THE ROLE OF BOARD COMPOSITION IN CSR DISCLOSURE: AN EMPIRICAL ANALYSIS IN FOUR EUROPEAN COUNTRIES

Carmela Di Guida *, Alfredo Celentano **, Francesco Mirone ***, Gabriella D'Amore ****

* Faculty of Medicine and Surgery, Saint Camillus International University of Health Sciences, Rome, Italy
** University of Naples "Parthenope", Naples, Italy
*** Sapienza University of Rome, Rome, Italy
**** *Corresponding author*, Law Department, University of Naples "Parthenope", Naples, Italy
Contact details: University of Naples "Parthenope", Via Generale Parisi 13 – 80133 Naples, Italy

OPEN ACCESS

How to cite this paper: Di Guida, C., Celentano, A., Mirone, F., & D'Amore, G. (2022). The role of board composition in CSR disclosure: An empirical analysis in four European countries. *Corporate Governance and Organizational Behavior Review, 6*(3), 74–86.
https://doi.org/10.22495/cgobrv6i3p7

ISSN Online: 2521-1889
ISSN Print: 2521-1870

Received: 07.05.2022
Accepted: 29.07.2022

JEL Classification: M140, M400, M480
DOI: 10.22495/cgobrv6i3p7

Abstract

The purpose of this study is to provide evidence of the influence of corporate governance mechanisms on corporate social responsibility (CSR) disclosure released by 483 European listed companies after the EU Directive (2014/95) entered into force. The sample includes 483 listed companies, all from the top four European countries by GDP value — Germany, France, Italy, and Spain — that issued CSR reports in the period 2017–2020. The study uses an ordinary least squares regression model to test six hypotheses on the relationship between board characteristics and CSR disclosure. The results of the study confirm that gender diversity, board independence, and CSR committee are positively related to CSR disclosure, while no significant relationship was found with CSR disclosure board meeting, the board size, and CEO duality. This article contributes to academic literature (Pucheta-Martínez & Gallego-Álvarez, 2019; Fuente, García-Sanchez, & Lozano, 2017) by showing the functioning of six board characteristics in influencing CSR disclosure released by European listed companies after EU Directive (2014/95) entered into force. It also provides interesting insights for governments and other regulatory bodies when formulating future guidelines and policies in this regard.

Keywords: Board Attributes, CSR Disclosure, Engagement, EU Directive (2014/95), Western Europe

Authors' individual contribution: Conceptualization — C.D.G. and A.C.; Investigation — C.D.G.; Methodology — C.D.G. and A.C.; Data Curation — C.D.G. and A.C.; Writing — Original Draft — C.D.G. and A.C.; Visualization — C.D.G. and G.D.A.; Software — A.C.; Formal Analysis — A.C.; Validation — F.M.; Writing — Review & Editing — F.M. and G.D.A.; Supervision — G.D.A.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

During the last decades, there has been increasing public awareness concerning sustainability issues and growing pressure on companies' behaviour in respect of environmental and social issues (Xie, Nozawa, Yagi, Fujii, & Managi, 2019). As a result, companies worldwide have started to use corporate social responsibility (CSR) reporting as a tool through which to regulate their relationships with relevant stakeholders (Bhattacharyya & Cummings, 2015; Gray, Kouhy, & Lavers, 1995). To gain legitimacy (Suchman, 1995) and influence public perception, companies tend to release non-financial information to show that their operations are kept well within the boundaries of social acceptance (Garcia-Sanchez, Cuadrado-Ballesteros, & Sepulveda, 2014).

Several studies (e.g., Schaltegger & Zvezdov, 2015), however, have evidenced how information overload and the adoption of greenwashing practices caused stakeholders' increasing scepticism towards CSR reporting. The relevance of CSR disclosure in addressing economic operators' choices and the growing demand for reliable information have brought legislators worldwide to issue laws to regulate companies' CSR disclosure and to strengthen corporate governance mechanisms. In 2014, the European Legislation issued a Directive on Non-Financial Reporting (2014/95/EU)[1], requiring listed companies to prepare a non-financial statement containing CSR information, including environmental-friendly actions, safeguarding employees' and human rights, implementing anti-corruption and bribery strategies, and promoting gender diversity.

Whether a requirement or a strategic decision to enhance the company's value, CSR disclosure has assumed a crucial role in corporate strategy, changing the way companies interact with and create value for their stakeholders. This has brought academic scholars to investigate the drivers that can influence the quantity and quality of CSR disclosure (Cormier & Magnan, 2015).

Much of the previous literature has focused on the role of the independent directors in enhancing CSR disclosure (Rao & Tilt, 2016; Ducassy & Montandrau, 2015), with mixed results. While several studies, in fact, confirm a positive relationship (e.g., Fernández-Gago, Cabeza-García, & Nieto, 2018), highlighting the decisive role of independent directors in enhancing voluntary disclosure in order to gain legitimacy, other studies find a negative (Pucheta-Martínez & Gallego-Álvarez, 2019) or no relationship (Mahmood & Orazalin, 2017), showing the ineffectiveness of the independence of the board in stimulating CSR disclosure (Michelon & Parbonetti, 2012). Contrasting results have brought researchers to investigate other characteristics of the board, such as board meeting, CEO duality, or gender diversity, potentially able to influence the amount and quality of information disclosed to the public, however, no convergence has been found on the determinants of CSR disclosure, leaving the way open for further research explorations.

In the light of this heterogeneity, and given the increased relevance of corporate governance mechanisms in influencing the level of market transparency, we investigate the relationship between six different board attributes and CSR disclosure, analysing the board structure and non-financial reports of 483 European listed firms from 2017 to 2020.

The aim of this work is to provide an adequate understanding of the role of board composition as an internal corporate governance mechanism, able to influence the amount and quality of information companies release to the public. Our results evidence that board independence, gender diversity, and CSR committee are positively related to CSR reporting, while for board size, board meetings, and CEO duality no relationship has been found. This study provides insights for scholars, evidencing the overall impact of board composition attributes on CSR disclosure in four western European countries, unlike several studies conducted on this issue, most of which analyse few attributes and focus on a single country. Our findings have also interesting implications for legislators and companies, providing suggestions on how to design effective boards.

The remainder of this paper is structured as follows. The second section is dedicated to the theoretical background and hypotheses development. The third section illustrates the methodology. The fourth section analyses the results that are discussed in the fifth section. Finally, the sixth section draws conclusions and exposes the implications and limitations of this study.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

In the last decades, firms have paid increasing attention to CSR issues, changing their strategies and choices in response to the enhanced request by stakeholders to be sustainable (Hussain, Rigoni, & Orij, 2018).

Firms use CSR disclosure to show their alignment with societal values and improve their connections with stakeholders (Garcia-Sanchez et al., 2014).

This has brought academic research to investigate the role of corporate governance in influencing CSR policies (Fernandez-Feijoo, Romero, & Ruiz-Blanco, 2014). Most scholars have identified the board of directors (BoD) as one of the principal corporate governance mechanisms, able to condition the quantity and quality of the information disclosed (Soobaroyen, Ramdhony, Rashid, & Gow, 2022; Sekarlangit & Wardhani, 2021; Rao & Tilt, 2016; Michelon & Parbonetti, 2012).

The responsibility of the board, in fact, is to ensure companies' profitability, aligning the firm's behaviour to the interests of its shareholders and relevant stakeholders (Jo & Harjoto, 2011), and they are called to assume strategic decisions. However, the composition of the board determines what board members can do (Cucari, Esposito De Falco, & Orlando, 2017) since board dimension and board composition impact the supervisory capacity of the board of directors (Villanueva-Villar, Rivo-López, & Lago-Peñas, 2016).

In this perspective, the BoD assumes an advisory function aimed at obtaining and supplying the resources necessary for the formulation and application of the corporate strategy, which is to be understood in a broad sense with respect to what may be the connatural economic-corporate meaning.

Indeed, their tasks include managing relationships with the external environment and ensuring access to strategic resources for the company, through the network of their personal and professional relationships (Conger, Lawler, & Finegold, 2001). For these reasons, as theorized by the resource dependence theory (Pfeffer & Salancik, 1978), independent directors, to increase their

[1] https://eur-lex.europa.eu/legal-content/IT/LSU/?uri=celex:32014L0095

reputation, are disposed to release information on CSR in order to demonstrate externally that companies operate responsibly and follow the rules. In their decision-making processes, they should consider all different stakeholders' interests, most of which go beyond economic interest, including also social and environmental sustainability, encouraging companies to release more information about their CSR strategies.

However, the effectiveness of board members in acting as a stimulus mechanism for CSR disclosure depends also on their real degree of independence from top management or controlling shareholders (Fama & Jensen, 1983). To reduce the risk of collision, a number of independent directors, who have no connection with the property or management, are usually appointed.

A high degree of independence of the board of directors impacts positively on the level of disclosure of CSR matters, ensuring more effective monitoring functions (Jo & Harjoto, 2011). Fama (1980) argues that a higher percentage of independent directors leads to more significant board control and restricts opportunistic behaviour by top management and dominant shareholders (Zattoni & Cuomo, 2010). Moreover, the concern for the reputation that animates independent directors can generate behaviours that safeguard the interests of all the stakeholders and not just the shareholders (Fama & Jensen, 1983). Sustainability becomes a decisive element for independent directors to avoid exposure to negative external observations that could compromise their own and the company's image (Zahra & Stanton, 1988).

Consequently, the presence of independent directors should encourage the adoption of sustainable strategies and higher levels of CSR disclosure, improving the completeness and accuracy of companies' disclosure, by increasing their level of transparency and accountability (Arenas-Parra & Álvarez-Otero, 2020; Prado-Lorenzo, Gallego-Álvarez, & García-Sánchez, 2009; Cheng & Courtenay, 2006). Based on this reasoning, the following hypotheses have been developed:

H1: There is a positive relationship between the independence of the board of directors and the level of communication on CSR.

However, the board independence alone could be not enough to explain the level of CSR disclosure. In some contexts, where companies are characterized by a high ownership concentration, for instance, its effectiveness as a corporate governance mechanism able to eliminate opportunistic behaviours and stimulate CSRDisc could be reduced (Lepore, Landriani, Pisano, D'Amore, & Pozzoli, 2022). This has prompted other scholars to extend the analysis to other board attributes, in order to verify how these can influence the level of CSR disclosure.

Board diversity is considered one of the board characteristics that strongly influence corporate environmental disclosure (Post, Rahman, & Rubow, 2011); the information resources and broadening of the cognitive and behavioural range of the board can be improved by the gender diversity of directors sitting on the board (Rao & Tilt, 2016).

Research on corporate governance evidence that female directors can play a considerable role in improving the effectiveness of the board and the financial performance of companies (Musviyanti, Ulfah, & Yudaruddin, 2021). Besides, the presence of women has been associated with a higher quality of financial information and the promotion of good corporate practices (Pucheta-Martínez, Bel-Oms, & Olcina-Sempere, 2016).

The study conducted by Matsa and Miller (2013) suggests that women are more responsive to and inclined towards the requests of stakeholders, especially with reference to social and environmental issues. As a result, female leadership would tend to favour the disclosure of CSR issues thanks to the assumption that women placed in top positions are more sensitive about this topic than male subjects (Kim, 2013).

Psychological, sociological, and cognitive perspectives also argue that female directors influence corporate governance and strategic decisions. In fact, previous studies (e.g., Levi, Li, & Zhang, 2014) found that women administrators are more prudent in decision-making processes relating to relevant issues.

These qualities demonstrate the possession of greater social and ethical skills than male directors, with the consequence of adopting more responsible behaviours, finalized to equalizing the interests of managers and shareholders in the adoption of strategic decisions, such as the disclosure of CSR.

According to stakeholder theory (Freeman, 1984), the external environment can perceive that companies are committed to CSR issues, when female representatives are part of the boards of directors, showing a concrete orientation of the company towards the expectations and interests of stakeholders (Ibrahim & Angelidis, 1994).

Therefore, the attitude and sensitivity of female directors, in combination with other characteristics of their leadership style, are factors capable of influencing the board to become more engaged in these issues, leading to increased disclosure of CSR information. Thus, based on the above studies, we formulated the following hypothesis:

H2: There is a positive relationship between gender diversity and the level of communication on CSR.

Another board characteristic that has been widely investigated by academic research for its potential impact on disclosure is the level of activity — that is, the number of meetings held during the year.

Studies such as González and García-Meca (2014) have shown that a greater number of board meetings and participation in typical tasks and activities, such as monitoring, and supervision of business, are associated with higher quality information without distortion. Some studies (Evans, Evans, & Loh, 2002) clarify that too frequent meetings reduce firm performance, consuming part of the management time and increasing board expenses, due to the need to pay for meeting expenses (such as travel expenses). Other studies (Aleqab & Ighnaim, 2021; Che-Adam, Lode, & Abd-Mutalib, 2019; Fadzilah, 2017; Ahmed, 2013), on the other hand, show no influence of this characteristic on company performance. About the level of CSR disclosure, in this regard, there are two opposite views: the first suggests that a greater number of meetings of the board of directors may indicate excessive powers in the hands of directors, thus negatively affecting companies' performance (Vafeas, 1999); the second view argues that more active councils, and therefore those that meet more frequently, are more effective because the frequency of their meetings leads to better control of business management (Lipton & Lorsch, 1992). Furthermore, greater frequency demonstrates a greater interest of directors in disclosing information, allowing stakeholders to perceive their efforts to satisfy collective interests. Several studies confirm that boards that meet frequently perform a more effective control function, as frequent meetings give the opportunity to share more information, allowing better distribution of the workload. Moreover, increasing the number of board meetings reduces the potential manipulation of corporate profits and cases of information asymmetry (Kanagaretnam, Lobo, & Whalen, 2007).

Based on these considerations, we formulated the following hypothesis:

H3: There is a positive relationship between the level of activity of the board and the level of communication on CSR.

The literature on group dynamics suggests that councils with few members perform a more effective and efficient monitoring and control function than councils with a larger dimension (Dey, 2008). However, the small dimension of the board of directors could also mean an inability of the directors to operate effective control as they are forced to carry out a large number of tasks because they are distributed over a small number of subjects (John & Senbet, 1998), and with a lack of diversified skills which would hinder the correct application of the monitoring and consultancy functions (Guest, 2009).

For Jizi, Salama, Dixon, and Stratling (2014), one of the attributes that make councils effective in putting pressure on management to disclose CSR information is their size. This approach is taken from the stakeholder theory, which theorizes that larger boards of directors are potentially able to protect almost all stakeholders' interests since economic and ethical principles are more easily balanced (Freeman, 1984).

As suggested by Dalton, Daily, Johnson, and Ellstrand (1999), boards that have a high number of directors are more likely to have directors with different types of skills, useful for conflict resolution and decision-making, such as disclosure of CSR information. Cormier, Ledoux, Magnan, and Aerts (2010) showed that the size of the board of directors improves communication, mitigating information asymmetry and reducing agency costs.

Previous studies, mainly based on agency theory, have investigated the effects of corporate governance on disclosure (Jensen & Meckling, 1976). The agency theory, applied to the relationship between owners and managers (I type) or to the majority and minority shareholders (II type), explains the reasons behind the generation of conflicts and how to resolve them, through incentives and control mechanisms. Its application to corporate governance studies helps to explain how board composition may reduce information asymmetries, thus protecting shareholders' interests.

Based on agency theory (Lehn, Patro, & Zhao, 2009; Dalton et al., 1999) some studies reveal that board size is able to influence corporate performance, both financial (Marashdeh, Alomari, Aleqab, & Alqatamin, 2021) and non-financial (Kusumawardani, Wardhani, Maria, & Yudaruddin, 2021; Abeysekera, 2010). Besides, several studies (Ridwan & Mayapada, 2022; Rodríguez-Ariza, Frías Aceituno, & Rubio, 2013) suggest that the size of the board is a contributing factor to information disclosure and that the presence of a significant number of directors positively influences the disclosure of CSR. Therefore, on the basis of the above arguments, the following hypothesis is formulated:

H4: There is a positive relationship between the size of the board and the level of communication on CSR.

The literature review also reveals how the duality of the roles of the CEO and chairman of the board can influence corporate disclosure.

CEO duality occurs when CEO simultaneously is in charge of the chairman of the board of directors, configuring a combination of managerial and control functions. Its impact on CSR disclosure has been widely investigated in corporate governance studies, revealing heterogeneous and sometimes contradictory results. Agency theory can help explain the contrasting evidence since managers' personal interests are likely to influence their engagement in CSR disclosure practices. Therefore, if the CEO perceives that CSR activities have no value, he can incentivize management to consider those as not strategic issues, thereby reducing the monitoring role performed by the directors and the amount of information disclosed to shareholders and all stakeholders (Sundarasen, Je-Yen, & Rajangam, 2016; Giannarakis, 2014). Some authors, like Chau and Gray (2010), have theorized the negative impact of the role duality of CEO and chairman on the transparency of a company, especially as a factor decreasing voluntary disclosure, including information on CSR.

However, according to some scholars (Finkelstein & D'Aveni, 1994), CEO duality can have also a positive effect on the actions carried out by companies thanks to the supervisory role of the CEO/President. When CEOs are also chairmen of the board of directors, they may be encouraged to disclose CSR information, to show the company's commitment to sustainability issues. In this way, they can improve their reputation, the chance of staying in charge, their legitimacy, and, consequently, their success and remuneration (Jiraporn & Chintrakarn, 2013). Despite empirical evidence showing contrasting findings, most previous research (Ananzeh, 2022; Ananzeh, Alshurafat, Bugshan, & Hussainey, 2022; Giannarakis, 2014) supports a negative effect of CEO duality on CSR disclosure. Therefore, based on these studies, the next hypothesis is:

H5: There is a negative relationship between CEO duality and the level of communication on CSR.

We finally consider the presence of a CSR committee in the board of directors, as a useful mechanism for improving policies related to sustainability issues. The creation of CSR committees should involve a greater commitment to providing better quality information on companies' CSR (Sekarlangit & Wardhani, 2021; Adnan, van Staden, & Hay, 2010). The main purpose of the CSR committee lies in increasing information on CSR and ensuring greater transparency of company operations and communication policies (Fuente, García-Sanchez, & Lozano, 2017).

Arena, Bozzolan, and Michelon (2015) support the centrality of CSR committees in the context of corporate governance mechanisms; in fact, they significantly facilitate environmental performance for all stakeholders. The same approach is used by Michelon and Parbonetti (2012), who affirm that the quantity and quality of CSR policies are positively influenced by CSR committees. Fuente et al. (2017) provide the same evidence, supporting the assumption that CSR committees are positively associated with greater corporate transparency on sustainability. Based on these results, we hypothesize that:

H6: There is a positive relationship between the presence of a CSR committee and the level of communication on CSR.

3. RESEARCH METHODOLOGY

3.1. Sample selection and data source

To test our hypotheses, we gathered data from the Refinitiv Eikon Datastream. Refinitiv offers one of the most comprehensive environmental, social, and governance (ESG) databases, covering over 80 percent of global market capitalization across more than 450 different ESG metrics.

We selected the companies listed in regulated markets in Germany, France, Italy, and Spain, the four strongest European countries by GDP value, in the period 2017–2020. We removed those firms that had not issued a CSR report and firms without ESG and financial data useful for our analysis.

The final sample consists of 483 companies (1,369 observations).

3.2. Variables

3.2.1. Dependent variable

Our dependent variable is CSR disclosure (*CSR_Disc*). It measures the level of information on sustainability disclosed by companies. The value attribute is the result of the sum of 19 individual ESG items contained and available in the Refinitiv Eikon Datastream pertaining to environmental and social issues and categorized in Eikon as external corporate communication.

For each company in the sample, each indicator was assigned a value of 1 if the information is disclosed, and 0 otherwise. The sum of the value of the 19 indicators gives the overall *CSR_Disc* score for each company in the sample.

Table 1. Description of dependent variable and measurement

No.	*Item*	*Description*
1	*Healthy Food or Product*	The company develops or markets products and services that promote specific health and safety benefits to consumers.
2	*Internal Promotion*	The company reports information regarding career advancement opportunities for its employees.
3	*HIV-AIDS Programme*	The company systematically reports information regarding the adoption of policies or programmes to prevent or combat HIV-AIDS.
4	*Crisis Management Systems*	The company routinely reports information on crisis management systems.
5	*Green Buildings*	The company routinely reports information regarding the possession or adoption of green facilities and/or buildings.
6	*Toxic Chemicals Reduction*	The company reports initiatives to reduce, reuse, replace or phase out chemicals or toxic substances.
7	*Staff Transportation Impact Reduction*	The company systematically reports on initiatives to reduce the environmental impact of transportation used for its staff.
8	*Waste Reduction Initiatives*	The company routinely reports initiatives to recycle, reduce, reuse, substitute, treat or phase out waste.
9	*VOC Emissions Reduction*	The company routinely reports on efforts to reduce, replace, or phase out volatile organic compounds (VOC).
10	*NOx and SOx Emissions Reduction*	The company reports initiatives to reduce, reuse, recycle, replace or phase out SOx (sulphur oxide) or NOx (nitrogen oxide) emissions.
11	*Human Rights Breaches Contractor*	The company reports or demonstrates that it is prepared to terminate a collaboration with a sourcing partner if human rights criteria are not met.
12	*Human Rights Contractor*	The company reports or shows that it uses human rights criteria in the process of selecting or monitoring its suppliers or sourcing partners.
13	*Day Care Services*	The company claims to provide day care services (day-care, vouchers, disability assistance) to its employees.
14	*OECD Guidelines for Multinational Enterprises*	The company claims to follow Organization for Economic Cooperation and Development (OECD) guidelines for multinational enterprises.
15	*Global Compact Signatory*	The company has signed the United Nations Global Compact, a non-binding pact to encourage businesses around the world to adopt sustainable and socially responsible policies.
16	*Policy Community Involvement*	The company reports on adopting a policy to improve its good corporate citizenship through donations, volunteering, philanthropic activities, and community investments.
17	*Policy Business Ethics*	The company reports on adopting a policy to improve its good corporate citizenship through donations, volunteering, philanthropic activities, and community investments.
18	*Flexible Working Hours*	The company reports on the adoption of programmes or processes that help employees have a good work-life balance.
19	*Management Training*	The company claims to provide regular training to staff and management.

3.2.2. Independent and control variables

Board independence (*BoInd*) measures the percentage of independent directors appointed to the board. In line with the prevailing literature, a positive association has been hypothesized between board independence and CSR disclosure. In fact, a greater number of independent directors can lead to a decrease in conflicts of interest between shareholders and stakeholders, and independent directors, being more inclined towards issues of external interest, encourage CSR disclosure activities.

The board gender diversity (*BoGenDiv*) variable measures the percentage of women sitting on the board. It is based on the common idea that the female gender has a greater inclination towards and sensitivity to stakeholder expectations and respect for collectively shared and recognized principles. Thus, a positive relationship has been hypothesized between the presence of women on boards and the level of communication on CSR.

The board meetings variable (*BoMeetings*) measures the number of meetings held by the board during the year, as it is assumed that a greater number of meetings will make it possible to exercise the functions of controlling and monitoring the board's activities more effectively (Adams & Ferreira, 2009).

We also inserted board size (*BoSize*), indicating the number of directors, based on the assumption that more administrators can better perform their monitoring role. We expected to find a positive association with CSR disclosure (Cheng & Courtenay, 2006).

We considered CEO duality (*CEOChDual*) and predicted a negative relationship with CSR disclosure ESG items score, in line with the idea that the concentration of power deriving from the duality of the positions of CEO and chairman compromises the monitoring role of the board of directors, assuming that this concentration of power significantly reduces the supervisory role of the board of directors (Pisano, Lepore, & Agrifoglio, 2015).

CSR committee (*CSRComm*) is a dummy variable that takes a value of 1 if a specific committee for sustainability issues has been established, or 0 otherwise.

Three control variables were included in the regression model that express the size and performance of the company in economic and financial terms. The variable *LN_TA* measures the size of companies through the natural logarithm of total assets. In this regard, a positive association with CSR disclosure has been hypothesized, as large companies, in order to meet the expectations and requests of investors, should increase the level of communication, including in relation to the average costs they incur for the operations of collecting and disseminating information. Leverage (*LTD_TA*) was then considered, calculated as the ratio between long-term debt and total assets, assuming that it has a positive association with CSR disclosure.

Therefore, companies whose financial leverage is higher are more willing to disclose information in order to reduce agency costs with creditors. Finally, the corporate profitability index return on assets (*ROA*) was introduced into the model.

Table 2. Description of variables and measurement

Variable	*Description*	*Measurement*	*Source*
Dependent variable			
CSRDisc	CSR disclosure	Sum of the number of non-financial indicators relevant to environmental, social, and governance issues	Refinitiv Eikon Datastream
Independent variables			
BoInd	Board independence	The ratio between independent directors appointed by minorities and the total number of directors	Refinitiv Eikon Datastream
BoGenDiv	Board gender diversity	Percentage of women on the board of directors	Refinitiv Eikon Datastream
BoMeetings	Board meetings	Number of board meetings during the year	Refinitiv Eikon Datastream
BoSize	Board size	Total number of board members at the end of the fiscal year	Refinitiv Eikon Datastream
CEOChDual	CEO duality	Dummy variable that takes on the value 1 if the chairman of the board of directors of the company is simultaneously the CEO or 0 otherwise	Refinitiv Eikon Datastream
CSRComm	CSR committee	Dummy variable that assumes the value of 1 if a CSR committee is present, or 0 otherwise	Refinitiv Eikon Datastream
Control variables			
LN_TA	Size	Natural logarithm of total assets	Refinitiv Eikon Datastream
LTD_TA	Leverage	Long-term debt divided by total assets	Refinitiv Eikon Datastream
ROA	Return on assets	Natural logarithm of the ratio between the market value and the balance sheet value of assets	Refinitiv Eikon Datastream

4. RESULTS

4.1. Descriptive statistics

Table 3 below shows the descriptive statistics of the variables.

CSRDisc shows an average value of 9.04, the minimum and maximum values being 1 and 17, respectively. The data show that, on average, the sampled companies disclose information on 9 indicators out of a total of 19, reaching a minimum of 1 and a maximum of 17, and thus covering almost all the elements surveyed.

The standard deviation is equal to 3.72, indicating wide heterogeneity in the behaviours adopted by companies regarding the disclosure of information on sustainability. There are optimal situations in which information disclosure is almost global, and others in which it is, instead, absolutely unsatisfactory. Such dissimilar levels can lead to a variety of evaluations: if, for those companies whose level of communication is minimal, there is a clear lack of perception of the strategic role played by disclosure in the field of sustainability, then for the others, whose levels reach satisfactory standards, the levels could indicate both opportunistic behaviour in terms of a compliant nature with respect to regulatory obligations, and true attention to the subject matter and the interests of stakeholders.

BoInd shows a minimum value of 0, signifying boards in which there is an absence of independent directors, and a maximum value of 100, indicating that all board directors are independent members. On average, boards of directors show independence of 50.44 percent. The data reported, therefore, show relatively consolidated independence of boards, suggesting an adequate capacity of directors to safeguard and respond to the widespread interests of stakeholders.

Regarding *BoGenDiv*, descriptive statistics show that, on average, the percentage of women members of the board of directors is equal to 33.39 percent, with minimum values equal to 0 and maximum values equal to 66.67. The results are extremely varied, ranging from situations in which there is a total absence of women directors to situations in which more than half the board is represented by female members. Examining the other variables considered, on average, 8.84 meetings are held per year by boards of directors that are composed, on average, of 11.63 members, with compositions ranging from 2 members to 23. In 34.11 percent of the companies surveyed, the CEO is also president of the board, and, on average, there is a specific committee for CSR in 77.64 percent of the companies.

Table 3. Descriptive statistics

Variable	***Obs.***	***Mean***	***Std. Dev.***	***Min***	***Max***
CSRDisc	1.369	9.046749	3.727467	1	17
BoInd	1.369	50.43943	26.65994	0	100
BoGenDiv	1.369	33.39279	13.68353	0	66.66667
BoMeetings	1.369	8.848795	4.477666	1	52
BoSize	1.369	11.63112	4.301733	2	23
CEOChDual	1.369	0.3411249	0.4742605	0	1
CSRComm	1.369	9.588235	4.514406	0	1
LN_TA	1.369	0.7764792	1.777696	16.69133	18.86306
LTD_TA	1.369	0.2251432	0.1517665	0	1.019485
ROA	1.369	0.0304215	0.08078	-1.081107	0.6033972

Table 4. Correlation matrix

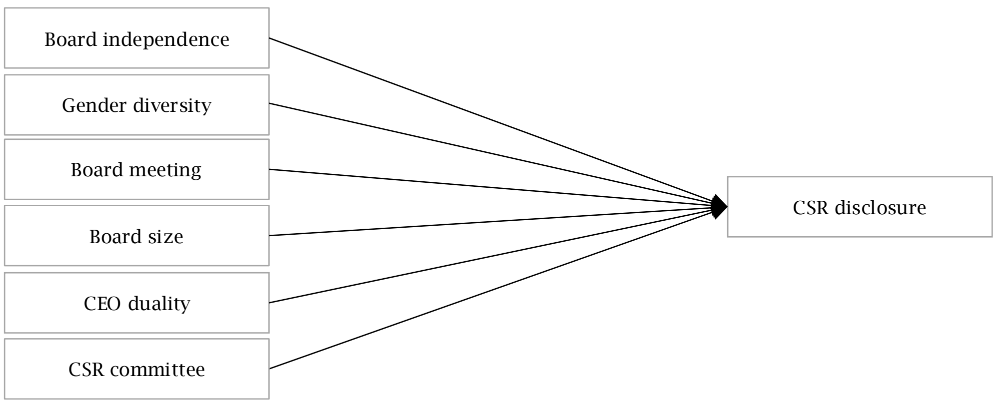
	CSRDisc	***BoInd***	***BoGenDiv***	***BoMeetings***	***BoSize***	***CEOChDual***	***CSRComm***	***LN_TA***	***LTD_TA***	***ROA***
CSRDisc	1.0000									
BoInd	0.2386*	1.0000								
	0.0000									
BoGenDiv	0.3384*	0.1023*	1.0000							
	0.0000	0.0001								
BoMeetings	0.1246*	0.1062*	0.0959*	1.0000						
	0.0000	0.0001	0.0004							
BoSize	0.4991*	0.0500	0.3235*	0.0541*	1.0000					
	0.0000	0.0643	0.0000	0.0452						
CEOChDual	0.2097*	-0.0215	0.2791*	-0.0081	0.1237*	1.0000				
	0.0000	0.4265	0.0000	0.7660	0.0000					
CSRComm	0.5286*	0.1849*	0.2487*	0.1664*	0.3238*	0.1124*	1.0000			
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				
LN_TA	0.6164*	0.2331*	0.2637*	0.1232*	0.5995*	0.1465*	0.3705*	1.0000		
	0.0000	0.000	0.000	0.000	0.000	0.000	0.000			
LTD_TA	-0.0253	0.0812*	-0.0110	0.1480*	-0.0345	-0.0014	0.0438	-0.0012	1.0000	
	0.3488	0.0026	0.6830	0.000	0.2021	0.9587	0.1052	0.9635		
ROA	0.0184	0.0196	0.0042	-0.1532*	-0.0270	0.0348	0.0302	-0.0074	-0.2360*	1.0000
	0.4952	0.4696	0.8758	0.0000	0.3181	0.1975	0.2634	0.7838	0.0000	

*Note: * $p < 0.05$.*

4.2. Regression analysis

Figure 1 describes our research model, and the relationships between the variables investigated. We used the following research model:

Figure 1. Research model



We developed the following regression model to test the hypotheses developed:

Model 1

$$CSRDisc = \alpha + \beta_1 BoInd + \beta_2 BoGenDiv + \beta_3 BoMeetings + \beta_4 BoSize + \beta 5\ CeoChDual + \beta_6 CSRComm + \beta_9 Control + \varepsilon \quad (1)$$

Table 4 shows the results of the regression models, providing evidence for the hypotheses developed.

In order to verify the robustness of the fixed effects panel model used in this study, specific comparison tests were conducted with the pooled ordinary least squares (OLS) and random effects (RE) models. The Breusch and Pagan Lagrangian multiplier test was performed to compare the pooled OLS and the RE models. The results of the comparison, given the wide heterogeneity of the data from the countries in the sample, led us to consider the RE model more appropriate than a simple OLS regression. We then compared the fixed effects model with the variable effects model using the Hausman test, which confirmed the greater appropriateness of the fixed effects model. Finally, the Chow test was performed as the ultimate test of the appropriateness of the fixed effects model compared to the OLS model. A comparison of these models allowed us to conclude that the fixed effects model is preferred to the OLS model.

The R-squared is 20 percent, a value that, in line with prevailing studies on the topic, confirms a reliable explanatory power of the regression.

Analysing the data in Table 4, the first hypothesis, *H1*, is confirmed. A significant and positive relationship between the independence of the board and the level of disclosure is confirmed by the results obtained. The reference coefficient, with a significance of 5 percent, confirms the hypothesis that greater independence of the board of directors leads to an increased level of disclosure on CSR. In respect of the second hypothesis, *H2*, the results obtained confirm the presence of a positive relationship, with a significance of 5 percent, between gender diversity and CSR disclosure. It is therefore confirmed that women on the board of directors influence the level of CSR disclosure. The results of the regression do not confirm hypothesis *H3*. There is no significance in the relationship between a number of meetings and CSR disclosure. Similarly, hypotheses *H4* and *H5* are not confirmed by the regression results. Neither board size nor CEO duality shows evidence of statistical significance. Therefore, it is not possible to confirm the thesis that there is a positive relationship between board size and the level of disclosure of information; as a result, it is also not possible to confirm the negative relationship between the disclosure of information and the dual role of chief executive officer and chairman.

Hypothesis *H6* is confirmed with significance at the 10 percent level, indicating that the presence of a sustainability committee has a positive impact on the level of information provided by the company. It is, therefore, confirmed that CSR committees represent optimal governance mechanisms to respond to the specific needs of both economic operators and the stakeholders they address. Specifically, CSR committees represent drivers for companies in terms of transparency and communication on sustainability.

The control variables exhibit mixed results. The economic dimension of the firm shows a positive and significant effect on disclosure; leverage exhibits a positive but not statistically significant influence, while ROA shows significant and negative results.

Table 5. Regressions

Variables	*Model 1 direct effect OLS*	*Model 3 direct effect FE*	*Model 2 direct effect RE*
BoInd	0.0119***	0.0103**	0.0107***
	(0.00276)	(0.00436)	(0.00310)
BoGenDiv	0.0244***	0.0170**	0.0275***
	(0.00567)	(0.00779)	(0.00585)
BoMeetings	0.00955	0.00373	0.00398
	(0.0162)	(0.0126)	(0.0116)
BoSize	0.119***	-0.0279	0.0369
	(0.0211)	(0.0332)	(0.0242)
CEOChDual	0.645***	-0.170	0.118
	(0.154)	(0.201)	(0.159)
CSRComm	2.694***	1.612***	1.994***
	(0.187)	(0.174)	(0.152)
LN_TA	0.767***	1.470***	0.989***
	(0.0521)	(0.212)	(0.0726)
LTD_TA	-0.986**	0.678	0.194
	(0.479)	(0.603)	(0.473)
ROA	0.144	-2.411***	-1.688***
	(0.900)	(0.660)	(0.608)
Constant	-13.16***	-26.04***	-16.76***
	(1.011)	(4.618)	(1.436)
Observations	1,369	1,369	1,369
R-squared	0.523	0.198	
Number of companies		483	483

*Note: * p < 0.10; ** p < 0.05; *** p < 0.01.*

5. DISCUSSION

The results obtained clearly demonstrate that board independence, in line with the prevailing literature (Fernández-Gago et al., 2018; Garcia-Sanchez et al., 2014; Haniffa & Cooke, 2005; Rao, Tilt, & Lester, 2012; Jo & Harjoto, 2011; Zahra & Stanton, 1988; Pfeffer & Salancik, 1978) is a useful governance mechanism to increase CSR disclosure. A greater number of independent directors can lead to a decrease in the conflicts of interest between shareholders and stakeholders, as independent directors are more inclined towards issues of external interest and aware and attentive to stakeholder expectations, thus facilitating CSR disclosure activities.

This is also the consequence of the reputational factor to which the directors are subject; in fact, independent directors have more direct relationships with stakeholders and, consequently, are subject to their judgments. This clearly stimulates them to motivate companies to engage more concretely and more widely in CSR activities (Khan, 2010; Haniffa & Cooke, 2005). The directors' reputation depends on the ethical and responsible approach put in place by companies (Zahra & Stanton, 1988), for this reason, they are motivated to make sustainable activities and, above all, to disclose information about it (Prado-Lorenzo et al., 2009; Cheng & Courtenay, 2006).

Regarding hypothesis *H2*, the results confirm the presence of a positive relationship between gender diversity and CSR disclosure. Consistent with reference studies (Fernandez-Feijoo et al., 2014; Lone, Ali, & Khan, 2016), the results of our analysis show that the presence of women on boards of directors represents a strong influence on the level of disclosure of sustainability, confirming the female gender's tendency to pay more attention to issues of social and ethical interest (Levi et al., 2014) and to adopt more responsible actions and behaviours that are oriented to the interests of all stakeholders.

The regression results do not support hypothesis *H3* about the existence of a correlation between the number of board meetings and CSR disclosure. The results of similar studies have shown the existence of both positive (Lipton & Lorsch, 1992) and negative (Vafeas, 1999) relationships, motivated respectively by increased board activity as a mechanism that amplifies control over corporate management and decision-making processes, or by excessive power on the part of directors. In line with other studies (e.g., Dienes & Velte, 2016), we found no significance in the relationship between these variables.

Also, the hypothesis *H4* that the size of the board can have a positive impact on the level of CSR disclosure released by the company, has not been confirmed. In line with previous studies (Dienes & Velte, 2016; Cheng & Courtenay, 2006), we may assume that a greater number of board members can lower the level of monitoring and therefore reduce CSR disclosure due to a greater dispersion of functions.

The results obtained with regard to hypothesis *H5* concerning role duality are not statistically significant. It is therefore not possible to confirm the assumption that there is a negative relationship between sustainability disclosure and the dual roles of CEO and chairman. These results are also in line with previous studies that have used duality as a control variable when investigating the relationship between board characteristics and corporate disclosure (García-Sánchez, Gómez-Miranda, David, & Rodríguez-Ariza, 2019; Helfaya & Moussa, 2017; Fuente et al., 2017).

Hypothesis *H6* instead has been confirmed. The presence of a CSR committee has a positive impact on the level of information provided by the company, confirming the consideration that the presence of committees dedicated to specific aspects represents an optimal governance mechanism to respond to the specific needs of both economic operators and the stakeholders they address. Specifically, CSR committees represent drivers for companies in terms of transparency and communication in order to guarantee the quality of the company's sustainability reporting activities (Michelon & Parbonetti, 2012). In fact, CSR committees potentially act as a useful governance mechanism in terms of fostering the quantity and quality of firms' CSR disclosure (Pucheta-Martínez & Gallego-Alvarez, 2019; Mahmood & Orazalin, 2017; Fuente et al., 2017).

The results obtained in this work show that in the European countries investigated, the higher independence of directors, the presence of women sitting on the board, and the establishment of CSR committee with specific competences on sustainability issues turn out to be factors that have a positive impact on the level of disclosure regarding sustainability, confirming that these attributes are tools for reducing conflicts between parties.

Contrary to what several previous studies (Guerrero-Villegas, Pérez-Calero, Hurtado-González, & Giráldez-Puig, 2018; Jizi, 2017; González & García-Meca, 2014) have found, other board characteristics, such as CEO duality, a number of meetings and board size have not been shown to exert any influence on the level of disclosure.

6. CONCLUSION

During the last decades, CSR disclosure has been widely investigated by scholars as an internal corporate governance mechanism able to influence the increase in financial performance. Several studies (Ananzeh, 2022; Arenas-Parra & Álvarez-Otero, 2020; Fernández-Gago et al., 2018; Rao & Tilt, 2016) have analysed its relationship with board compositions, most of which focus on board independence, finding no convergence on the determinants of CSR disclosure.

This paper investigates the role of board composition in influencing the CSR disclosure released by companies located in the big four western European countries, analysing six different board attributes.

This study shows how greater heterogeneity in the characteristics of the board can be a useful mechanism for the implementation of actions and operations of transparency and consideration of the expectations and needs of stakeholders, not only from the point of view of accountability of the company's work but also from the stakeholder engagement perspective.

These results have important implications for legislators, companies, and operators in the sector with regard to the definition of roles and functions of directors, observing, for example, the impact of independent directors and the presence of women on the board.

In designing new regulations or corporate governance codes, legislators should take into consideration the role that board independence, gender diversity, and CSR committee can play in improving the level of disclosure, accountability, and transparency of companies towards their stakeholders. The results suggest that companies characterized by higher levels of board independence, with a high percentage of women sitting on the board and with a CSR committee are expected to behave in a socially and environmentally responsible way and to be more transparent and accountable.

Our findings should be taken into consideration also by companies, especially those located in contexts characterized by a low level of transparency when they appoint board members. According to the results of this study, companies should establish a CSR committee and appoint more independent and female directors, that are more inclined to disclose CSR information, by protecting all stakeholders' interests and increasing companies' accountability. The results obtained in this work should logically be considered in light of the limited sample size. Therefore, every observation and consideration based on the results obtained suffers from a primary objective limitation that precludes any claim to generalized application. However, this limitation represents a first element and opportunity for future research explorations. In the future, the sample size can be increased by extending the analysis to other European countries, also by including country-specific variables, in order to understand how context can influence the effectiveness of corporate governance mechanisms.

Furthermore, it should be considered that this study only analyzed the quantity of CSR information released without analyzing its quality; this aspect can be implemented in future studies by focusing attention on different characteristics of the information disclosed. Finally, the overall spread of CSR, covering all environmental, social, and governance aspects, was considered. It might be interesting for future research to analyse the effect of the board composition in each of these dissemination categories.

REFERENCES

1. Abeysekera, I. (2010). The influence of board size on intellectual capital disclosure by Kenyan listed firms. *Journal of Intellectual Capital, 11*(4), 504–518. https://doi.org/10.1108/14691931011085650
2. 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
3. Adnan, S. M., van Staden, S., & Hay, D. (2010). Do culture and governance structure influence CSR reporting quality: Evidence from China, India, Malaysia and the United Kingdom. In *Proceedings of the 6th Asia Pacific Interdisciplinary Research in Accounting Conference*.
4. Ahmed, S. (2013). Board of director characteristics an earnings management in Malaysia. *Journal on Business Review, 2*(4), 94–99. Retrieved from http://dl6.globalstf.org/index.php/gbr/article/viewFile/183/181
5. Aleqab, M. M., & Ighnaim, M. M. (2021). The impact of board characteristics on earnings management. *Journal of Governance & Regulation, 10*(3), 8–17. https://doi.org/10.22495/jgrv10i3art1
6. Ananzeh, H. (2022). Corporate governance and the quality of CSR disclosure: Lessons from an emerging economy. *Society and Business Review, 17*(2), 280–306. https://doi.org/10.1108/SBR-09-2021-0153
7. Ananzeh, H., Alshurafat, H., Bugshan, A., & Hussainey, K. (2022). The impact of corporate governance on forward-looking CSR disclosure. *Journal of Financial Reporting and Accounting*. Advance online publication. https://doi.org/10.1108/JFRA-10-2021-0379
8. Arena, C., Bozzolan, S., & Michelon, G. (2015). Environmental reporting: Transparency to stakeholders or stakeholder manipulation? An analysis of disclosure tone and the role of the board of directors. *Corporate Social Responsibility and Environmental Management, 22*(6), 346–361. https://doi.org/10.1002/csr.1350
9. Arenas-Parra, M., & Álvarez-Otero, S. (2020). CSR disclosure: The IPO case. *Sustainability, 12*(11), 4390. https://doi.org/10.3390/su12114390
10. Bhattacharyya, A., & Cummings, L. (2015). Measuring corporate environmental performance — Stakeholder engagement evaluation. *Business Strategy and the Environment, 24*(5), 309–325. https://doi.org/10.1002/bse.1819
11. Chau, G., & Gray, S. (2010). Family ownership, board independence and voluntary disclosure: Evidence from Hong Kong. *Journal of International Accounting, Auditing and Taxation, 19*(2), 93–109. https://doi.org/10.1016/j.intaccaudtax.2010.07.002
12. Che-Adam, N., Lode, N. A., & Abd-Mutalib, H. (2019). The influence of board of directors'characteristics on the environmental disclosure among Malaysian companies. *Malaysian Management Journal, 23,* 1–25. https://doi.org/10.32890/mmj.23.2019.9682
13. Cheng, E. C. M., & Courtenay, S. M. (2006). Board composition, regulatory regime and voluntary disclosure. *The International Journal of Accounting, 41*(3), 262–289. https://doi.org/10.1016/j.intacc.2006.07.001
14. Conger, J. A., Lawler, E., & Finegold, D. L. (2001). *Corporate boards: New strategies for adding value at the top*. San Francisco, CA: Jossey-Bass Inc.
15. Cormier, D., & Magnan, M. (2015). The economic relevance of environmental disclosure and its impact on corporate legitimacy: An empirical investigation. *Business Strategy and the Environment, 24*(6), 431–450. https://doi.org/10.1002/bse.1829
16. Cormier, D., Ledoux, M.-J., Magnan, M., & Aerts, W. (2010). Corporate governance and information asymmetry between managers and investors. *Corporate Governance, 10*(5), 574–589. https://doi.org/10.1108/14720701011085553
17. Cucari, N., Esposito De Falco, S., & Orlando, B. (2017). Diversity of board of directors and environmental social governance: Evidence from Italian listed companies. *Corporate Social Responsibility and Environmental Management, 25*(3), 250–266. https://doi.org/10.1002/csr.1452

18. 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/10.5465/256988
19. Dey, A. (2008). Corporate governance and agency conflicts. *Journal of Accounting Research, 46*(5), 1143–1181. https://doi.org/10.1111/j.1475-679X.2008.00301.x
20. Dienes, D., & Velte, P. (2016). The impact of supervisory board composition on CSR reporting. Evidence from the German two-tier system. *Sustainability, 8*(1), 63. https://doi.org/10.3390/su8010063
21. Ducassy, I., & Montandrau, S. (2015). Corporate social performance, ownership structure, and corporate governance in France. *Research in International Business and Finance, 34,* 383–396. https://doi.org/10.1016/j.ribaf.2015.02.002
22. Evans, J., Evans, R., & Loh, S. (2002). Corporate governance and declining firm performance. *International Journal of Business Studies, 10*(1), 1–18.
23. Fadzilah, N. S. B. M. (2017). Board of directors' characteristics and earnings management of family owned companies. *International Journal of Accounting & Business Management, 5*(2), 68–83. Retrieved from https://www.ftms.edu.my/journals/pdf/IJABM/Nov2017/68-83.pdf
24. Fama, E. (1980). Agency problems and the theory of the firm. *Journal of Political Economy, 88*(2), 288–307. https://doi.org/10.1086/260866
25. Fama, E., & Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301–325. https://doi.org/10.1086/467037
26. Fernandez-Feijoo, B., Romero, S., & Ruiz-Blanco, S. (2014). Women on boards: Do they affect sustainability reporting? *Corporate Social Responsibility and Environmental Management, 21*(6), 351–364. https://doi.org/10.1002/csr.1329
27. 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
28. Finkelstein, S., & D'Aveni, R. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal, 37*(5), 1079–1108. https://doi.org/10.5465/256667
29. Forker, J. J. (1992). Corporate governance and disclosure quality. *Accounting and Business Research, 22*(86), 111–124. https://doi.org/10.1080/00014788.1992.9729426
30. Freeman, E. R. (1984). *Strategic management. A stakeholder approach.* Boston, MA: Pitman.
31. Fuente, J. A., García-Sanchez, I. M., & Lozano, M. B. (2017). The role of the board of directors in the adoption of GRI guidelines for the disclosure of CSR information. *Journal of Cleaner Production, 141,* 737–750. https://doi.org/10.1016/j.jclepro.2016.09.155
32. García-Sánchez, I. M., Gómez-Miranda, M. E., David, F., & Rodríguez-Ariza, L. (2019). Board independence and GRI-IFC performance standards: The mediating effect of the CSR committee. *Journal of Cleaner Production, 225,* 554–562. https://doi.org/10.1016/j.jclepro.2019.03.337
33. Garcia-Sanchez, I., Cuadrado-Ballesteros, B., & Sepulveda, C. (2014). Does media pressure moderate CSR disclosures by external directors? *Management Decision, 52*(6), 1014–1045. https://doi.org/10.1108/MD-09-2013-0446
34. Giannarakis, G. (2014). The determinants influencing the extent of CSR disclosure. *International Journal of Law and Management, 56*(5), 393–416. https://doi.org/10.1108/IJLMA-05-2013-0021
35. González, J. S., & García-Meca, E. (2014). Does corporate governance influence earnings management in Latin American markets? *Journal of Business Ethics, 121*(3), 419–440. https://doi.org/10.1007/s10551-013-1700-8
36. 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. https://doi.org/10.1108/09513579510146996
37. Guerrero-Villegas, J., Pérez-Calero, L., Hurtado-González, J. M., & Giráldez-Puig, P. (2018). Board attributes and corporate social responsibility disclosure: A meta-analysis. *Sustainability, 10*(12), 4808. https://doi.org/10.3390/su10124808
38. 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
39. Haniffa, R., & Cooke, T. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy, 24*(5), 391–430. https://doi.org/10.1016/j.jaccpubpol.2005.06.001
40. Harjoto, M., Laksmana, I., & Lee, R. (2015). Board diversity and corporate social responsibility. *Journal of Business Ethics, 132*(4), 641–660. https://doi.org/10.1007/s10551-014-2343-0
41. Helfaya, A., & Moussa, T. (2017). Do board's corporate social responsibility strategy and orientation influence environmental sustainability disclosure? UK evidence. *Business Strategy and the Environment, 26*(8), 1061–1077. https://doi.org/10.1002/bse.1960
42. Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics, 149,* 411–432. https://doi.org/10.1007/s10551-016-3099-5
43. Ibrahim, N. A., & Angelidis, J. P. (1994). Effect of board members' gender on corporate social responsiveness orientation. *Journal of Applied Business Research, 10*(1), 35–40. https://doi.org/10.19030/jabr.v10i1.5961
44. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X
45. Jiraporn, P., & Chintrakarn, P. (2013). Corporate social responsibility (CSR) and CEO luck: Are lucky CEOs socially responsible? *Applied Economics Letters, 20*(11), 1036–1039. https://doi.org/10.1080/13504851.2013.772291
46. Jizi, M. (2017). The influence of board composition on sustainable development disclosure. *Business Strategy and the Environment, 26*(5), 640–655. https://doi.org/10.1002/bse.1943
47. Jizi, M., Salama, A., Dixon, R., & Stratling, R. (2014). Corporate governance and corporate social responsibility disclosure: Evidence from the US banking sector. *Journal of Business Ethics, 125*(4), 601–615. https://doi.org/10.1007/s10551-013-1929-2
48. Jo, H., & Harjoto, M. A. (2011). Corporate governance and firm value: The impact of corporate social responsibility. *Journal of Business Ethics, 103*(3), 351–383. https://doi.org/10.1007/s10551-011-0869-y
49. John, K., & Senbet, L. W. (1998). Corporate governance and board effectiveness. *Journal of Banking & Finance, 22*(4), 371–403. https://doi.org/10.1016/S0378-4266(98)00005-3

50. Kanagaretnam, K., Lobo, G. J., & Whalen, D. J. (2007). Does good corporate governance reduce information asymmetry around quarterly earnings announcements? *Journal of Accounting and Public Policy, 26*(4), 497–522. https://doi.org/10.1016/j.jaccpubpol.2007.05.003
51. Khan, H. (2010). The effect of corporate governance elements on corporate social responsibility (CSR) reporting: Empirical evidence from private commercial banks of Bangladesh. *International Journal of Law and Management, 52*(2), 82–109. https://doi.org/10.1108/17542431011029406
52. Kim, H. (2013). Glass fence thicker than glass ceiling: The puzzling gaps of women's leadership in Korea. In J. Rajasekar (Ed.), *Culture and gender in leadership: Perspectives from the Middle East and Asia* (pp. 253–274). Palgrave Macmillan. https://doi.org/10.1057/9781137311573_13
53. Kusumawardani, A., Wardhani, W., Maria, S., & Yudaruddin, R. (2021). Board structure and disclosure of intellectual capital: An empirical study in an emerging market. *Journal of Governance & Regulation, 10*(3), 140–149. https://doi.org/10.22495/jgrv10i3art12
54. Lehn, K. M., Patro, S., & Zhao, M. (2009). Determinants of the size and composition of US corporate boards: 1935–2000. *Financial Management, 38*(4), 747–780. https://doi.org/10.1111/j.1755-053X.2009.01055.x
55. Lepore, L., Landriani, L., Pisano, S., D'Amore, G., & Pozzoli, S. (2022). Corporate governance in the digital age: The role of social media and board independence in CSR disclosure. Evidence from Italian listed companies. *Journal of Management and Governance*. Advance online publication. https://doi.org/10.1007/s10997-021-09617-2
56. Levi, M., Li, K., & Zhang, F. (2014). Director gender and mergers and acquisitions. *Journal of Corporate Finance, 28,* 185–200. https://doi.org/10.1016/j.jcorpfin.2013.11.005
57. Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *The Business Lawyer, 48*(1), 59–77. Retrieved from https://www.jstor.org/stable/40687360
58. Lone, E. J., Ali, A., & Khan, I. (2016). Corporate governance and corporate social responsibility disclosure: Evidence from Pakistan. *Corporate Governance: The International Journal of Business in Society, 16*(5), 785–797. https://doi.org/10.1108/CG-05-2016-0100
59. Mahmood, M., & Orazalin, N. (2017). Green governance and sustainability reporting in Kazakhstan's oil, gas, and mining sector: Evidence from a former USSR emerging economy. *Journal of Cleaner Production, 164,* 389–397. https://doi.org/10.1016/j.jclepro.2017.06.203
60. Marashdeh, Z., Alomari, M. W., Aleqab, M. M., & Alqatamin, R. M. (2021). Board characteristics and firm performance: The case of Jordanian non-financial institutions. *Journal of Governance & Regulation, 10*(3), 150–159. https://doi.org/10.22495/jgrv10i3art13
61. Matsa, D. A., & Miller, A. R. (2013). A female style in corporate leadership? Evidence from quotas. *American Economic Journal: Applied Economics, 5*(3), 136–169. https://doi.org/10.1257/app.5.3.136
62. Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance, 16*(3), 477–509. https://doi.org/10.1007/s10997-010-9160-3
63. Musviyanti, Ulfah, Y., & Yudaruddin, Y. A. (2021). Women on board, firm size and cash holding: Empirical evidence from the developing country. *Journal of Governance & Regulation, 10*(3), 177–185. https://doi.org/10.22495/jgrv10i3art16
64. Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. California, the US: Stanford University Press.
65. Pisano, S., Lepore, L., & Agrifoglio, R. (2015). Corporate governance and information asymmetry between shareholders and lenders: An analysis of Italian listed companies. *Financial Reporting, 27,* 27–53. https://doi.org/10.3280/FR2015-002002
66. Post, C., Rahman, N., & Rubow, E. (2011). Green governance: Boards of directors' composition and environmental corporate social responsibility. *Business & Society, 50*(1), 189–223. https://doi.org/10.1177/0007650310394642
67. Prado-Lorenzo, J.-M., Gallego-Álvarez, I., & García-Sánchez, I. M. (2009). Stakeholder engagement and corporate social responsibility reporting: The ownership structure effect. *Corporate Social Responsibility and Environmental Management, 16*(2), 94–107. https://doi.org/10.1002/csr.189
68. 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
69. Pucheta-Martínez, M. C., Bel-Oms, I., & Olcina-Sempere, G. (2016). Corporate governance, female directors and quality of financial information. *Business Ethics: A European Review, 25*(4), 363–385. https://doi.org/10.1111/beer.12123
70. Rao, K., & Tilt, C. (2016). Board composition and corporate social responsibility: The role of diversity, gender, strategy, and decision making. *Journal of Business Ethics, 138*(2), 327–347. https://doi.org/10.1007/s10551-015-2613-5
71. Rao, K., Tilt, C., & Lester, L. (2012). Corporate governance and environmental reporting: An Australian study. *Corporate Governance, 12*(2), 143–163. https://doi.org/10.1108/14720701211214052
72. Ridwan, R., & Mayapada, A. G. (2022). Does sharia governance influence corporate social responsibility disclosure in Indonesia Islamic banks? *Journal of Sustainable Finance & Investment, 12*(2), 299–318. https://doi.org/10.1080/20430795.2020.1749819
73. Rodríguez-Ariza, L., Frías Aceituno, J., & Rubio, R. G. (2014). El consejo de administración y las memorias de sostenibilidad [The board of directors and the sustainability report]. *Revista de Contabilidad, 17*(1), 5–16. https://doi.org/10.1016/j.rcsar.2013.02.002
74. Schaltegger, S., & Zvezdov, D. (2015). Gatekeepers of sustainability information: Exploring the roles of accountants. *Journal of Accounting & Organizational Change, 11*(3), 333–361. https://doi.org/10.1108/JAOC-10-2013-0083
75. Sekarlangit, L. D., & Wardhani, R. (2021). The effect of the characteristics and activities of the board of directors on sustainable development goal (SDG) disclosures: Empirical evidence from Southeast Asia. *Sustainability, 13*(14), 8007. https://doi.org/10.3390/su13148007
76. Soobaroyen, T., Ramdhony, D., Rashid, A., & Gow, J. (2022). The evolution and determinants of corporate social responsibility (CSR) disclosure in a developing country: Extent and quality. *Journal of Accounting in Emerging Economies*. Advance online publication. https://doi.org/10.1108/JAEE-02-2020-0031

77. Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review, 20*(3), 571–610. https://doi.org/10.5465/amr.1995.9508080331
78. Sundarasen, S. D. D., Je-Yen, T., & Rajangam, N. (2016). Board composition and corporate social responsibility in an emerging market. *Corporate Governance, 16*(1), 35–53. https://doi.org/10.1108/CG-05-2015-0059
79. Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics, 53*(1), 113–142. https://doi.org/10.1016/S0304-405X(99)00018-5
80. Villanueva-Villar, M., Rivo-López, E., & Lago-Peñas, S. (2016). On the relationship between corporate governance and value creation in an economic crisis: Empirical evidence for the Spanish case. *Business Research Quarterly, 19*(4), 233–245. https://doi.org/10.1016/j.brq.2016.06.002
81. Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance? *Business Strategy and the Environment, 28*(2), 286–300. https://doi.org/10.1002/bse.2224
82. Zahra, S. A., & Stanton, W. W. (1988). The implications of board of directors' composition for corporate strategy and performance. *International Journal of Management, 5*(2), 229–236.
83. Zattoni, A., & Cuomo, F. (2010). How independent, competent and incentivized should non-executive directors be? An empirical investigation of good governance codes. *British Journal of Management, 21*(1), 63–79. https://doi.org/10.1111/j.1467-8551.2009.00669.x