can be classified into several main topics. The first field of studies looks at the theories related to CSR and disclosure, including agency theory (Dhaliwal, Radhakrishnan, Tsang, & Yang, 2012), legitimacy theory (Georgiou & Jack, 2011) and neo-institutional theory (J. L. Campbell, 2007). Other studies focused on what encourages companies to disclose their CSR commitment; reasons include company reputation, customer loyalty and customer-company identification (Kolk & Pinkse, 2010). A significant part of literature analyses the role of CSRD in spreading the ethical values of the company (Lewis & Unerman, 1996), developing an effective social responsibility policy (Spence, 2009), increasing transparency and democracy (J. Brown, 2009; Spence, 2009), and analysing it in developed and developing Countries (Ali, Frynas, & Mahmood, 2017) or focusing on multinational corporations (Kaymak & Bektas, 2017).

We suggest that, as disclosure policies on sustainability and CSR emanate from the board of directors, sustainability disclosure may be a function of board attributes. In particular, this study, conducted through the lens of agency theory and in the stakeholder perspective, aims to investigate the relationship between different characteristics of the board and sustainability disclosures. We expect that efficient boards will impact on CSRD, since firms interested in being identified by stakeholders and society as linked to CSR, especially in CSR reporting, should have boards of directors which protect the interests of all stakeholders rather than only shareholders.

In literature, CSRD has been closely studied in relation to board independence. García-Sánchez and Martínez-Ferrero (2017) run a Tobit regression model on an international sample from 2004 to

2010, to find whether the role of independent directors in CSRD is determined by the aim of protecting shareholders' value, and whether non-executive and directors only have the incentive to disclose this information when it does not damage ownerships' interest. They show that independent directors show an initial opposition to CSRD. Moreover, using a sample of 83 Spanish-listed firms over the period 2009–2014, Fernández-Gago, Cabeza-García and Nieto (2018) show how the background of independent directors may affect the way in which their companies disclose CSR information, and that political background and diverse education has a positive impact on their firm's probability of issuing a CSR report following the standards of the Global Reporting Initiative.

The relationship between CSRD and CG involves aspects like size and CEO Duality (Forker 1992, Gul and Leung, 2004; Roberts, McNulty and Stiles, 2005) which are characteristics of efficient boards.

In recent years, the relationship between CSRD and board diversity has become increasingly important as an subject of study. Rao and Tilt (2016) develop an analysis involving a longitudinal study to analyse the extent of CSRD in annual reports. Through a regression analysis using panel data, they analyse the association between CSRD and measures of board diversity such as tenure, gender and overall diversity. Their results are consistent with many previous studies showing that the presence of women directors is associated with higher levels of CSR reporting (Barako & Brown, 2008; Kathy Rao, Tilt, & Lester, 2012; Khan, Khan, & Saeed, 2019). In other words, their findings suggest that women and men differ in values when it comes to social responsibility (Post, Rahman, & Rubow, 2011).

The present study investigates the relationship between CSRD and board diversity in the context of Italy. Recent legislation reflects long term debate and wide-ranging research on CSRD in the country. Italy is in fact a context of particular interest since CG has been the subject of regulatory intervention relating to gender aspects and the system of supervision and responsibilities. On gender, Law No. 120 of 2011 (Golfo-Mosca Law) currently promotes gender balance in the governing bodies of listed companies on regulated markets and of non-listed companies controlled by the Government. If no extension is made, the law expires shortly, which means there will be interesting opportunities to investigate the effects of regulatory intervention and the evolution of governing bodies of Italian companies in the future. A further relevant item of legislation is Regulation 231 of 2001, which made Italy one of the first countries to legislate on the responsibility of ?companies, and specified a very broad and precise list of ?offences.

## 3. Hypothesis development

The analysis is carried out on Italian listed companies for financial year 2016. For this period, it is possible to link the quality of CG to CSRD before EU Directive No. 95 of 2014. This lays down the

rules on disclosure of non-financial and diversity information by large companies, and was introduced in Italy by Legislative Decree No. 254 of 2016 to cover financial statements from fiscal year 2017 onwards.

With these premises, the present study aims to analyse the following research hypotheses:

H1: CG characteristics and functioning of boards are positively associated with the presence of CSRD.

The presence of a stand-alone report is one of the most widely investigated aspects of CSRD. CSR reporting has developed from disclosure of corporate environmental and social policies included in financial annual reports to stand-alone combined reports which include social, environmental, and economic/financial information (Buhr, 2002; Gray & Milne, 2007). Recent trends indicate an increasing number of stand-alone reports, which have become almost standard for large corporations worldwide (Michelon, Pilonato, & Ricceri, 2015).

H2: CG characteristics and functioning of boards are positively associated with the level of assurance of CSRD.

External assurance is considered essential in order to guarantee the credibility of CSR and sustainability reports (Dando & Swift, 2003). ??Although the process of assurance of the credibility of CSR reports does not escape criticism (C. A. Adams & Evans, 2004), many studies note the importance of independent verification processes (C. A. Adams & Evans, 2004; Zorio, García-Benau, & Sierra, 2013) in providing adequate support for the credibility, completeness, and materiality of the social and environmental information reported (Michelon et al., 2015).

H3: CG characteristics and functioning of boards are positively associated with the level of detail provided on key CSR elements disclosed in the report.

Materiality analysis ensures that CSR reports meet the highest level of agreement between the interests of all stakeholders. Font, Guix and Bonilla-Priego (2016) note that materiality analysis makes it possible to define a sustainability strategy and ?can also appear in the report. One of the most serious problems with CSR reporting, in fact, is the lack of completeness in covering all the features that are material for the stakeholders (Calabrese et al., 2016). With robust materiality analysis, a company can identify the interests and issues of most interest to its stakeholders as well as the main issues impacting on the company.

H4: CG characteristics and functioning of boards are positively associated with the level of stakeholder engagement disclosed in the CSR report.

An effective materiality process requires the direct involvement of all company stakeholders, i.e. complete engagement, in order to identify stakeholder expectations and needs, so that the

company can define the content of the report appropriately (Calabrese et al., 2016). Many studies underline the importance of involving all stakeholders (Font et al., 2016; Harrison & Wicks, 2013; Wood, 1991) in producing a useful voluntary report. Companies are in fact required to identify a set of stakeholder expectations (Unerman & Bennett, 2004).

## 4. Methodology

To test our hypotheses we use the Probit model and run the following regressions:

Prob [CSR Report] = Prob ( $\beta$ 0 +  $\beta$ 1 BoardSize<sub>i</sub> +  $\beta$ 2 Independence<sub>i</sub> +  $\beta$ 3 Duality<sub>i</sub> +  $\beta$ 4 FemaleExecutive<sub>i</sub> +  $\beta$ 5 Size<sub>i</sub> +  $\beta$ 6 ROA<sub>i</sub> + e<sub>i</sub>)

(1)

Prob [Assurance] = Prob ( $\beta$ 0 +  $\beta$ 1 BoardSize<sub>i</sub> +  $\beta$ 2 Independence<sub>i</sub> +  $\beta$ 3 Duality<sub>i</sub> +  $\beta$ 4 FemaleExecutive<sub>i</sub> +  $\beta$ 5 Size<sub>i</sub> +  $\beta$ 6 ROA<sub>i</sub> + e<sub>i</sub>)

(2)

Prob [Materiality] = Prob ( $\beta$ 0 +  $\beta$ 1 BoardSize<sub>i</sub> +  $\beta$ 2 Independence<sub>i</sub> +  $\beta$ 3 Duality<sub>i</sub> +  $\beta$ 4 FemaleExecutive<sub>i</sub> +  $\beta$ 5 Size<sub>i</sub> +  $\beta$ 6 ROA<sub>i</sub> + e<sub>i</sub>)

(3)

Prob [Engagement] = Prob ( $\beta$ 0 +  $\beta$ 1 BoardSize<sub>i</sub> +  $\beta$ 2 Independence<sub>i</sub> +  $\beta$ 3 Duality<sub>i</sub> +  $\beta$ 4 FemaleExecutive<sub>i</sub> +  $\beta$ 5 Size<sub>i</sub> +  $\beta$ 6 ROA<sub>i</sub> + e<sub>i</sub>)

(4)

where our dependent variable is (i) CSR Report - representing presence or absence of company commitment to CSRD; (ii) assurance - credibility of social and sustainability reports; (iii) materiality – whether CSR report meets the highest level of agreement between the interests of all stakeholders; (iv) engagement level of direct stakeholder involvement and helps define report content.

Given that our dependent variables are dummy variables, we use a Probit model. We also use standard error robust to heteroscedasticity(White, 1980).

Looking at the independent variables, we consider four main board of directors (BoD) characteristics as a proxy of high-quality CG. These are the number of directors appointed, the number of independent directors over the total number of directors, overlapping in the role of CEO and chairman, and female presence in executive positions.

Previous research finds that size (Bear, Rahman, & Post, 2010; S. Brammer, Millington, & Pavelin, 2009; Galbreath, 2011; Post et al., 2011) and profitability can also exert influence on a firm's responsible behavior. They are therefore both included as control variables.

See Appendix 1 for definitions of variables.

## 5. Sample

Starting with the full population of Italian listed firms at the end of the year 2016 (338 companies), we randomly selected 200 of them. Unlike previous research, our study includes financial firms because of their importance in the field analyzed.

For these 200 firms we hand-collected both CG and CSRD data from the CG report and the CSR report of three years, 2016, 2011 and 2008, respectively. The aim of using three different years is to capture different CG characteristics, given that the board of directors changes every three years and its characteristics could impact on CSR. Unfortunately, the sample is somewhat unbalanced because some data is missing for some companies in one or two years.

Using the public CG reports available on company websites, we hand-collect data on characteristics of boards of directors. We focus on the total number of directors appointed by the firm, the number of independent directors, the overlap between the role of CEO and Chairman and the number of women executive directors.

Using the public CSR reports available on company websites, we also hand-collect data on:

- the presence or absence of a CSR report, as a proxy of the level of commitment by the firm;
- the credibility of CSR reports, proxied by the external assurance on this document;
- the level of agreement between stakeholders on the CSR reports;
- direct stakeholder involvement.

Financial data come from "Analisi Informatizzata Delle Aziende" (AIDA) from Bureau van Dijck. We consider 200 companies in ?three different fiscal years, and have a total of 427 observations.

## 6. Univariate results

## 6.1 Descriptive statistics

Table 1 shows descriptive statistics for dependent, independent and control variables.

Looking at the dependent variables, 27.2% of observations have a CSR report and 17.2% provide external assurance on the reports, while 25.4% show reports including a materiality matrix. Finally, we show that in 26.1% of reports analyzed, firms mention stakeholder involvement, signaling their commitment to it.

Focusing on the characteristics of CG, the mean number of directors appointed to the board is 10, with a maximum number of 24. This is consistent with boards of directors worldwide. The average numbers of board members are 9, 11 or 12 in the USA (R. B. Adams & Ferreira, 2009; Carter, D'Souza, Simkins, & Simpson, 2010; Landry, Bernardi, & Bosco, 2016); 11 or 15 in Spain (K. Campbell & Mínguez-Vera, 2008; de Anca & Gabaldon, 2014); 9 in Italy (Bianco, Ciavarella, & Signoretti, 2015); 5 or 7 in Norway (Huse, Nielsen, & Hagen, 2009; Nielsen & Huse, 2010) and 7 in Malaysia (Abdullah, Ismail, & Nachum, 2016). The average number is 6 in Australia and in Finland (Galbreath, 2011).

The number of independent directors sitting on a board of directors in Italy is, on average, 47.5%, which is similar to other countries. The percentage of observations in which one individual holds both the role of CEO and chairperson is 29%; this percentage is lower than in the USA but similar to the corporate governance structure Spain (Abbott, Parker, & Presley, 2012; Bear et al., 2010; Chih, Chih, & Chen, 2010). Finally, the percentage of women in executive positions (female serving as CEO or executive director) is 26.5% %.

With regard to the size of the sample firms, the mean total asset is approximately 5.7 billion Euros (untabulated, consistent with Bar-yosef and Prencipe (2013). The average ROA is 0.70%.

#### 6.2 Correlation Matrix

Table 2 shows the univariate correlation between variables. As expected, all dependent variables are significantly and positively correlated (Pearson correlations 74.4%, 95.4%, 97.1%, 73.8%, 72.5% and 97% respectively). Independent and control variables both have a low correlation and their VIF is also very low. Moreover, for all the other variables with high correlation (> 40%), we check the variance inflation factor (VIF) which is lower than 10. Thus, we conclude that there are no problems of multicollinearity.

#### 7. Regression results

Tables 3, 4 5 and 6 present the results of the Probit regression between CG characteristics and CSRD issues.

Table 3 provides the answer to H1, which investigates whether board size, the percentage of independent directors, the overlap between the role of CEO and Chairman and the presence of female executive directors are related to a higher probability of having a CSR report. We find a significant and negative association between Independence and Duality and the presence of a CSR Report ( $\beta$ 2= -0.681 and  $\beta$ 3= -0.255; p-value = 0.068 and 0.103 respectively). The R-square of McFadden is 23.40%.

Our results underline that directors who are more independent reduce the probability of producing a CSR report. This may reflect the fact that independent directors are more effective in protecting stakeholder interests irrespective of whether CSRD is made. In other words, the more independent are the directors sitting on the board, the higher the level of shareholder and stakeholder protection, and smaller the need to have CSR information and data on firm behaviors. Related to this interpretation, there is also the idea that producing a good and shared CSR report entails spending time and economic resources. Our findings support the findings of García-Sánchez and Martínez-Ferrero (2017) that independent directors are often initially opposed to CSR disclosure practices.

Moreover, firms with the same person in the CEO and Chairman role show a lower probability of issuing a CSR report. This may be because this role-overlap is significantly time-consuming.

Previous research on the relationship between CEO duality and voluntary disclosure is often inconclusive. Ho and Shun Wong (2001) as well as Cheng and Courtenay (2006) find no association between CEO duality and voluntary disclosure, while Gul and Leung (2004) find a negative association between CEO duality and the extent of voluntary disclosure. Our results are in line with Forker (1992), Gul and Leung (2004) and Roberts, McNulty and Stiles (2005), who all argue that CEO duality reduces overall accountability, thus making companies less transparent for stakeholders as well as for shareholders.

Table 4 provides the answers to H2, in which we analyze whether board size, the percentage of independent directors, the overlap between the role of CEO and Chairman and the presence of female executive directors are related to a higher probability of having an external assurance on the CSR report. We find no significant association between CG characteristics and external assurance of the CSR report. The R-square of McFadden is 24.50%.

It thus appears that governance structure has no impact on the firm's decision to have external and independent assurance on its CSR report.

Table 5 answers H3, in which we analyze whether board size, the percentage of independent directors, the overlap between the role of CEO and Chairman and the presence of female executive directors are related to a higher probability of having the materiality matrix in the CSR report. We find no significant association between CG characteristics and the presence of the materiality matrix in the CSR report. The R-square of McFadden is 18%.

It thus appears that governance structure has no impact on the firm's decision to include a materiality matrix in the CSR report. The materiality matrix supplies fuller information on matters which can generate significant economic, social and environmental impact on the firms' activities, and which are perceived as important by stakeholders.

Finally, Table 6 provides answers to H4, in which we analyze whether board size, the percentage of independent directors, the overlap between the role of CEO and Chairman and the presence of female executive directors are related to a higher probability of achieving stakeholder involvement in all practices and bringing stakeholders closer to the company. We find a significant and negative association between Board Size and Independence and stakeholder engagement in the "life of the firm" ( $\beta$ 1= -0.048 and  $\beta$ 2= -0.587; p-values = 0.084 and 0.102 respectively). The R-square of McFadden is 19.60%.

Our findings show that a large board of directors, perhaps because it can be inefficient, reduces the probability of following practices which involve stakeholders more closely in company activity. The previous literature confirms that a larger board size probably entails weaker monitoring, or creates coordination problems and collusion (Beasley, 1996; Fama & Jensen, 1983; Martin Lipton & Lorsch, 1992). Smaller boards are more efficient at monitoring because they are better coordinated and less vulnerable to free-riding (Jensen, 1993). They are associated with better firm performance (Dalton, Daily, Johnson, & Ellstrand, 1999; Eisenberg, Sundgren, & Wells, 1998).

Companies with more independent directors have a higher level of stakeholder protection almost by definition, and there is thus need for additional ways of involving stakeholders in company activity.

#### 8. Conclusions

The analysis confirms that specific governance characteristics influence different aspects of CSR. We find that the level of firm commitment to CSR, measured through the four aspects, presence of a CSR report, whether the CSR report is externally assured, the inclusion of the materiality matrix and the level of stakeholder engagement, is related to certain aspects of CG. Our findings confirm that the presence of independent directors serves as a guarantee in itself, and there are no further requirements for a company to follow sound CSR practices. In other words, directors from more independent backgrounds make issuing a CSR report, and adopting additional methods of involving stakeholders more closely in the company, both less likely. Our results also confirm that overlap between the role of CEO and Chairman is undesirable, finding a negative relation between overlap and the probability of issuing a CSR Report. Finally, we confirm that greater board size reduces the probability of company having in place procedures which sufficiently engage all stakeholders in the "life of the firm", confirming the widespread stance of literature that a large board of directors is "inefficient".

The main implications of our study are related to academic research. Previous findings have been mixed, and we contribute to the literature by providing additional evidence on the relationship between specific CG characteristics and CSRD issues. Moreover, we fill the gap existing in the literature with an empirical analysis in the context of Italy, based on relatively unexplored CSRD characteristics. Previous research, in fact, explores the quality of CSRD, often using indexes or content analysis which evaluates disclosure quality overall, or simply investigating the presence of voluntary reports. This study looks in more detail at the relationship between certain CG characteristics and certain key features of CSRD. This research should be also be of use for regulators in seeking to improve the quality of CSR by providing recommendations on the structure of CG.

Our research is not without limitations. We consider only one country which, although our results are meaningful, makes them less generalizable. Given the differentiation in CG worldwide, the study may however inspire research in other countries. Secondly, the hand-collection of the data makes our analysis extremely time-consuming. Future research could however increase the sample size and analyze a higher number of years.

#### References

- Abbott, L. J., Parker, S., & Presley, T. J. (2012). Female board presence and the likelihood of financial restatement. *Accounting Horizons*, *26*(4), 607–629. https://doi.org/10.2308/acch-50249
- Abdullah, S. N., Ismail, K. N. I. K., & Nachum, L. (2016). Does having women on boards create value? the impact of societal perceptions and corporate governance in emerging markets. *Strategic Management Journal*, *37*(3), 466–476. https://doi.org/10.1002/smj.2352
- Adams, C. A., & Evans, R. (2004). Accountability, Completeness, Credibility and the Audit Expectations Gap. *Journal of Corporate Citizenship*, *14*, 97–115. Retrieved from http://greenleaf-publishing.com/content/pdfs/jcc14adam.pdf
- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*(2), 291–309. https://doi.org/10.1016/j.jfineco.2008.10.007
- Ali, W., Frynas, J. G., & Mahmood, Z. (2017). Determinants of Corporate Social Responsibility (CSR) Disclosure in Developed and Developing Countries: A Literature Review. *Corporate Social Responsibility and Environmental Management*, *24*(4), 273–294. https://doi.org/10.1002/csr.1410
- Atkinson, L., & Galaskiewicz, J. (1988). Stock Ownership and Company Contributions to Charity. *Administrative Science Quarterly*, 33(1), 82. https://doi.org/10.2307/2392856
- Bar-yosef, S., & Prencipe, A. (2013). The Impact of Corporate Governance and Earnings Management on Stock Market Liquidity in a Highly Concentrated Ownership Capital Market. *Journal of Accounting, Auditing & Finance*, *28*(3), 292–316.
- Barako, D. G., & Brown, A. M. (2008). Corporate social reporting and board representation: Evidence from the Kenyan banking sector. *Journal of Management and Governance*, *12*(4), 309–324. https://doi.org/10.1007/s10997-008-9053-x
- Baysinger, B., & Hoskisson, R. E. (1990). The Composition of Boards of Directors and Strategic Control: Effects on Corporate Strategy. *The Academy of Management Review*, *15*(1), 72. https://doi.org/10.2307/258106
- Bear, S., Rahman, N., & Post, C. (2010). The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation. *Journal of Business Ethics*, 97(2), 207–221. https://doi.org/10.1007/s10551-010-0505-2
- Beasley, M. S. (1996). An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud. *The Accounting Review*, 71(4), 443–465.
- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, *14*(3), 257–273. https://doi.org/10.1016/j.jcorpfin.2008.03.006
- Bhagat, S., Bolton, B., & Romano, R. (2008). The promise and peril of Corporate Governance indices. Columbia Law Review, 108(8), 1803–1883.
- Bianco, M., Ciavarella, A., & Signoretti, R. (2015). Women on corporate boards in Italy: The role of family connections. *Corporate Governance: An International Review*, *23*(2), 129–144. https://doi.org/10.1111/corg.12097
- Boeker, W. (1997). Strategic Change: The Influence of Managerial Characteristics and Organizational Growth Author (s): Warren Boeker Source: The Academy of Management Journal, Vol. 40, No. 1 (Feb., 1997), pp. 152-170 Published by: Academy of Management Stable U. *The Academy of Management Journal*, 40(1), 152–170.
- Bouten, L., Everaert, P., Van Liedekerke, L., De Moor, L., & Christiaens, J. (2011). Corporate social responsibility reporting: A comprehensive picture? *Accounting Forum*, *35*(3), 187–204. https://doi.org/10.1016/j.accfor.2011.06.007
- Brammer, S. J., & Pavelin, S. (2006). Corporate reputation and social performance: The importance of fit. *Journal of Management Studies*, *43*(3), 435–455. https://doi.org/10.1111/j.1467-6486.2006.00597.x
- Brammer, S., Millington, A., & Pavelin, S. (2009). Corporate reputation and women on the board. *British Journal of Management*, *20*(1), 17–29. https://doi.org/10.1111/j.1467-8551.2008.00600.x

- Brick, I. E., & Chidambaran, N. K. (2010). Board meetings, committee structure, and firm value. *Journal of Corporate Finance*, 16(4), 533–553. https://doi.org/10.1016/j.jcorpfin.2010.06.003
- Brickley, J. A., Coles, J. L., & Jarrell, G. (1997). Leadership structure: Separating the CEO and Chairman of the Board. *Journal of Corporate Finance*, *3*(3), 189–220. https://doi.org/10.1016/s0929-1199(96)00013-2
- Brown, D. A. H., Brown, D. L., & Anastasopoulos, V. (2002). Women on Boards Not Just the Right Thing But the "Bright" Thing. *The Conference Board of Canada*, 1(1), 16. Retrieved from https://utsc.utoronto.ca/~phanira/WebResearchMethods/women-bod&fp-conference board.pdf
- Brown, J. (2009). Democracy, sustainability and dialogic accounting technologies: Taking pluralism seriously. *Critical Perspectives on Accounting*, *20*(3), 313–342. https://doi.org/10.1016/j.cpa.2008.08.002
- Buhr, N. (2002). A structuration view on the initiation of environmental reports. *Critical Perspectives on Accounting*, 13(1), 17–38. https://doi.org/10.1006/cpac.2000.0441
- Calabrese, A., Costa, R., & Rosati, F. (2016). Gender differences in customer expectations and perceptions of corporate social responsibility. *Journal of Cleaner Production*, *116*, 135–149. https://doi.org/10.1016/j.jclepro.2015.12.100
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, *32*(3), 946–967. https://doi.org/10.5465/AMR.2007.25275684
- Campbell, K., & Mínguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance. *Journal of Business Ethics*, *83*(3), 435–451. https://doi.org/10.1007/s10551-007-9630-y
- Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, *18*(5), 396–414. https://doi.org/10.1111/j.1467-8683.2010.00809.x
- Cheng, E. C. M., & Courtenay, S. M. (2006). Board composition, regulatory regime and voluntary disclosure. *International Journal of Accounting*, *41*(3), 262–289. https://doi.org/10.1016/j.intacc.2006.07.001
- Chih, H. L., Chih, H. H., & Chen, T. Y. (2010). On the determinants of corporate social responsibility: International evidence on the financial industry. *Journal of Business Ethics*, 93(1), 115–135. https://doi.org/10.1007/s10551-009-0186-x
- Cosma, S., Mastroleo, G., & Schwizer, P. (2018). Assessing corporate governance quality: substance over form. *Journal of Management and Governance*, *22*(2), 457–493. https://doi.org/10.1007/s10997-017-9395-3
- Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1999). Number of directors and financial performance: A meta-analysis. *Academy of Management Journal*, *42*(6), 674–686. https://doi.org/10.2307/256988
- Dando, N., & Swift, T. (2003). Transparency and Assurance: Minding the Credibility Gap. *Journal of Business Ethics*, 44(2–3), 195–200. https://doi.org/10.1023/A:1023351816790
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20–47. https://doi.org/10.5465/AMR.1997.9707180258
- Dayton, K. N. (1984). From the Boardroom Corporate governance: the other side. *Harvard Business Review*, *January-Fe*, 34–37.
- de Anca, C., & Gabaldon, P. (2014). The Media Impact of Board Member Appointments in Spanish-Listed Companies: A Gender Perspective. *Journal of Business Ethics*, 122(3), 425–438. https://doi.org/10.1007/s10551-013-1768-1
- Deegan, C., & Gordon, B. (1996). A Study of the Environmental Disclosure Practices of Australian Corporations. Accounting and Business Research, 26(3), 187-199.
- Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2012). Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility disclosure. *Accounting Review*, *87*(3), 723–759. https://doi.org/10.2308/accr-10218
- DiTomaso, N., Post, C., & Parks-Yancy, R. (2007). Workforce Diversity and Inequality: Power, Status, and Numbers. *Annual Review of Sociology*, *33*(1), 473–501.

- https://doi.org/10.1146/annurev.soc.33.040406.131805
- Eisenberg, T., Sundgren, S., & Wells, M. T. (1998). Larger board size and decreasing firm value in small firms. *Journal of Financial Economics*, *48*(1), 35–54. https://doi.org/10.1016/s0304-405x(98)00003-8
- Elkington, J. (2006). Governance for sustainability. *Corporate Governance: An International Review*, 14(6), 522–529. https://doi.org/10.1111/j.1467-8683.2006.00527.x
- Erhard, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. *Corporate Governance: An International Review*, *11*(2), 102–111. https://doi.org/10.1111/1467-8683.00011
- European Commission. (2001). Green Paper: Promoting a European Framework for Corporate Social Responsibility. *Commission of the European Communities*, *121*(July), 1–34. https://doi.org/10.1017/CBO9781107415324.004
- Fama, F., & Jensen, M. (1983). Separation of Ownership and Control. *The Journal of Law & Economics*, 26(2), 301–325.
- Fernández-Gago, R., Cabeza-García, L., & Nieto, M. (2018). Independent directors' background and CSR disclosure. *Corporate Social Responsibility and Environmental Management*, *25*(5), 991–1001. https://doi.org/10.1002/csr.1515
- Fifka, M. S. (2013). Corporate Responsibility Reporting and its Determinants in Comparative Perspective a Review of the Empirical Literature and a Meta-analysis. *Business Strategy and the Environment*, 22(1), 1–35. https://doi.org/10.1002/bse.729
- Font, X., Guix, M., & Bonilla-Priego, M. J. (2016). Corporate social responsibility in cruising: Using materiality analysis to create shared value. *Tourism Management*, *53*, 175–186. https://doi.org/10.1016/j.tourman.2015.10.007
- Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, *24*(3), 489–505. https://doi.org/10.5465/AMR.1999.2202133
- Forker, J. J. (1992). Corporate governance and disclosure quality. Accounting and Business Research, 22(1), 111–124.
- Freeman, R. E. (2004). The Stakeholder Approach Revisited. *Zeitschrift Für Wirtschafts- Und Unternehmensethik*, *5*(3), 228–241. https://doi.org/10.5771/1439-880x-2004-3-228
- Frias-Aceituno, J. V., Rodríguez-Ariza, L., & Garcia-Sánchez, I. M. (2014). Explanatory Factors of Integrated Sustainability and Financial Reporting. *Business Strategy and the Environment*, 23(1), 56–72. https://doi.org/10.1002/bse.1765
- Furlotti, K., Mazza, T., Tibiletti, V., & Triani, S. (2019). Women in top positions on boards of directors: Gender policies disclosed in Italian sustainability reporting. *Corporate Social Responsibility and Environmental Management*, *26*(1), 57–70. https://doi.org/10.1002/csr.1657
- Galbreath, J. (2011). Are there gender-related influences on corporate sustainability? A study of women on boards of directors. *Journal of Management and Organization*, *17*(1), 017–038. https://doi.org/10.5172/jmo.2011.17.1.17
- García-Sánchez, I. M., & Martínez-Ferrero, J. (2017). Independent Directors and CSR Disclosures: The moderating effects of proprietary costs. *Corporate Social Responsibility and Environmental Management*, *24*(1), 28–43. https://doi.org/10.1002/csr.1389
- Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, *53*, 51–71. https://doi.org/10.1007/978-94-007-4126-3\_4
- Georgiou, O., & Jack, L. (2011). In pursuit of legitimacy: A history behind fair value accounting. *British Accounting Review*, 43(4), 311–323. https://doi.org/10.1016/j.bar.2011.08.001
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2), 47–77.
- Gray, R., & Milne, M. (2007). Future prospects for corporate sustainability reporting. *Sustainability Accounting and Accountability*, (July), 184–207. https://doi.org/10.4324/noe0415384889.ch10
- Guest, P. M. (2009). The impact of board size on firm performance: Evidence from the UK.

  European Journal of Finance, 15(4), 385–404. https://doi.org/10.1080/13518470802466121
- Gul, F. A., & Leung, S. (2004). Board leadership, outside directors' expertise and voluntary

- corporate disclosures. *Journal of Accounting and Public Policy*, 23(5), 351–379. https://doi.org/10.1016/j.jaccpubpol.2004.07.001
- Harjoto, M. A., & Jo, H. (2011). Corporate Governance and CSR Nexus. *Journal of Business Ethics*, 100(1), 45–67. https://doi.org/10.1007/s10551-011-0772-6
- Harrison, J. S., & Wicks, A. C. (2013). Stakeholder Theory, Value, and Firm Performance. *Business Ethics Quarterly*, 23(1), 97–124. https://doi.org/10.5840/beq20132314
- Ho, S. S. M., & Shun Wong, K. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation*, 10(2), 139–156. https://doi.org/10.1016/S1061-9518(01)00041-6
- Hsu, C. W., Lee, W. H., & Chao, W. C. (2013). Materiality analysis model in sustainability reporting: A case study at Lite-On Technology Corporation. *Journal of Cleaner Production*, *57*, 142–151. https://doi.org/10.1016/j.jclepro.2013.05.040
- Huse, M., Nielsen, S. T., & Hagen, I. M. (2009). Women and employee-elected board members, and their contributions to board control tasks. *Journal of Business Ethics*, 89(4), 581–597. https://doi.org/10.1007/s10551-008-0018-4
- Jensen, M. C. (1993). The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *The Journal of Finance*, *48*(3), 831–880. https://doi.org/10.1111/j.1540-6261.1993.tb04022.x
- Jo, H., & Harjoto, M. A. (2012). The Causal Effect of Corporate Governance on Corporate Social Responsibility. *Journal of Business Ethics*, 106(1), 53–72. https://doi.org/10.1007/s10551-011-1052-1
- Johnson, R. A., Hoskisson, R. E., & Hitt, M. A. (1993). Board of director involvement in restructuring: The effects of board versus managerial controls and characteristics. *Strategic Management Journal*, *14*(1 S), 33–50. https://doi.org/10.1002/smj.4250140905
- Kathy Rao, K., Tilt, C. A., & Lester, L. H. (2012). Corporate governance and environmental reporting: An Australian study. *Corporate Governance: The International Journal of Business in Society*, *12*(2), 143–163. https://doi.org/10.1108/14720701211214052
- Kaymak, T., & Bektas, E. (2017). Corporate Social Responsibility and Governance: Information Disclosure in Multinational Corporations. *Corporate Social Responsibility and Environmental Management*, 24(6), 555–569. https://doi.org/10.1002/csr.1428
- Khan, I., Khan, I., & Saeed, B. bin. (2019). Does board diversity affect quality of corporate social responsibility disclosure? Evidence from Pakistan. *Corporate Social Responsibility and Environmental Management*, 26(6), 1371–1381. https://doi.org/10.1002/csr.1753
- Kini, O., Kracaw, W., & Mian, S. (1995). Corporate takeovers, firm performance, and board composition. *Journal of Corporate Finance*, 1(3–4), 383–412. https://doi.org/10.1016/0929-1199(94)00011-I
- Kolk, A., & Pinkse, J. (2010). The integration of corporate governance in corporate social responsibility disclosures. *Corporate Social Responsibility and Environmental Management*, 17(1), 15–26. https://doi.org/10.1002/csr.196
- Landry, E. E., Bernardi, R. A., & Bosco, S. M. (2016). Recognition for Sustained Corporate Social Responsibility: Female Directors Make a Difference. *Corporate Social Responsibility and Environmental Management*, *23*(1), 27–36. https://doi.org/10.1002/csr.1358
- Levy, L. (1981). Reforming board reform. *Harvard Business Review*, *59*(1), 166–172. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=3867885&site=ehost-live
- Lewis, L., & Unerman, J. (1996). Ethical Relativism: a Reason for International Differences in Social and Environmental Accounting? *Critical Perspectives on Accounting*, (July 1998), 1–28
- Lipton, M., & Lorsch, J. W. (1992). A Modest Proposal for Improved Corporate Governance. *The Business Lawyer*, 48, 59–77.
- Lipton, Martin, & Lorsch, J. W. (1992). A modest proposal for improved corporate governance: Business source. *Business Lawyer*, *42*(1), 59–78. https://doi.org/10.1525/sp.2007.54.1.23.
- Longo, M., Mura, M., & Bonoli, A. (2005). Corporate social responsibility and corporate performance: The case of Italian SMEs. *Corporate Governance*, *5*(4), 28–42. https://doi.org/10.1108/14720700510616578

- Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management and Governance*, *16*(3), 477–509. https://doi.org/10.1007/s10997-010-9160-3
- Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, 33(December 2017), 59–78. https://doi.org/10.1016/j.cpa.2014.10.003
- Nielsen, S., & Huse, M. (2010). The contribution of women on boards of directors: Going beyond the surface. *Corporate Governance: An International Review*, *18*(2), 136–148. https://doi.org/10.1111/j.1467-8683.2010.00784.x
- Parker, L. (2014). Constructing a research field: A reflection on the history of social and environmental accounting. *Social and Environmental Accountability Journal*, 34(2), 87–92. https://doi.org/10.1080/0969160X.2014.938472
- Post, C., Rahman, N., & Rubow, E. (2011). *Green governance: Boards of directors' composition and environmental corporate social responsibility. Business and Society* (Vol. 50). https://doi.org/10.1177/0007650310394642
- Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2019). An international approach of the relationship between board attributes and the disclosure of corporate social responsibility issues. *Corporate Social Responsibility and Environmental Management*, 26(3), 612–627. https://doi.org/10.1002/csr.1707
- Rao, K., & Tilt, C. (2016). Board diversity and CSR reporting: An Australian study. *Meditari Accountancy Research*, 24(2), 182–210. https://doi.org/10.1108/MEDAR-08-2015-0052
- Roberts, J., McNulty, T., & Stiles, P. (2005). Beyond agency conceptions of the work of the non-executive director: Creating accountability in the boardroom. *British Journal of Management*, 16(SPEC. ISS.), S5–S26. https://doi.org/10.1111/j.1467-8551.2005.00444.x
- Robinson, G., & Dechant, K. (1997). Building a business case for diversity. *Academy of Management Executive*, 11(3), 21–31. https://doi.org/10.5465/ame.1997.9709231661
- Rodriguez-Fernandez, M. (2016). Social responsibility and financial performance: The role of good corporate governance. *BRQ Business Research Quarterly*, *19*(2), 137–151. https://doi.org/10.1016/j.brq.2015.08.001
- Scherer, A. G., & Palazzo, G. (2007). Toward a political conception of corporate responsibility: Business and society seen from a habermasian perspective. *Academy of Management Review*, *32*(4), 1096–1120. https://doi.org/10.5465/AMR.2007.26585837
- Searcy, C., & Buslovich, R. (2014). Corporate Perspectives on the Development and Use of Sustainability Reports. *Journal of Business Ethics*, *121*(2), 149–169. https://doi.org/10.1007/s10551-013-1701-7
- Spence, C. (2009). Social accounting's emancipatory potential: A Gramscian critique. *Critical Perspectives on Accounting*, 20(2), 205–227. https://doi.org/10.1016/j.cpa.2007.06.003
- Unerman, J., & Bennett, M. (2004). Increased stakeholder dialogue and the internet: Towards greater corporate accountability or reinforcing capitalist hegemony? *Accounting, Organizations and Society*, *29*(7), 685–707. https://doi.org/10.1016/j.aos.2003.10.009
- Weber, M. (2008). The business case for corporate social responsibility: A company-level measurement approach for CSR. *European Management Journal*, *26*(4), 247–261. https://doi.org/10.1016/j.emj.2008.01.006
- Westphal, J. D., & Milton, L. P. (2000). How Experience and Network Ties Affect the Influence of Demographic Minorities on Corporate Boards Author ( s ): James D . Westphal and Laurie P . Milton Published by : Sage Publications , Inc . on behalf of the Johnson Graduate School of Management , Cor. *Administrative Science Quarterly*, *45*(2), 366–398. Retrieved from https://www.jstor.org/stable/2667075?seq=1&cid=pdf-reference#references\_tab\_contents
- White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heter- oskedasticity. *Econometrica*, *48*, 817–838.
- Wiseman, J. (1982). An Evaluation of Environmental Disclosures Made in Corporate Annual Reports. Accounting, Organizations and Society, 7(1), 53-63.
- Wood, D. J. (1991). Corporate social performance revisited. *The Academy of Management Review*, *16*(4), 691–718. https://doi.org/10.5465/amr.1991.4279616
- Zorio, A., García-Benau, M. A., & Sierra, L. (2013). Sustainability development and the quality of

assurance reports: Empirical evidence. *Business Strategy and the Environment*, *22*(7), 484–500. https://doi.org/10.1002/bse.1764

Table 1 - Descriptive statistics

427	0.000			
	0.000	1.000	0.272	0.446
427	0.000	1.000	0.172	0.378
427	0.000	1.000	0.254	0.436
427	0.000	1.000	0.261	0.440
N	Min.	Max.	Mean	SD
427	2.000	24.000	9.581	3.199
427	0.000	1.000	0.475	0.211
427	0.000	1.000	0.286	0.452
427	0.000	1.000	0.265	0.442
N	Min.	Max.	Mean	SD
427	14.114	26.827	19.842	1.925
427	-1.221	0.364	0.007	0.106
	427 N 427 427 427 427 N 427	427 0.000  N Min.  427 2.000  427 0.000  427 0.000  427 0.000  427 0.000  N Min.  427 14.114	427       0.000       1.000         427       0.000       1.000         N       Min.       Max.         427       2.000       24.000         427       0.000       1.000         427       0.000       1.000         427       0.000       1.000         N       Min.       Max.         427       14.114       26.827	427       0.000       1.000       0.254         427       0.000       1.000       0.261         N       Min.       Max.       Mean         427       2.000       24.000       9.581         427       0.000       1.000       0.475         427       0.000       1.000       0.286         427       0.000       1.000       0.265         N       Min.       Max.       Mean         427       14.114       26.827       19.842

Table 2 - Pearson correlation matrix

		1	2	3	4	5	6	7	8	9	10
1	CSR Report	1.000									
2	Assurance	0.744	1.000								
3	Materiality	0.954	0.738	1.000							
4	Engagement	0.971	0.725	0.970	1.000						
5	BoardSize	0.316	0.264	0.284	0.315	1.000					
6	Independence	0.225	0.157	0.166	0.203	0.179	1.000				
7	Duality	-0.106	-0.156	-0.093	-0.102	-0.243	-0.183	1.000			
8	FemaleExecutive	-0.008	-0.090	0.018	0.008	-0.002	-0.060	0.118	1.000		
9	Size	0.491	0.472	0.434	0.446	0.565	0.301	-0.236	-0.082	1.000	
10	ROA	0.080	0.058	0.068	0.073	0.142	0.075	-0.067	-0.037	0.244	1.000

Correlation is measured by Pearson coefficients. Bold are coefficients significant at 5% level.

Table 3 - Multivariate Analysis of CSR Report

HP 1: CSR Report				
Probit regressions	Marginal Effect	p-value		
BoardSize	-0.030	0.295		
Independence	-0.681	0.068		
Duality	-0.255	0.103		
FemaleExecutive	-0.154	0.351		
Size	-0.391	0.000		
ROA	0.284	0.761		
Intercept	9.254	0.000		
R <sup>2</sup> – McFadden	0.234			
Number of observation	427			

**Table 4 - Multivariate Analysis of Assurance** 

HP 2: Assurance				
Probit regressions	Marginal Effect	p-value		
BoardSize	0.006	0.854		
Independence	0.050	0.904		
Duality	0.119	0.574		
FemaleExecutive	0.206	0.298		
Size	-0.413	0.000		
ROA	0.567	0.599		
Intercept	9.228	0.000		
R <sup>2</sup> – McFadden	0.245			
Number of observation	427			

**Table 5 - Multivariate Analysis of Materiality** 

HP 3: Materiality				
Probit regressions	Marginal Effect	p-value		
BoardSize	-0.029	0.287		
Independence	-0.277	0.451		
Duality	-0.195	0.259		
FemaleExecutive	-0.221	0.173		
Size	-0.337	0.000		
ROA	0.280	0.752		
Intercept	8.014	0.000		
R <sup>2</sup> - McFadden	0.180			
Number of observation	427			

Table 6 - Multivariate Analysis of Engagement

HP 4: Engagement				
Probit regressions	Marginal Effect	p-value		
BoardSize	-0.048	0.084		
Independence	-0.587	0.102		
Duality	-0.210	0.226		
FemaleExecutive	-0.191	0.243		
Size	-0.320	0.000		
ROA	0.256	0.776		
Intercept	7.994	0.000		
R <sup>2</sup> - McFadden	0.196			
Number of observation	427			

## Appendix 1 - Variables definitions

Dependent Variables					
CSR Report	Equals to 1 if the firm has a CSR report, 0 otherwise.				
Assurance	Equals to 1 if the CSR report has an external assurance, 0 otherwise.				
Materiality	Equals to 1 if the CSR report has the materiality matrix, 0 otherwise.				
Engagement	Equals to 1 if the CSR report spoke about the stakeholders' engagement, 0 otherwise.				
	Independent Variables				
BoardSize	The number of directors on the board.				
Independence	The number of independent directors on the total number of directors.				
Duality	Equals to 1 if a single individual holds the role of CEO and chairperson, 0 otherwise.				
FemaleExecutive	Equals to 1 if the female is in executive position (CEO or executive directors),				
	0 otherwise.				
Control variables					
Size	The natural logarithm of total assets at the end of the fiscal year.				
ROA	Ratio of earnings before interest and taxes to total assets.				