REVISTA DE CONTABILIDAD

SPANISH ACCOUNTING REVIEW

revistas.um.es/rcsar

Board competences and CSR reporting: the moderating role of CEO power

Isabel Gallego-Álvarez[a], María-Consuelo Pucheta-Martínez[b]

a) Department of Business Administration, Instituto Multidisciplinar de Empresa, University of Salamanca, Salamanca-SPAIN.
b) Departamento de Finanzas y Contabilidad, Facultad de Ciencias Jurídicas y Económicas, Universidad Jaume I, Castellón-SPAIN.

[b]Corresponding author.
E-mail address: pucheta@uji.es

ARTICLE INFO

Article history:
Received 6 June 2020
Accepted 30 January 2021
Available online 1 July 2022

JEL classification:
DO2
M14
O3

Keywords:
Board specific skills
Board tenure
Board culture diversity
CSR disclosure
CEO power

ABSTRACT

Studies addressing the impact of board capabilities on CSR reporting are scarce. The aim of this research is to provide further evidence of the impact that certain board capabilities, such as board specific skills, board tenure and board cultural diversity have on CSR disclosure. Additionally, the moderating impact of CEO power on the association between these three board competences and CSR reporting is examined. The paper draws on resource dependence theory and agency theory, which are highly relevant in analysing how board competence influences CSR disclosure. The findings show that board specific skills, board tenure and board cultural diversity have a positive effect on the disclosure of CSR information. Moreover, our evidence also shows that CEOs with greater power can negatively moderate the positive effect of the three board competences considered on CSR reporting.

Las competencias del consejo de administración y los informes de RSC: el papel moderador del poder del CEO

Códigos JEL:
DO2
M14
O3

Palabras clave:
Habilidades específicas del consejo
Permanencia en el consejo
Diversidad de la cultura del consejo
Divulgación de la RSE
Poder del CEO

RESUMEN

Los estudios que abordan el impacto de las capacidades del consejo de administración en la información sobre RSE son escasos. El objetivo de esta investigación es proporcionar más pruebas del impacto que tienen ciertas capacidades del consejo de administración en la divulgación de la RSC, como son las habilidades específicas del consejo, la permanencia en el cargo y la diversidad cultural del consejo. Además, se examina el impacto moderador del poder del CEO en la asociación entre estas tres competencias del consejo y la información sobre RSC. El artículo se basa en la teoría de la dependencia de los recursos y en la teoría de la agencia, que son muy pertinentes para analizar cómo las competencias del consejo de administración influyen en la divulgación de la RSE. Los resultados muestran que las competencias específicas del consejo, la permanencia en el cargo y la diversidad cultural del consejo tienen un efecto positivo en la divulgación de información sobre RSE. Además, nuestros datos también muestran que los consejeros delegados con mayor poder pueden moderar negativamente el efecto positivo de las tres competencias del consejo consideradas sobre la información de RSC.

https://www.doi.org/10.6018/rcsar.431221

1. Introduction

In recent years, there has been a growing interest worldwide in the disclosure of non-financial information by firms, including information related to corporate social responsibility (CSR). According to Carroll & Shabana (2010), firms use CSR to increase transparency about social and environmental issues to legitimise their position with stakeholders and society. Likewise, CSR disclosure may allow firms to build and enhance their corporate image and may provide useful information for investment decisions (Deegan & Blomquist, 2006). Thus, firms whose boards support CSR reporting will demonstrate greater social orientation and greater engagement with stakeholders and society by meeting their needs and requests for social and environmental information.

Various studies have focused on analysing the factors determining CSR disclosure. In this regard, Suwaidan (2004) and Barako et al. (2006) consider that firm size positively affects CSR reporting. Profitability can be also considered to have a positive impact on CSR disclosure: if the profitability of a company is good, management will want to make it known in detail to their shareholders in order to enhance the firm's image (Giner, 1997). Authors including Belkaoui-Riahi & Karpik (1989) have found there is a positive relationship between profitability and CSR disclosure. Other factors, such as liquidity, leverage and R&D intensity, can be also considered significant determinants influencing CSR disclosure (Cooke, 1989; Ho & Taylor, 2007; Brammer & Millington, 2008).

Cucari et al. (2018) believe that board characteristics play an important role in determining social, ethical and environmentally responsible behaviours and in strategic corporate decision-making. In this regard, past evidence shows that board characteristics may influence CSR reporting in various ways. Board size is one of the attributes that makes boards effective in the sense of pressuring the management team to disclose CSR issues (Jizi et al., 2014; Lasagio & Cucari, 2019). Dalton et al. (1999), amongst others, support the thesis that large boards are more likely to have directors with varied experience and capabilities, which are helpful in solving conflicts and making decisions, such as disclosing CSR matters. Another attribute that has an impact on CSR disclosure is board independence, a relevant corporate governance mechanism for controlling and monitoring the management team and safeguarding shareholders' interests, particularly those of minority shareholders (Agrawal & Knoeber, 1996). According to Velte (2019), board independence is an essential condition for monitoring CSR disclosure measures in order to assure that these fulfil sharelolders' informational needs. Companies with greater board independence are presumed to encourage involvement in more CSR activities and their disclosure (Arora & Dharwadkar, 2011). CEO duality may also have an effect through its important supervisory role. Jiraporn & Chintrakarn (2013) argue that in cases of CEO duality, CEOs use CSR disclosure as an opportunistic instrument to enhance their reputation. Tamini & Sebastianelli (2017) find that CEO duality on boards increases the disclosure of environmental-social-governance information and, therefore, results in greater transparency. Other variables, such as board gender diversity or board committees may also have a positive influence on CSR disclosure. The presence of female directors on boards appears to be a good driver of CSR matters: Tamini & Sebastianelli (2017) find a positive association between board gender diversity and CSR issues. Fuente et al. (2017) provide evidence that CSR board committees are positively associated with greater company transparency concerning sustainability, and Konadu (2017) shows that the presence of a CSR committee on the board increases the voluntary disclosure of environmental and social information.

Alongside different board characteristics, board capabilities such as board specific skills, board tenure and board cultural diversity significantly enhance CSR disclosure (Wincent et al., 2010). Previous studies on the impact of board capabilities on CSR reporting are scarce, and some only address specific geographical areas, such as the United States. Harjoto et al. (2015) demonstrate that, in the case of North American firms, diversity in terms of gender, tenure and expertise is significantly related to CSR. Also focusing on North American firms, Post et al. (2011) found cultural background, among other board characteristics, to be statistically significant and positively associated with CSR reporting. In an analysis of Bangladeshi firms, Muttakin et al. (2018) examined how the board of directors' level of experience, expertise and knowledge affect CSR disclosure, and found that board capital is positively associated with CSR disclosure levels.

This study relies on research dependence theory, which posits that management boards provide firms with resources in the form of knowledge, experience or skills. Moreover, diverse boards add quality to firms' strategic decision-making, are able to identify and meet stakeholders' requirements, and improve the firm's reputation and performance (Michelon & Parbonetti, 2012; Makkonen et al., 2018). Equally, they support organisations in understanding and responding to their environment, helping them to better address issues that may arise concerning CSR disclosure (Boyd, 1990). At the same time, agency theory is also considered relevant to analyse board competences and CSR disclosure.

In view of the above, the aim of this research is to provide further evidence of the impact that certain board capabilities, such as board specific skills, board tenure and board cultural diversity have on CSR disclosure. Additionally, we examine the moderating impact of CEO power on the association between the three board competences addressed and CSR reporting. Our findings show that, in general, board specific skills, board tenure and board cultural diversity affect CSR disclosure positively, but that powerful CEOs moderate this positive effect negatively.

This paper makes the following contributions to existing research. Firstly, we have tried to delve into a topic that has previously been analysed only at the national level. We have expanded the sample by using firms from 16 different countries, which differentiates our research from previous studies, which have examined only a single country, such as those conducted by Harjoto et al. (2015) for the United States, or Muttakin et al. (2018) for Bangladesh. Secondly, resource dependence theory is most commonly used to address the relationship between board competences and CSR disclosure. Together with resource dependence theory, we have also used agency theory to support the research. Few researchers (see Vitolla et al., 2020b) have also considered this theory when examining the relationship between board competences and CSR disclosure. The final contribution made by the current research lies in the results obtained. Although board specific skills, board tenure and board cultural diversity positively affect CSR disclosure, in line with previous literature, our evidence shows a clear negative effect of CEO power on the relationship between these three board competences and CSR disclosure. The CEO position is one of the most powerful in a firm because it can affect board composition and influence its decisions, which can reduce board effectiveness. Furthermore, CEOs are expected to be able to position their firms to create wealth and maximise future opportunities for in-

terest groups. The construction of our variable CEO power has been done by aggregating four dummies variables: CEO duality, the Chairman of the board is ex-CEO, CEO tenure, and CEO board member, in line with earlier research such as Muttakin et al. (2018). However, our variable differs from that used by Muttakin et al. (2018) in some aspects because these authors consider CEO duality, CEO ownership, CEO tenure and family CEO status (i.e. whether the CEO was a family member). To the best of our knowledge, our study is the first to provide this evidence from a sample of firms operating in different countries. For this reason, we think it would be interesting to do this type of research with a more diverse and larger sample of countries in order to generalise the findings reported in previous analyses to other countries. The results obtained with a sample with different contexts can provide a more solid evidence about the impact that certain board capabilities, such as board specific skills, board tenure and board cultural diversity, have on CSR disclosure, taking also into account the moderating impact of CEO power on the association between these three board competences and CSR reporting.

The paper is structured in the following sections. The theoretical framework relating to the association between board specific skills, board tenure, board culture diversity and CSR reporting is described in the following section. Section 3, then, presents the literature review and Section 4 formulates the hypotheses proposed in this research. Section 5 describes the sample selection, the methodology and variables used. The results are analysed in Section 6 and, finally, Section 7 presents our conclusions and the implications of our findings.

2. Theoretical framework

Among organisational theories, resource dependence theory could be regarded as the most interesting in analysing how the diversity and composition of the board influence corporate social responsibility (CSR) disclosure. As noted by Hillman & Dalziel (2003), this theory suggests that boards provide firms with resources in the form of knowledge, experience or skills, while also supporting organisations in understanding and responding to their environment, thus improving their reactions to issues raised in relation to CSR reporting (Boyd, 1990).

Pfeffer & Salancik (1978, p. 163) observe that 'when an organization appoints an individual to a board, it expects the individual will come to support the organization, will concern himself with its problems, and will try to aid it'. According to these authors, 'boards can provide four main benefits: (1) provision of specific resources, such as expertise and advice from individuals with experience in a variety of strategic areas; (2) channels for communicating information between external organizations and the firm; (3) aids in obtaining commitments or support from important elements outside the firm; and (4) legitimacy' (Pfeffer & Salancik, 1978, pp. 145-161).

In the light of the above, a number of researchers (Baysinger & Butler, 1985; Gales & Kesner, 1994; Johnson et al., 1996) have used the resource dependency framework to argue that today's increasingly complex and uncertain environment requires leadership from individuals who can provide a broad range of resources. Such resources may include prestige, legitimacy and funding, as well as industrial, functional and geographical knowledge, and diversity. Thus, this perspective recognises the importance of procuring the resources of directors' human capital and social capital. Hillman et al. (2000) believe that resource dependency theory is applicable to board diversity, describing several types of directors, including business experts or influential individuals. At the same time, Coleman (1988) refers to directors' experience, knowledge, reputation and skills, which he describes as human capital. For Rao & Tilt (2016), diversity involves the inclusion of different cultures among board members and has an infinite number of dimensions, ranging from religion, age or nationality to skills. While characteristics such as nationality, gender or age may be more visible, others, such as educational, functional and occupational background, are less so (Kang et al., 2007).

According to Pfeffer & Salancik (1978, 2003), the use of the resource dependency framework also supports the notion that boards of directors are a relevant mechanism for the procurement of external resources and for maintaining ties with influential external organisations. In this regard, the board of directors is considered an important resource in managing firms' external requirements, such as environmental and social challenges. Against this background, Ramón-Llorens et al. (2019) state that boards of directors which comprise directors with a broad range of networks, experience, knowledge and skills, and have a broader perspective of stakeholders, can have a positive impact on CSR strategic decision-making, including reporting on CSR matters (Wang & Dewhirst, 1992). Similarly, Chang et al. (2017) claim that diversity in board members' backgrounds supports a better understanding of stakeholders' interests and requirements and, consequently, helps firms to engage more effectively in CSR. Galbreath (2016) also notes that boards with a broad variety of human capabilities, skills and experience are capable of delivering advice on CSR.

Agency theory is another approach useful in analysing how board diversity influences CSR disclosure, since a 'board has a crucial control and an independent monitoring role' (Muttakin et al., 2018, p. 42). For Barako et al. (2006), CSR disclosure presents an excellent opportunity to apply agency theory, since managers have greater access to the private information of a company than do external owners and investors, and are, therefore, able to make credible and reliable communications to the market to improve the value of the company and to reduce agency costs. Managers voluntarily bear these costs, disclosing investment opportunities, financial policies and other general information about the company. According to Vitolla et al. (2020b), agency theory suggests that the board of directors should pressure managers to increase the quantity and quality of information disclosed by the company in order to reduce information asymmetry and agency costs. Specifically, certain board characteristics, such as board competencies, may affect the board's control and monitoring capacity and, therefore, the quantity and quality of the social responsibility information reported by firms. In this regard, Jensen & Meckling (1976), focusing on agency theory, assert that the board of directors is a control mechanism capable of reducing information asymmetry and aligning ownership and management interests.

For Vitolla et al. (2020a), the disclosure of information is another way to reduce information asymmetry by harmonising the interests of shareholders and managers, and consequently reducing agency costs, in such a way that CSR disclosure will only be made when the benefits of the disclosure outweigh its costs. According to Rodriguez-Gomez et al. (2020), agency costs would be all those costs incurred by the company in order to align the interests of the agent and the principal. These costs are defined as the sum of supervision or control costs on the part of the principal, guarantee costs, and residual loss.

Moreover, Htay et al. (2012) suggest that information disclosure is an integral part of corporate governance since greater disclosure can reduce information asymmetry, not only reducing the conflict of interest between shareholders and managers, but also increasing the transparency of corporate reports on social and environmental issues. Furthermore, as Mallin (2002) indicates, a good board structure where board competences are relevant will exert a certain influence on CSR disclosure.

3. Literature review

In recent years, there has been growing worldwide interest in the disclosure of non-financial information by companies, including information on corporate or business social responsibility in its economic, environmental and social aspects. Various researchers have examined the determinants of CSR disclosure: Suwaidan (2004), New et al. (1998) and Barako et al. (2006) find that the larger the company, the more information it discloses on CSR issues. In this respect, Watson et al. (2002) suggest that managers of larger companies are more likely to recognise the potential benefits of greater CSR disclosure and smaller companies are more likely to feel that full CSR disclosure could jeopardise their competitive position. Profitability is also relevant in CSR disclosure: from the perspective of agency theory, when the profitability of a company is good, managers will want to make it known in detail to their shareholders in order to project a positive image (Giner, 1997), ensure their stability and position as well as their remuneration, and press for improvements in this regard. However, if profitability is low, they will prefer to hide the information, divulging less to third parties in order to cover up losses or declines in profit. Belkaoui-Riahi & Karpik (1989) report a positive relationship between profitability and CSR disclosure, with evidence that managers who know how to make a company profitable also have a knowledge and understanding of social responsibility which leads them to disclose information on social and environmental matters. Liquidity is a further factor in CSR disclosure: Belkaoui-Riahi & Kahl (1978) and Cooke (1989) suggest that the solidity of the company – as represented by high liquidity – can be associated with greater CSR disclosure. Other factors, such as leverage or innovation, can also be determinants of CSR disclosure. Regarding leverage, Ho & Taylor (2007) consider that companies with greater debt will tend to increase CSR reporting, while Brammer & Millington (2008) analyse the relationship between innovation – measured by R&D intensity – and some CSR activities, reporting a positive relationship.

In addition to the business characteristics cited above, certain corporate governance characteristics influence the voluntary disclosure practices of companies, such as board composition, board leadership structure or audit committee formation. Frias-Aceituno et al. (2013), using a sample of 568 companies from 15 countries in the period 2008–2010, examine the influence of certain board characteristics, specifically size, independence, activity and diversity, in the degree of integrated reports presented by leading non-financial, multinational companies. The results obtained show that board size and board gender diversity are the most influential factors in a board's decision to expand and enhance the processes of integrated reporting. Vitolla et al. (2020b), in a study based on agency theory, focus on intellectual capital and explore board features in 130 companies across five continents and 27 countries, operating in different sectors. The findings report a positive relationship between board size, board independence, board diversity, board activity and the intellectual capital report issued by firms. Barako et al. (2006), using a sample of Kenyan companies, focus on financial and non-financial disclosure. Among the corporate governance characteristics that influence such disclosure are the existence of an audit committee, the proportion of foreign ownership and the percentage of stock owned by institutional shareholders.

In a range of research on the topic, previous studies have revealed how boards of directors can be responsible for problems related to CSR disclosure (Haji, 2013; Jamali et al., 2008; Razek 2014). A more diverse board of directors is considered to be more creative and innovative (Oba et al., 2013) and could, therefore, influence the quality of CSR information. Harjoto et al. (2015) demonstrate that, in North American firms, diversity in gender, tenure and expertise is significantly related to CSR. Chen et al. (2019) examine whether CEO tenure affects CSR disclosure, using a sample of US companies for the period 1999–2003, finding that CEO tenure is significantly related to CSR disclosure, especially when the board is more independent. Muttakin et al. (2018) examine the effect of board directors' level of experience, expertise and knowledge of CSR disclosure in companies listed on the Dhaka Stock Exchange in Bangladesh from 2005 to 2013, and reveal that board capital is, indeed, positively associated with CSR disclosure levels. Post et al. (2011) found that, in North American firms, cultural background, among other board characteristics, has a positive statistical relationship with CSR. This evidence is in line with the results obtained by Krüger (2009) for firms in the same region, where board experience is positively associated with CSR. Terjesen, Couto, Francisco (2016) also claim that boards of directors that include human capital with experience and skills can improve firms' decision-making processes, since there will be a greater flow of information between board members. In this regard, Bear et al. (2010) affirm that the board's human capital is associated with the experience, knowledge and capabilities of its members and that these resources promote CSR practices. Amorelli & García-Sánchez (2020) also consider that it can be expected that CSR disclosure strategy will benefit from the background, skills and experience of board members. Consequently, ties with external organisations and stakeholders may be strengthened, further promoting reporting on CSR matters. In summary, firms that are committed to pursuing CSR issues to achieve their goals will seek directors with diverse values, background and experience for their boards (Rao & Tilt, 2016).

4. Research hypotheses

4.1. Board specific skills as a determinant of CSR disclosure

Board specific skills can be defined as those of board members who have an industry-specific background, described by Hillman et al. (2000) as business experts. These board members, who have knowledge acquired from previous experience, prove more effective, since they provide firms with resources in the form of skills, knowledge, experience, legitimacy, reputation and support, and are therefore able to build commitment and ties between firms and stakeholders (Pfeffer & Salancik, 1978). According to Wincent et al. (2010) and Johnson et al. (2013), the sources of this human and social capital are the education, knowledge and experience acquired by such members outside the firm.

Consequently, such knowledge and experience result in board members having greater capacity to process information, engage in firm strategies, establish networks, respond to

innovation and support effective decision-making (Wiersema & Bantel, 1992; Goll et al., 2007; García-Meca & Palacio, 2018). Coleman (1988) describes this collective experience, knowledge and skill as human capital when applying what he terms resource dependency theory.

Board members with such characteristics will be better able to perform their roles in terms of services, control and provision of resources for firms than less-experienced board members (Muttakin et al., 2018). Experience draws on both education and knowledge acquired in previous jobs, shaping the thoughts of individuals and what they represent in the decision-making process.

There is little empirical evidence regarding the relationship between board specific skills and CSR disclosure although a few studies have attempted to illuminate the relationship. For example, Rao & Tilt (2016) claim that directors who are more experienced and have greater knowledge will be more likely to have a positive influence on CSR disclosure. In a similar vein, Krüger (2009) notes that extensive experience improves board members' skills and expertise, which has a positive effect on firms' capacity to manage their social and environmental risks effectively. Their experience allows them to offer alternative points of view, providing information to other members on how to interact with other firms facing similar problems or decisions. For Reeb & Zhao (2013), board members' educational background and experience facilitates the supervision of board activities and enhances the board's efficacy, adding quality to disclosure in general and to CSR reporting in particular.

Muttakin et al. (2018) further found that directors with skills, experience and knowledge are better able to supervise firms' social and environmental activities and provide stakeholders with relevant information. Their study was based on firms listed on the Dhaka Stock Exchange in Bangladesh from 2005 to 2013, and proved that board members' experience and knowledge have a positive influence on CSR disclosure levels. Similarly, a study by Harjoto et al. (2015), based on a sample of 1,489 North American firms between 1999 and 2011 and using board-related measures such as expertise and power, also yields evidence of a positive relationship with CSR activities including community, environmental and product responsibility.

In light of the above, the following working hypothesis is proposed:

> ***H1:*** *There is a positive association between board specific skills and the level of CSR disclosure.*

4.2. Board tenure as a determinant of CSR disclosure

Another important board characteristic is members' length of service, with opinions differing on board members' continuity in service and how incentives for board members evolve with long service (Krüger, 2009). Vafeas (2003) suggests that committee members' term of office can provide them with sufficient knowledge of the firm and its environment, leading to higher levels of expert knowledge and competence. Likewise, Pfeffer & Salancik (1978) reveal that long-serving members are often a source of knowledge, advice and experience within the firm, which ultimately leads to improved monitoring and control. Chan et al. (2013), among others, expresses similar views, stating that one of the advantages of a long board tenure is that members are more familiar with the firm's policies and have greater expertise in monitoring the reporting processes in the organization. Likewise, long-tenured members have a better understanding of the firm's activities, rules and regulations.

There are few studies on how board tenure affects CSR disclosure, and those available provide only inconclusive results. Noteworthy among them is the work carried out by Chan et al. (2013), who show that tenure diversity improves the monitoring process and enables other directors to acquire the knowledge they need more quickly in the organisation. Similarly, Harjoto et al. (2015) and Katmon et al. (2019) claim that boards with directors with extended tenure have a greater understanding of the firm's operations and the reporting of CSR information.

Rao & Tilt (2016), investigating Australian firms, show how three board-diversity attributes, including tenure and the overall diversity measure, have the potential to influence CSR reporting. Moreover, Katmon et al. (2019) documented a positive relationship between tenure diversity and CSR disclosure in a study examining 200 non-financial firms listed on the main market of Bursa Malaysia between 2009 and 2013, a period characterised by stable economic conditions after the global financial crisis of 2007–2008. Khan et al. (2019) looked at non-financial firms listed on the Pakistan Stock Exchange (PSX). Their final sample covered 16 sectors, including 86 firms with 614 firmyear observations and they found that board tenure has a significant and positive impact on CSR disclosure for companies in Pakistan, increasing innovative activity, creativity and expertise in monitoring, and resulting in effective decision-making regarding CSR disclosure.

Based on these arguments, we propose the following hypothesis:

> ***H2:*** *There is a positive association between board tenure and the level of CSR disclosure.*

4.3. Board culture diversity as a determinant of CSR disclosure

Cultural diversity in boards could be regarded as a determining factor in the disclosure of CSR information disclosure. Thus, Brannen & Thomas (2010) and Tadmor et al. (2009) consider that every national culture is diverse in terms of the rules, values, beliefs, behaviours and ethical guidelines that affect firms' strategic decision-making. Likewise, culture also pervades the boards' group processes and influences the communication, conflict management and decision-making that takes place among members of the board of directors (Veldsman, 2012).

Azmat (2013) suggests that variation in cultures could explain diversity and heterogeneity among board members, given that different cultures may have different skills, education, values, beliefs, assets and networks, among other characteristics. Such diversity may also include age, gender, ethnic origin or religion, and could therefore affect different aspects of human, social and cultural capital (Ayuso et al., 2014; Johnson et al., 2013; Azmat & Rentschler, 2017).

From the perspective of resource dependence theory, cultural diversity in boards can be regarded as a valuable resource, since it improves the board's capacity to achieve a competitive advantage (Khan et al., 2019) and contributes to a better understanding of the preferences and needs of stakeholders from a range of cultures. Thus, board cultural diversity is able to offer firms a different perspective (Hillman et al., 2002; Ammer & Ahmad-Zaluki, 2014).

According to Westphal & Milton (2000), divergent culture in board members stimulates acquired knowledge, which improves the firm's competitive advantage. Moreover, boards with greater cultural diversity among their members offer higher quality reports on financial and non-financial aspects of their businesses than boards with less cultural diversity

among their members (Butler, 2012). In the case of CSR information disclosure, board members with greater cultural diversity will find it easier to understand the requirements and preferences of the interested parties within their own cultural group, which could have a positive impact on CSR information disclosure (Plessis et al., 2012).

To date, empirical studies analysing the influence of board culture diversity on CSR disclosure are scarce and insufficient in number. Haji-Abdullah & Wan-Hussin (2009), however, focusing on a sample of Malaysian firms, revealed a positive relationship between board culture (considering the cultural aspects of ethnicity) and CSR rating and performance. A later study by Zhang (2012) on firms listed on the Fortune 500 index, also found a positive relationship between board cultural diversity and CSR ratings. For Nigerian firms, Louis & Osemeke (2017) believe that board members' cultural values and background are effective in decision-making and also in increasing the allocation of resources to CSR activities in Nigeria.

The arguments and evidence detailed above suggest that management boards encompassing different cultural sensitivities will ensure that all their members empathise with cultures other than their own, so that each of them may interiorise the values and beliefs of all the cultures represented on the board. Hence, it will be possible to reach an optimal point where all such cultures agree that the disclosure of CSR information is relevant to all stakeholders. In view of the foregoing, the following working hypothesis is proposed:

H3: *There is a positive association between board culture diversity and the level of CSR disclosure.*

4.4. CEO power as a moderating variable

The CEO position is one of the most powerful in a firm (Hamori & Kakarika, 2009). Its power may stem from the importance of the position, given that CEOs are expected to be able to position their firms to create wealth (Papadakis, 2006) and maximise future opportunities for interest groups (Kanter, 1982). Therefore, while their responsibility could focus on creating shareholder value, they are also accountable for creating value for employees and the wider community around the organisation (Quinn, 1985).

According to Fiegener et al. (2000), CEO power can determine board composition and influence decisions. In this regard, Dalton & Kesner (1987) note that a powerful CEO may affect board decisions, ultimately reducing board effectiveness (Boyd, 1994). This could be due to the fact that CEOs frequently hold power over board members as a result of structural and socio-psychological mechanisms that impact significantly on boardroom decision-making processes (Van Essen et al., 2015). This CEO power can stem from multiple sources (Jackling & Johl 2009) including CEO duality, CEO ownership, CEO tenure and CEO family status.

Muttakin et al. (2018) suggest that powerful CEOs may make decisions that are not in the best interests of stakeholders, which could lead to reduced involvement in social concerns and, therefore, affect the firm's information disclosure. Weisbach (1988) concurs, commenting that CEOs' different forms of entrenched power can be used to promote their own interests instead of those of shareholders or stakeholders.

With regard to one element of firm information disclosure, namely CSR issues, McWilliams et al. (2006) argue that powerful CEOs may lack the motivation to invest in CSR practices if these are not linked to their own interests. Therefore, CEO power may curtail a board's potential to invest in CSR and disclose the firm's CSR practices. According to Muttakin et al. (2018), CEO power is another variable that has the potential to negatively affect the level of CSR disclosure by inhibiting a board's monitoring ability.

Previous research, such as that by Chau & Gray (2010), suggests that CEO power is negatively associated with CSR disclosure and also reduces the positive effect of board capital on CSR disclosure. Similarly, García-Sanchez et al. (2021) show that powerful CEOs are negatively associated with the disclosure of integrated information. The moderating effect of CEO power on the relationship between board capital and CSR disclosure has been analysed by Chen (2014) in electronics firms, and Haynes & Hillman (2010) also show that CEO power is an important moderator in the relationship between board human capital and strategic change. Therefore, it seems that, while board capital (human capital and social capital) can enhance CSR practices, CEO power may inhibit such improvement. Likewise, based on the study conducted by Muttakin et al. (2018) on Bangladeshi firms, it can be concluded that CEO duality, CEO ownership and CEO tenure are important dimensions of CEO power which affect CSR disclosure in Bangladeshi companies. Accordingly, in light of the foregoing, we propose the following hypothesis:

H4: *The association between board specific skills, board tenure, board culture diversity and the level of CSR disclosure is moderated by CEO power.*

5. Empirical design

5.1. Sample description

Our initial sample is composed of 13,561 firm-year observations for the period 2004–2015. However, financial entities were removed from the initial sample because these comply with different accounting rules in preparing their financial statements, making comparisons between annual financial statements of non-financial and financial firms impossible. Thus, the final unbalanced panel data sample is composed of 10,043 firm-year observations obtained from the Thomson Reuters database, from 16 countries: Australia, Austria, Belgium, Canada, Denmark, Finland, Germany, Ireland, Japan, The Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States. In Table 1, we show the percentage of representation of each country in our sample. The country with the highest level of representation is the United States with

Table 1. Number of observations by country

Country	Observations	Percentage	Cum.
Australia	793	7.9	7.9
Austria	34	0.3	8.2
Belgium	90	0.9	9.1
Canada	1,125	11.2	20.3
Denmark	110	1.1	21.4
Finland	137	1.4	22.8
Germany	357	3.6	26.3
Ireland	174	1.7	28.1
Japan	1,515	15.1	43.2
Netherlands	218	2.2	45.3
New Zealand	52	0.5	45.9
Norway	61	0.6	46.5
Sweden	218	2.2	48.6
Switzerland	380	3.8	52.4
United Kingdom	1,198	11.9	64.3
United States	3,581	35.7	100.0
Total	10,043	100	

35.70%, followed by Japan with 15.10%, Canada with 11.20% and the United Kingdom with 11.90%. In contrast, Austria represents only 0.3%, New Zealand 0.5%, Norway 0.6%, Belgium 0.9% and Denmark 1.1%.

In Table 2, we show the industries in which firms in our sample operate. We use the industry classification employed by the Thomson Reuters database: the Thomson Reuters Business Classification (TRBC), which is an industry classification of global companies including the following sectors: Basic materials, Consumer cyclical, Consumer non-cyclical, Energy, Healthcare, Industrial, Technology, Telecommunications services and Utilities. The industrial, consumer non-cyclical and basic materials sectors have the highest representation with 21.60%, 19.90% and 13.80%, respectively, while telecommunications services and utilities represent the lowest percentages with 3.30% and 5.10% respectively.

Table 2. Number of observations by activity sector

TRBC economic sector name	Number of observations	Percentage	Cum.
Basic Materials	1,381	13.8	13.8
Consumer cyclical,	2,001	19.9	33.7
Consumer Non-Cyclical	1,002	10.0	43.7
Energy	870	8.7	52.3
Healthcare	896	8.9	61.2
Industrial	2,174	21.6	82.9
Technology	877	8.7	91.6
Telecommunications Services	331	3.3	94.9
Utilities	511	5.1	100.0
Total	10,043	100,0	

5.2. Dependent variable

Our dependent variable, CSR_DISC, is the CSR disclosure score of the firms in our sample. This variable is calculated using a multidimensional construct, which includes all actions relative to the firm's CSR behaviour (Lee et al., 2012; Rupp & Mallory, 2015). We have constructed an index by dividing the aggregate of 112 social and environmental items analysed and the total 112 items. If firms provide information on each one of the items addressed, then a value of 1 is assigned; otherwise 0 (Kolk & Pinkse 2010; Gallego-Álvarez & Ortas, 2017). In Table 3, we present the 112 social and environmental items considered in constructing our CSR disclosure score. These items were collected from the Thomson Reuters database.

As can be seen in Table 3, items related to environmental actions appear in three principal areas: resource use, emissions and innovation. The use of resources reflects the performance and capacity of a company to reduce the use of materials, energy or water and to attempt to find more efficient solutions to improve the management of the supply chain. The emissions category refers to the commitment and effectiveness of a company in reducing environmental emissions in production and operational processes. The innovation category reflects the capacity of a company to reduce financial and environmental costs for its customers, thus creating new market opportunities through new technologies, environmental processes or ecological products. Most of these environmental items have also been addressed by past research (Liu, 2010, Leire & Mont 2010).

In Table 3, we also show the principal four areas included in the social dimension: workforce, human rights, community and product responsibility. Workforce addresses how effective a company is in achieving worker satisfaction and a healthy and safe workplace, and maintaining diversity and equal opportunities. Human rights focus on how effective a firm is in respecting fundamental human rights conventions, while Community addresses the firm's commitment to being a good citizen, protecting public health and respecting business ethics. Product responsibility indicates the ability of a company to produce quality goods and services that integrate health and safety, integrity and maintain privacy regarding customer data.

To ensure the validity and internal consistency of the CSR disclosure index, we assessed its reliability with Cronbach alpha, which provides a value of 0.959. Given that this value is higher than 0.8, it can be considered acceptable (Sijtsma, 2009). Additionally, we performed a factorial analysis to explain the relationships among a set of observed variables. Based on correlations as input information, it attempts to summarise and reflect the information through a reduced number of hypothetical variables (factors). The validation of the factorial analysis is performed using the Kaiser-Meyer-Olkin (KMO) test and Bartlett's sphericity test. Consistent with Hair et al. (1998), KMO values should be higher than 0.8 in order to confirm that the variables analysed refer to the same homogeneous set of variables. In this paper, the value obtained for KMO is 0.937 and Bartlett's test shows a statistical significance of 0.000. These statistics allow us to infer and validate that all the items used in the CSR disclosure index refer to a unique construct, which will be the dependent variable in the model.

5.3. Independent variables

The first independent variable considered is board specific skills, labelled as B_SPECI_SKILLS, and measured as the percentage of board members who have an industry-specific background (Ramón-Llorens et al., 2019).

The second independent variable addressed is board tenure (Fallah & Mojarrad, 2019), denoted as B_TENURE, and calculated as the average number of years each board member has been on the board.

Board diversity, including cultural diversity, can improve board performance by enhancing board decision-making processes through providing different opinions and points of view. Thus, the third independent variable used is board culture diversity (Katmon et al., 2019), denoted as B_CULT_DIV, and measured as the percentage of board members who have a cultural background different from the location of the corporate headquarters. By board culture diversity, we mean, as described by Balachandran et al. (2019), 'diversity in the country group of birth among board members, following central traditions in political science, sociology, and international business that depict national culture as a foundation for individuals' cultural distinctions and behavior'. This definition aligns with those from Hambrick et al. (1998) and Hofstede (1980), among others.

Finally, as a moderating variable, we use CEO power, denoted by CEO_POW and calculated, in line with earlier research (Muttakin et al., 2018), by the aggregation of four dummy variables: (1) if the CEO is a board member, which takes the value 1 if the CEO serves as a board member, but not as chair of the board, and 0 otherwise; (2) CEO tenure, which that takes the value 1 if CEO tenure is above the sample median, and 0 otherwise; (3) CEO duality, which takes the value 1 if the same person serves simultaneously as CEO and chairman of the board, and 0 otherwise, and (4) whether the chairman of the board is an ex-CEO, which takes the value 1 if the chairman of the board held the CEO position in the company prior to becoming chairman and, 0 otherwise.

Table 3. Corporate social responsibility disclosure

	Environmental			Social		
Resource use	Emissions	Innovation	Workforce	Human rights	Community	Product responsibility
Resource reduction policy	Policy emissions	Environmental products	Health and safety policy	Human rights policy	Employee engagement volunt work	Policy customer health and safety
Policy water efficiency	Targets emissions	Eco-design products	Policy employee health and safety	Policy freedom of association	Corporate responsibility awards	Policy data privacy
Policy energy efficiency	Biodiversity impact reduction	Noise reduction	Policy supply chain health and safety	Policy child labor	Product sales at discount to emerging markets	Policy responsible marketing
Policy sustainable packaging	Emissions trading	Hybrid vehicles	Training and development policy	Policy forced labor	Diseases of the developing world	Policy fair trade
Policy environment supply chain	Climate change commercial risks opportunities	Environmental assets under MGT	Policy skills training	Policy human rights	Bribery corruption and fraud controversies	Product responsibility monitor
Resource reduction targets	Nox and Sox emissions reduction	Equator principles	Policy career development	Fundamental human rights ILO UN	Crisis management systems	Quality mgt systems
Environment management team	Voc or particulate matter emissions	Equator principles or environmental projects	Policy diversity and opportunity	Human rights contractor	Anti competition controversies	ISO 9000
Environment management training	Voc emissions reduction	Environmental project financing	Employees health and safety team	Ethical trading initiative ETI		Six sigma and quality mgt systems
Environmental materials sourcing	Particulate matter emission reduction	Nuclear	Health and safety training	Human rights breaches contractor		Product access low price
Toxic chemicals reduction	Waste reduction total	Labeled wood	Supply chain health and safety training			Healthy food or products
Renewable energy use	e-Waste reduction	Organic products initiatives	Employees health and safety OHSAS 18001			Embryonic stem cell research
Green buildings	Environmental restoration initiatives	Product impact minimization	Flexible working hours			Retailing responsibility
Environmental supply chain management	Staff transportation impact reduction	Take-back and recycling initiatives	Day care services			alcohol
Environmental supply chain monitoring	Environmental expenditures investment	Product environmental responsible use	Employee fatalities			gambling
Env supply chain partnership termination		GMO products	HIV-AIDS program			tobacco
Land environmental impact reduction		Agrochemical products	Internal promotion			armaments
Environmental controversies		Agrochemical 5% revenue	Management training			Obesity risk
		Animal testing in the last 12fy	Supplier ESG training			Cluster bombs
		Animal testing cosmetics	Wages working condition controversies			Antipersonal landmines
		Animal testing reduction				Consumer complaints
		Renewable clean energy products				Customer controversies
		Water technologies				Responsible marketing controversies
		Sustainable building products				Product recall

5.4. Control variables

Other factors potentially affecting CSR reporting are also considered. The first control variable used is board size, BODSIZE, measured as the total number of board directors (Jizi, 2017). The second factor controlled is outsider directors, OUTSIDERS, calculated as the ratio between the total number of outsiders and the total number of directors on boards (Arora & Dharwadkar, 2011). Firm size (SIZE) is another factor considered, measured as the log of total assets (Ali et al., 2017). Additionally, we also control for a firm's profitability, measured as the return on assets (ROA). This variable is the operating income before interest and taxes over total assets (Liu & Anbomuzhi, 2009). A further control vari-

Table 4. Variables description

Variables	Description
CSR_DISC	The ratio between the aggregation of 112 items concerning social and environmental issues and the total items (112)
B_SPECI_SKILLS	The percentage of board members who has an industry-specific background
B_TENURE	Average number of years each board member has been on the board
B_CULT_DIV	The percentage of board members who has a cultural background different from the location of the corporate headquarters
CEO_POW	The aggregation of four dummies variables: (1) CEO duality, which is a dummy variable that takes the value 1 if the same person serves simultaneously as CEO and chairman of the board and 0, otherwise, (2) the Chairman of the board is ex-CEO, which is a dummy variable that takes the value 1 if the chairman of the board held the CEO position in the company prior to becoming chairman and 0, otherwise, (3) CEO tenure, which is a dummy variable that takes the value 1 if CEO tenure is above the sample median and 0, otherwise and (4) CEO board member, which is a dummy variable that takes the value 1 if the CEO serves as a board member, but not as chair of the board and 0, otherwise
BODSIZE	The total number of directors on boards
OUTSIDERS	The proportion of external directors on boards= Total number of external directors on boards/ Total number of directors on boards
SIZE	The log of total assets
ROA	Operate income before interests and taxes over total assets
LEVERAGE	Debt over total assets
CSR_COMMT	Dummy variable that takes the value 1 if the firm has a CSR Committee and 0, otherwise
BASIC MATERIALS	Dummy variable: 1= Basic Materials; 0 = Otherwise
CONSUMER CYCLICAL	Dummy variable: 1= Consumer Cyclical; 0 = Otherwise
CONSUMER NON-CYCLICAL	Dummy variable: 1= Consumer Non-Cyclical; 0 = Otherwise
ENERGY	Dummy variable: 1= Energy; 0 = Otherwise
HEALTHCARE	Dummy variable: 1= Healthcare; 0 = Otherwise
INDUSTRIALS	Dummy variable: 1= Industrial; 0 = Otherwise
TECHNOLOGY	Dummy variable: 1= Technology; 0 = Otherwise
TELECOMMUNICATION SERVICES	Dummy variable: 1= Telecommunication Services; 0 = Otherwise
UTILITIES	Dummy variable: 1= Utilities; 0 = Otherwise

able used is the level of leverage, LEVERAGE, calculated as the ratio between total debts and total assets (Barnea & Rubin, 2010; García-Sánchez & Martínez-Ferrero, 2019). The presence of a CSR committee in firms is another factor included, denoted by CSR_COM and calculated as a dummy variable that takes the value 1 if the firm has a CSR Committee and 0, otherwise (Mallin & Michelon, 2011). The industry in which firms operate is also controlled. We define this variable as INDUSTRY. We use the TRBC economic classification provided by Thomson Reuters: basic materials, consumer cyclical, consumer non-cyclical, energy, healthcare, industrial, technology, telecommunications services, and utilities (Gallego-Álvarez & Quina-Custodio, 2017). Thus, nine industries are considered. Industry variable is measured as a dummy variable, coded as 1 if the firm operates in the industry analysed and 0, otherwise. Finally, we also control for year (YEAR) effects by including a set of dummy variables in the model. In Table 4, we present a summary of all the variables considered in this research.

5.5. Econometric model

To empirically test our hypotheses, we ran the following model:

$$CSR\ disclosure_{it} = f(Board\ specific\ skills_{it},\ board\ tenure_{it},\ board\ cultural\ diversity_{it},\ control\ variables_{it},\ YEAR,\ \mu_i,\ \Psi_{it})$$

In all of these variables, subscript *i* represents the company and *t* refers to the time period. The random error term is divided into two parts: Ψ_{it}, which varies between companies over time, and the individual effect, μ_i, firm-fixed or firm-specific effects (the unobservable heterogeneity), which characterises each company, but does not vary over time.

The model for testing our hypotheses will be estimated by using the generalised method of moments (GMM) procedure (Arellano & Bond, 1991; Blundell & Bond, 1998). The GMM estimator is more efficient and consistent in controlling unobservable heterogeneity (μ_i) than other procedures. Furthermore, the GMM also addressees endogeneity and mitigates the estimation bias.

The GMM procedure includes the following tests: the Wald χ^2 test, the Arellano–Bond tests AR(1) and AR(2), and the Hansen test. The Wald χ^2 statistic confirms the model fitness. The existence of a second-order serial correlation in the first difference residuals is confirmed by the Arellano–Bond statistic AR(2). If the null hypothesis of 'no serial correlations' is rejected, then we can conclude that second-order serial correlation does not exist. Finally, the Hansen test of over-identifying restrictions shows the suitability of the instruments used in the model when the null hypothesis of non-correlation between the instruments and the error term is rejected.

6. Analysis of results

6.1. Descriptive analysis

In Table 5, we provide the descriptive statistics of all the variables employed in this paper. As can be seen, the CSR disclosure score is, on average, 0.25 over a range of 0 to 1. This figure suggests that, on average, the level of CSR disclosure in the firms in our sample is moderate. Furthermore, 57.90% of board members have an industry-specific background; the average number of years each board member has served on the board is 7.45 and 29.00% of board members have a cultural background different from the location of the corporate headquarters. The variable CEO_POW may range between 0 and 4 and shows a value of 1.64, near the median of 2. Thus, the CEO power in firms in our sample is medium. The mean number of board members is 10.44; the percentage of outsiders on boards is, on average, 74.19%; firm size is 9.61 (measured as the log of total assets); the return on assets of the firms is, on average, 6.32%; the level of leverage is, on

average, 11.05%; and 53.43% of firms in our sample have, on average, a CSR committee. Finally, 13.75% of firms in our sample operate in the basic materials industry, 19.24% in consumer cyclicals, 9.98% in consumer non-cyclicals, 8.66% in energy, 8.92% in healthcare, 21.65% in industrials, 8.73% in technology, 3.30% in telecommunications and 5.09% in utilities.

Table 5. Descriptive analysis

Variable	Obs	Mean	Std. Dev.
CSR_DISC	10,043	0.250	0.158
B_SPECI_SKILLS	10,043	57.896	23.874
B_TENURE	10,043	7.454	3.429
B_CULT_DIV	10,043	29.000	23.500
CEO_POW	10,043	1.643	0.740
BODSIZE	10,043	10.439	3.249
OUTSIDERS	10,043	74.186	25.812
SIZE	10,043	9.610	1.433
ROA	10,043	6.316	8.055
LEVERAGE	10,043	11.05	6.125
CSR_COMMT	10,043	53.430	49.884
BASIC MATERIALS	10,043	13.751	34.440
CONSUMER CYCLICAL	10,043	19.924	39.945
CONSUMER NON-CYCLICAL	10,043	9.977	29.970
ENERGY	10,043	8.663	28.130
HEALTHCARE	10,043	8.922	28.507
INDUSTRIALS	10,043	21.647	41.186
TECHNOLOGY	10,043	8.732	28.232
TELECOMMUNICATION SERVICES	10,043	3.296	17.854
UTILITIES	10,043	5.089	21.977

Mean and standard deviation. B_SPECI_SKILLS is the percentage of board members who has an industry-specific background; B_TENURE is the average number of years each board member has been on the board; B_CULT_DIV is the percentage of board members who has a cultural background different from the location of the corporate headquarters; CEO_POW is the aggregation of four dummies variables: (1) CEO duality, which is a dummy variable that takes the value 1 if the same person serves simultaneously as CEO and chairman of the board and 0, otherwise, (2) the Chairman of the board is ex-CEO, which is a dummy variable that takes the value 1 if the chairman of the board held the CEO position in the company prior to becoming chairman and 0, otherwise, (3) CEO tenure, which is a dummy variable that takes the value 1 if CEO tenure is above the sample median and 0, otherwise and (4) CEO board member, which is a dummy variable that takes the value 1 if the CEO serves as a board member, but not as chair of the board and 0, otherwise; BODSIZE is the number of directors on board; OUTSIDERS is measured as the proportion of outside directors on boards; SIZE is the log of total assets; ROA is the operate income before interests and taxes over total assets; LEV is the debt over total assets; CSR_COMMT is a dummy variable that takes the value 1 if the firm has a CSR Committee and 0, otherwise; Basic Materials if the company operates in Basic Materials sector and 0, otherwise; Consumer Cyclical if the company operates in Consumer Cyclical sector and 0, otherwise; Consumer Non-Cyclical if the company operates in Consumer Non-Cyclical sector and 0, otherwise; Energy if the company operates in Energy sector and 0, otherwise; Healthcare if the company operates in Healthcare sector and 0, otherwise; Industrials if the company operates in Industrials sector and 0, otherwise; Technology if the company operates in Technology sector and 0, otherwise; Telecommunication Services if the company operates in Telecommunication Services sector and 0, otherwise; Utilities if the company operates in Utilities sector and 0, otherwise.

In Table 6, we provide the correlation matrix in order to check whether multicollinearity exists. As can be seen, all the coefficients are lower than 0.8 (see Archambeault & DeZoort, 2001). Therefore, it can be concluded that multicollinearity is not a problem in this research.

6.2. Multivariate analysis

In Table 7, we offer the findings for the multivariate analysis. In Model 1, we explore the association between board specific skills and CSR disclosure. The variable board specific skills (B_SPECI_SKILLS) exhibits a positive sign, as expected, and is statistically significant. Accordingly, the first hypothesis cannot be rejected. This evidence supports the notion that board members with industry-specific background encourage CSR reporting, demonstrating that directors with varied knowledge, problem-solving capabilities, professional expertise and abilities may affect business decisions such as CSR disclosure. This conclusion suggests that the effectiveness of a board depends not only on its composition, but also on the individual skills and abilities of its members and their combined effect, which affects the role played by directors in monitoring managers, advising the firm and making decisions. Board specific skills may provide other benefits to companies, since these directors offer new opinions, views and ideas related to markets and internal issues, which they bring from other industries, contexts, organisations and boards. The skills and knowledge developed by directors on boards are considered human capital, which is beneficial for company activities and in making important links with external organisations, communities and relevant stakeholders from other firms (Harris & Shimizu, 2004; Bear et al., 2010). In line with this evidence, other researchers have also found a positive association between directors' background and other types of disclosure: Yasser et al. (2016) show that Australian and Malaysian firms with director training programmes increase their financial reporting. These programmes are useful for board directors to gain a greater knowledge of the particular context in which their company operates. Umukoro et al. (2019) also demonstrate that highly educated directors encourage sustainability reporting while executive and non-executive directors with little experience in environmental matters are not associated with sustainability disclosure. Further, Ewert & Baker (2001) found that board directors with backgrounds in law and finance are more likely to disclose environmental issues. This evidence of the relationship between the background of board members and other types of disclosure supports our findings that board specific skills have a positive impact on CSR disclosure.

Model 2 analyses the relationship between board tenure and CSR disclosure. We predict that board tenure will have a positive impact on the reporting of CSR information and the coefficient for the variable board tenure (B_TENURE) is positive and statistically significant. This leads us to not reject the second hypothesis. This finding suggests that, as the number of years' service as a board member increases, so does the likelihood of disclosing more CSR information. Firms reporting more CSR information signal a greater sensitivity towards their stakeholders and their needs, which will improve this relationship. This evidence is supported by Johnson et al. (2013), who demonstrate that longer board tenure improves the relationship between firms and stakeholders. Our evidence suggests, in line with Chan et al. (2013), that longer service on boards can benefit firms, providing greater expertise in policy-making and improving control of reporting processes because directors with long-term directorship positions in firms are more familiar with the rules, culture, strategies and activities of firms, among other things. This familiarity may result in a greater likelihood of reporting CSR information. Longer board tenure is valuable in enhancing CSR disclosure, since board members' knowledge and understanding of the firm's environment encourages them to pay greater attention to stakeholders' demands and interests. The impact of board tenure has been also explored in relation to other types of disclosure. In this sense, Amin et al. (2020) found a positive association between board tenure and financial disclosure among the 350 top-listed companies in the UK. Kim & Yang (2014) analysed the relationship between board tenure and financial reporting and found that longer board tenure contributes positively to financial reporting. Focusing on environmental reporting, Buchanan (1974) suggests that longer board tenure increases the likelihood of expending resources on company goals such as the environmental

Table 6. Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
CSR_DISC (1)	1.000																			
B_SPECI_SKILLS (2)	-0.126***	1.000																		
B_TENURE (3)	-0.0681***	-0.067***	1.000																	
B_CULT_DIV (4)	-0.082***	-0.003	-0.171***	1.000																
CEO_POW (5)	-0.082***	0.044***	0.121***	-0.109***	1.000															
BODSIZE (6)	0.356***	-0.133***	0.120***	-0.277***	-0.008***	1.000														
OUTSIDERS (7)	0.080***	-0.433***	0.143***	-0.023	-0.134***	0.135***	1.000													
SIZE (9)	0.550***	-0.128***	0.026**	-0.071***	-0.035***	0.550***	0.139***	1.000												
ROA (8)	-0.066***	-0.071***	0.173***	0.008	0.095***	-0.081***	0.107***	-0.179***	1.000											
LEVERAGE (10)	0.142***	-0.090***	-0.085***	-0.128***	-0.028***	0.182***	0.061***	0.277***	-0.347***	1.000										
CG_COMMT (11)	-0.119***	-0.092***	0.352***	-0.099***	0.091***	0.144***	0.359***	0.124***	0.112***	-0.023**	1.000									
BASIC MATERIALS (12)	0.046***	-0.003	-0.098***	0.091***	-0.035***	-0.070***	0.012	-0.065***	-0.075***	-0.054***	-0.070***	1.000								
CONSUMER CYCLICAL (13)	-0.076***	-0.029***	0.037***	-0.096***	0.032***	-0.009	-0.113***	-0.071***	0.034***	-0.020**	-0.032***	-0.199***	1.000							
CONSUMER NON-CYCLICAL (14)	0.095***	-0.074***	-0.005	-0.027	-0.002	0.082***	0.030***	0.048***	0.051***	0.074***	-0.002	-0.133***	-0.166***	1.000						
ENERGY (15)	-0.098***	0.092***	0.016	0.043**	-0.050***	-0.034***	0.057***	0.037***	0.002	-0.090***	0.157***	-0.123***	-0.154***	-0.103***	1.000					
HEALTHCARE (16)	-0.044***	-0.021**	0.055***	0.069***	0.013	-0.057***	0.087***	-0.051***	0.093***	-0.089***	0.037 ***	-0.125***	-0.156***	-0.104***	-0.096***	1.000				
INDUSTRIALS (17)	0.031***	0.005	-0.025**	-0.045**	0.025**	0.041***	-0.070***	0.006	-0.052***	0.111***	-0.140***	-0.210***	-0.262***	-0.175***	-0.162***	-0.165***	1.000			
TECHNOLOGY (18)	0.005	0.097***	0.053***	0.020	0.049***	-0.074***	-0.028***	-0.050***	0.105***	-0.221***	0.074***	-0.124***	-0.154***	-0.103***	-0.095***	-0.097***	-0.163***	1.000		
TELECOMMUNICATION SERVICES (19)	0.010	-0.018*	-0.036***	-0.043**	-0.048***	0.055***	0.057***	0.096***	-0.024**	0.112***	0.000	-0.074***	-0.092***	-0.062***	-0.057***	-0.057***	-0.097***	-0.057***	1.000	
UTILITIES (20)	0.045***	-0.056***	0.008	-0.036*	-0.023**	0.102***	0.080***	0.157***	-0.157***	0.236***	0.087***	-0.092***	-0.116***	-0.077***	-0.071***	-0.0725***	-0.122***	-0.072***	-0.043***	1.000

B_SPECI_SKILLS is the percentage of board members who has an industry-specific background; B_TENURE is the average number of years each board member has been on the board; B_CULT_DIV is the percentage of board members who has a cultural background different from the location of the corporate headquarters; CEO_POW is the aggregation of four dummies variables: (1) CEO duality, which is a dummy variable that takes the value 1 if the same person serves simultaneously as CEO and chairman of the board and 0, otherwise, (2) the Chairman of the board is ex-CEO, which is a dummy variable that takes the value 1 if the chairman of the board held the CEO position in the company prior to becoming chairman and 0, otherwise, (3) CEO tenure, which is a dummy variable that takes the value 1 if CEO tenure is above the sample median and 0, otherwise and (4) CEO board member, which is a dummy variable that takes the value 1 if the CEO serves as a board member, but not as chair of the board and 0, otherwise; BODSIZE is the number of directors on board; OUTSIDERS is measured as the proportion of outside directors on boards; SIZE is the log of total assets; ROA is the operate income before interests and taxes over total assets; LEV is the debt over total assets; CSR_COMMT is a dummy variable that takes the value 1 if the firm has a CSR Committee and 0, otherwise; Basic Materials if the company operates in Basic Materials sector and 0, otherwise; Consumer Cyclical if the company operates in Consumer Cyclical sector and 0, otherwise; Consumer Non-Cyclical if the company operates in Consumer Non-Cyclical sector and 0, otherwise; Energy if the company operates in Energy sector and 0, otherwise; Healthcare if the company operates in Healthcare sector and 0, otherwise; Industrials if the company operates in Industrials sector and 0, otherwise; Technology if the company operates in Technology sector and 0, otherwise; Telecommunication Services if the company operates in Telecommunication Services sector and 0, otherwise; Utilities if the company operates in Utilities sector and 0, otherwise. *p-value<0.1 **p-value<0.05 ***p-value<0.01.

agenda. De Villiers et al. (2011) consider that companies are more likely to improve environmental reporting as the tenure of directors increases. For Chinese companies, Khan et al. (2020) state that the impact of board tenure on corporate environmental reporting has become stronger in recent years. Collectively, this research shows a relationship between board tenure and other kinds of disclosure, which reinforces our evidence that board tenure has a positive impact on CSR disclosure.

The effect of board cultural diversity on CSR reporting is addressed in Model 3. The variable board cultural diversity (B_CULT_DIV) presents a positive sign, as predicted, and is statistically significant. This result allows us to not reject the third hypothesis, proposing that board cultural diversity positively affects CSR reporting. The evidence suggests that boards which include directors with cultural backgrounds different from the location of the corporate headquarters are more likely to support the reporting of CSR issues. Board cultural diversity can be considered a key element of board performance, since the board's culture includes unwritten rules which influence directors' decisions and interactions, including beliefs, mind-sets, values, group norms and hidden assumptions which affect the trust, the style of discussions and the level of engagement among directors as well as the way in which the board makes decisions. Thus, a diverse representation of culture amongst directors may have benefits for companies, by enriching their collective experience and reinforcing their knowledge and business links with outsiders (e.g. Harris & Shimizu, 2004), which may result in improved voluntary disclosure in, for example, CSR reporting. Concerning the impact of board cultural diversity on other types of disclosure, Kiliç & Kuzey (2019) report that diversity of nationalities among board members is positively associated with an increased likelihood of disclosing environmental issues, specifically carbon emissions, and the extent of those disclosures. Bhatia & Tuli (2017) found that diverse board nationality has a positive effect on sustainability reporting, suggesting that the presence of board members with different nationalities shows a multinational outlook to stakeholders: as firms are interested in highlighting their international presence to stakeholders, they are more likely to voluntarily report information on sustainability. Ntim & Soobaroyen (2013) show that board directors with different nationalities positively affect the extent of black economic empowerment disclosures in annual sustainability reports. Tangri & Southall (2008, p. 699) use the term 'Black' to refer to all non-whites, Africans, Asians and those of mixed race. Writing on intellectual capital reporting, Williams (2001) reports that board culture diversity (considering cultural aspects of ethnicity) has a positive association with intellectual capital disclosure in South African publicly listed firms, and concludes that these firms can improve their intellectual capital by appointing a well-balanced and structured board of directors in terms of ethnic representation. Rasmini et al. (2014) also examine the

Table 7. Multivariate analysis results of the Generalised Method of Moments

	MODEL 1 Coef.	MODEL 2 Coef.	MODEL 3 Coef.	MODEL 4 Coef.	MODEL 5 Coef.	MODEL 6 Coef.
CSR_SCORE (t-1)	0.862***	0.911***	0.859***	0.968***	1.100***	0.768***
B_SPECI_SKILLS	0.001***			0.002**		
B_TENURE		0.013**			0.004*	
B_CULT_DIV			0.059*			0.137*
BODSIZE	0.001	-0.008**	0.006	-0.000	-0.004	0.005
OUTSIDERS	0.002*	-0.000	0.001	0.000	-0.001	0.000
SIZE	0.001	-0.002	0.009*	0.001	-0.004	0.011
ROA	-0.002	0.000	-0.001	-0.001	0.000	-0.003*
LEVERAGE	0.000**	0.000*	0.000	0.000*	0.000	0.000
CG_COMMT	0.086	0.053	0.038	0.301	0.023	0.033
BASIC MATERIALS	0.097	-0.751***	-0.171	0.009	-0.051	-0.340
CONSUMER CYCLICAL	0.219	-0.551**	0.085	0.073	-0.094	-0.033
CONSUMER NON-CYCLICAL	0.088	-0.449*	-0.175	0.377	0.015	-0.022
ENERGY	-0.200	-0.659**	-0.171	-0.196	0.003	-0.157
HEALTHCARE	-0.134	-0.850***	-0.039	0.040	-0.048	0.052
INDUSTRIALS	0.058	-0.379	-0.073	0.056	-0.053	-0.243
TECHNOLOGY	0.321**	-0.594	-0.201	0.118	-0.029	-0.352
TELECOMMUNICATION SERVICES	0.062	-0.648*	-0.273	-0.187	-0.141	-0.463
CEO_POW				0.126**	0.018**	0.053
B_SPECI_SKILLS x CEO_POW				-0.001**		
B_TENURE x CEO_POW					-0.002**	
B_CULT_DIV x CEO_POW						-0.127**
Year effects	Yes	Yes	Yes	Yes	Yes	Yes
Wald χ^2 test	6442.76***	10248.07***	2593.22***	3517.26***	10742.14 ***	2032.85***
Arellano-Bond test AR(1) (z, p>|z|)	-4.98(0.000)	-5.72 (0.000)	-8.37 (0.000)	-5.15 (0.000)	-6.34 (0.000)	-7.51 (0.000)
Arellano-Bond test AR(2) (z, p>|z|)	1.49(0.137)	1.40 (0.160)	1.57 (0.117)	1.27 (0.204)	1.33 (0.182)	2.23(0.126)
Hansen test (chisquare, p>|chi2|)	28.23(0.297)	33.99 (0.166)	62.54 (0.110)	30.18 (0.218)	57.04 (0.364)	46.49 (0.136)

B_SPECI_SKILLS is the percentage of board members who has an industry-specific background; B_TENURE is the average number of years each board member has been on the board; B_CULT_DIV is the percentage of board members who has a cultural background different from the location of the corporate headquarters; CEO_POW is the aggregation of four dummies variables: (1) CEO duality, which is a dummy variable that takes the value 1 if the same person serves simultaneously as CEO and chairman of the board and 0, otherwise, (2) the Chairman of the board is ex-CEO, which is a dummy variable that takes the value 1 if the chairman of the board held the CEO position in the company prior to becoming chairman and 0, otherwise, (3) CEO tenure, which is a dummy variable that takes the value 1 if CEO tenure is above the sample median and 0, otherwise and (4) CEO board member, which is a dummy variable that takes the value 1 if the CEO serves as a board member, but not as chair of the board and 0, otherwise; BODSIZE is the number of directors on board; OUTSIDERS is measured as the proportion of outside directors on boards; SIZE is the log of total assets; ROA is the operate income before interests and taxes over total assets; LEV is the debt over total assets; CSR_COMMT is a dummy variable that takes the value 1 if the firm has a CSR Committee and 0, otherwise; Basic Materials if the company operates in Basic Materials sector and 0, otherwise; Consumer Cyclical if the company operates in Consumer Cyclical sector and 0, otherwise; Consumer Non-Cyclical if the company operates in Consumer Non-Cyclical sector and 0, otherwise; Energy if the company operates in Energy sector and 0, otherwise; Healthcare if the company operates in Healthcare sector and 0, otherwise; Industrials if the company operates in Industrials sector and 0, otherwise; Technology if the company operates in Technology sector and 0, otherwise; Telecommunication Services if the company operates in Telecommunication Services sector and 0, otherwise; Utilities if the company operates in Utilities sector and 0, otherwise. *p-value<0.1 **p-value<0.05 ***p-value<0.01.

effect of board culture diversity on the disclosure of intellectual capital information in financial companies listed on the Indonesia Stock Exchange in 2004–2009. Their evidence shows that board culture diversity influences the disclosure of intellectual capital. Boards comprising directors with different nationalities are more diverse in cultural terms. This can benefit firms, since these directors have knowledge, expertise and understanding of strategies in various overseas markets and are better placed to know and empathise with the needs and interests of all stakeholders, resulting in higher level of disclosure in several areas.

In Models 4, 5 and 6, we examine the moderating effect of CEO power on the relationship between CSR disclosure and board specific skills, board tenure and board cultural diversity. In Model 4, which analyses the impact of CEO power on the association between board specific skills and CSR disclosure, the coefficient for the interaction between board specific skills (B_SPECI_SKILLS) and CEO power (CEO_POW) is negative and significant, suggesting that the interaction of CEOs with power with board members with industry-specific background mitigates the reporting of CSR information. Thus, CEOs with power negatively moderate the positive impact of board specific skills on CSR reporting. CEOs with power do not support the decisions taken by board members with specific skills regarding disclosure of more CSR information. Firms are less likely to report CSR issues when they have both board members with specific skills and CEOs with power. In Model 5, we explore the moderating impact of CEO power on the relationship between board tenure and CSR reporting. The coefficient for the interaction between board tenure and CEO power is negative and statistically significant, supporting the view that CEOs who have greater power will tend to disclose less CSR information as the length of service of board directors increases. Finally, in Model 6, we analyse whether CEO power moderates the association between board cultural diversity and CSR disclosure. The coefficient of the interaction between board cultural diversity and CEO power is negative and statistically significant, showing that CEO power negatively moderates the positive association between board cultural diversity and CSR reporting. This evidence leads us to conclude that, when CEO power interacts with board specific skills, board tenure and board cultural diversity, the disclosure of CSR information is lower.

Focusing on the control variables, the variables of outsiders, firm size, leverage and technology industry exhibit a positive and significant coefficient, showing a positive association with CSR disclosure. Outsiders has an effect in Model 1, firm size in Model 3, leverage in Models 1, 2 and 4, and technology industry in Model 1. Return on assets (ROA) has a negative effect on CSR disclosure in Model 6. Finally, in Model 2, board size, basic materials, consumer cyclicals, consumer non-cyclicals, energy, healthcare and telecommunication services impact negatively on CSR disclosure. The remainder of the control variables are insignificant.

6.3 Additional analysis

We have conducted an additional analysis including, as control variables, Hofstede's six cultural dimensions in order to explore whether there are differences between cultures.

The national cultural model of Hofstede (1980, 2001), improved by Hofstede et al. (2010), is the most appropriate for capturing cultural differences between countries (Miska et al., 2018). This model addresses six cultural dimensions: (1) power distance, defined as POW_DIST; (2) individualism versus collectivism, defined as INDIV; (3) masculinity versus femininity, labelled as MASCUL; (4) uncertainty avoidance, labelled as UNC_AVOID; (5) long-term orientation defined as LONG_ORIENTATION and (6) indulgence versus restraint, labelled as INDULG. The six cultural dimensions range from 0 to 100, with 50 being the half-way point. Scores of 50 or above are considered high, while those under 50 are low; for instance, for the culture dimension of individualism versus collectivism, a score under 50 is categorised as collectivist and one above 50 as individualist. Thus, a country with a score of 30 is collectivist but less collectivist than a country with a score of 10, because this figure is nearer 0. All the values associated with each cultural dimension are publicly available through the website of Geert Hofstede.[1]

Table 8 presents the findings. In Models 1, 2 and 3, the effect on CSR disclosure of board specific skills, board tenure and board cultural diversity respectively are analysed. As in the baseline model, board specific skills and board tenure are positively and significantly associated with CSR reporting. Conversely, while board cultural diversity is positive and significant in the baseline model, it is positive but insignificant when Hofstede's six cultural dimensions are included as a control variable. The inclusion of specific cultural characteristics with Hofstede's cultural dimensions may eclipse the effect of board culture diversity, as this effect will be consistent with these cultural factors. When the moderating role of CEO power is examined, the principal findings are in line with those of the baseline model, that is, CEO power negatively moderates the positive impact of board competence on CSR disclosure. However, when board tenure is explored (Model 5), the impact is positive but insignificant, and when board cultural diversity is analysed (Model 6), both it and CEO power exhibit a positive sign, but the effect is insignificant.

The consideration of cultural factors measured with Hofstede's six cultural dimensions reaffirms our principal results, except for the factor of board cultural diversity, the effect of which is insignificant. The control of cultural features should be taken into account when elements affecting CSR disclosure are analysed.

7. Conclusions

Through CSR reporting, stakeholders and society can assess the commitment of firms to their needs and interests. Furthermore, companies can also use the reporting of CSR information to gain legitimisation from their stakeholders and society. In this regard, we predict that, of all the attributes that may influence the disclosure of CSR information, certain board capabilities can be included: board specific skills, board tenure and board cultural diversity. This paper aimed to explore whether these three board competences have an effect on CSR disclosure. Additionally, we examine the moderating impact of firms' CEO power on the association between the three board competences addressed and CSR reporting.

Our findings show that board specific skills, board tenure and board cultural diversity positively affect the disclosure of CSR information – these three board competences or capabilities encourage CSR reporting in firms. Further, our evidence also shows that CEOs with greater power negatively moderate the positive effect of these three board competences on the reporting of CSR issues.

Several implications can be drawn from our findings. Firstly, our results suggest that three board competences

[1]The cultural insights website of Geert Hofstede can be accessed at: https://www.geert-hofstede.com/

Table 8. Multivariate analysis results of the Generalised Method of Moments

	MODEL 1 Coef.	MODEL 2 Coef.	MODEL 3 Coef.	MODEL 4 Coef.	MODEL 5 Coef.	MODEL 6 Coef.
CSR_SCORE (t-1)	0.771***	1.562**	0.803***	0.471***	0.950***	0.423**
B_SPECI_SKILLS	0.001*			0.002**		
B_TENURE		0.082**			0.006	
B_CULT_DIV			0.057			0.050
BODSIZE	-0.001	-0.051	0.004	0.002	-0.003	-0.011
OUTSIDERS	0.002	0.001	0.001	0.001	-0.000	0.002
SIZE	0.003	-0.023	0.006	0.001	0.004	0.017*
ROA	-0.002	0.005	-0.001	-0.001	-0.001	-0.001
LEVERAGE	0.000	0.000	0.000	0.000	-0.000	0.000
CG_COMMT	0.188*	0.306	0.025	0.062	-0.017	0.035
BASIC MATERIALS	0.108	-2.417	-0.278	-0.447	-0.216	-0.349
CONSUMER CYCLICAL	0.271	-0.868	-0.031	-0.409	-0.268	0.056
CONSUMER NON-CYCLICAL	0.101	-0.172	-0.282	-0.143	-0.047	0.271
ENERGY	-0.022	-1.005	-0.297	-0.379	-0.130	0.042
HEALTHCARE	-0.048	-2.836	-0.160	0.008	-0.116	0.339
INDUSTRIALS	0.031	-0.754	-0.151	0.185	-0.153	-0.347
TECHNOLOGY	0.251	-1.798	-0.233	0.256	-0.147	-0.873
TELECOMMUNICATION SERVICES	0.139	1.057	-0.337	0.436	-0.165	-0.475
POW_DIST	-0.003	0.148	-0.013	-0.021	-0.029**	0.016
INDIV	0.019	-0.067	0.004	0.042**	0.006	-0.008
MASCUL	-0.001	-0.004	0.001	0.012*	0.005	0.009
UNC_AVOID	0.005	-0.056	0.005	0.031*	0.015*	-0.011
LONG_ORIENTATION	0.001	-0.012	0.001	0.012	0.002	-0.004
INDULG	-0.022	0.103	-0.005	0.008	0.006	-0.005
CEO_POW				0.097*	0.021*	0.054
B_SPECI_SKILLS x CEO_POW				-0.001*		
B_TENURE x CEO_POW					-0.002*	
B_CULT_DIV x CEO_POW						-0.124*
Year effects	Yes	Yes	Yes	Yes	Yes	Yes
Wald χ^2 test	2821.54***	658.45***	1924.26***	3976.78***	6234.68***	1307.78***
Arellano-Bond test AR(1) (z, p>|z|)	-5.52(0.000)	-2.44 (0.015)	-8.44 (0.000)	-5.74 (0.000)	-6.22 (0.000)	-4.84 (0.000)
Arellano-Bond test AR(2) (z, p>|z|)	1.55(0.120)	0.39 (0.697)	1.18 (0.260)	1.13 (0.259)	1.36 (0.169)	1.27(0.204)
Hansen test (chisquare, p>|chi2|)	26.81(0.419)	0.53 (0.971)	55.53 (0.114)	28.34 (0.386)	31.35 (0.689)	40.72 (0.114)

B_SPECI_SKILLS is the percentage of board members who has an industry-specific background; B_TENURE is the average number of years each board member has been on the board; B_CULT_DIV is the percentage of board members who has a cultural background different from the location of the corporate headquarters; CEO_POW is the aggregation of four dummies variables: (1) CEO duality, which is a dummy variable that takes the value 1 if the same person serves simultaneously as CEO and chairman of the board and 0, otherwise, (2) the Chairman of the board is ex-CEO, which is a dummy variable that takes the value 1 if the chairman of the board held the CEO position in the company prior to becoming chairman and 0, otherwise, (3) CEO tenure, which is a dummy variable that takes the value 1 if CEO tenure is above the sample median and 0, otherwise and (4) CEO board member, which is a dummy variable that takes the value 1 if the CEO serves as a board member, but not as chair of the board and 0, otherwise; BODSIZE is the number of directors on board; OUTSIDERS is measured as the proportion of outside directors on boards; SIZE is the log of total assets; ROA is the operate income before interests and taxes over total assets; LEV is the debt over total assets; CSR_COMMT is a dummy variable that takes the value 1 if the firm has a CSR Committee and 0, otherwise; Basic Materials if the company operates in Basic Materials sector and 0, otherwise; Consumer Cyclical if the company operates in Consumer Cyclical sector and 0, otherwise; Consumer Non-Cyclical if the company operates in Consumer Non-Cyclical sector and 0, otherwise; Energy if the company operates in Energy sector and 0, otherwise; Healthcare if the company operates in Healthcare sector and 0, otherwise; Industrials if the company operates in Industrials sector and 0, otherwise; Technology if the company operates in Technology sector and 0, otherwise; Telecommunication Services if the company operates in Telecommunication Services sector and 0, otherwise; Utilities if the company operates in Utilities sector and 0, otherwise; POW_DIST is the power distance, one of the six culture dimensions addressed by Hofstede et al. (2010) and ranges from 0 to 100; INDIV is the individualism, one of the six culture dimensions addressed by Hofstede et al. (2010) and ranges from 0 to 100; MASCUL is masculinity, one of the six culture dimensions addressed by Hofstede et al. (2010) and ranges from 0 to 100; UNC_AVOID represents uncertainty avoidance, one of the six culture dimensions addressed by Hofstede et al. (2010) and ranges from 0 to 100; LONG_ORIENTATION represents long-term orientation, one of the six culture dimensions addressed by Hofstede et al. (2010) and ranges from 0 to 100; INDULG represents indulgence, one of the six culture dimensions addressed by Hofstede et al. (2010) and ranges from 0 to 100. *p-value<0.1 **p-value<0.05 ***p-value<0.01.

(board specific skills, board tenure and board cultural diversity) are relevant factors in enhancing CSR disclosure. Therefore, managers engaged with CSR matters should consider the composition of their boards with the aim of addressing the three competences addressed in this research. These three board competences indicate the CSR orientation of the board, which managers can use as source of competitive advantage. Nevertheless, the coexistence of board specific skills, board tenure and board diversity with CEOs with power negatively moderates the positive effect of these board competences on the disclosure of CSR information and this fact should be also taken into account by all managers interested in showing their commitment to CSR issues. Firms where CEOs have less power should encourage the formation of boards with these three board capabilities because this will lead to greater CSR disclosure. Our evidence has further implications for managers, since it strengthens previous suggestions in the literature that CSR reporting may not be a suitable strategy for all companies (Clarkson et al., 2011). Our findings shed light on the combination of social, cultural and human resources on the board (board competences) which can be useful in facilitating greater disclosure of CSR information. Secondly, our evidence may be useful for all stakeholders, particularly for potential investors involved with CSR issues, because it may enable them to see which companies are oriented towards social and environmental matters. Thirdly, policy-makers should limit the power of CEOs in firms because the coexistence of a powerful CEO with the three board competences discourages the reporting of CSR information. Further, policy-makers should be also aware of the positive impact of board specific skills, board tenure and board cultural diversity on CSR reporting when legislating in this field. Firms have various stakeholders and multiple responsibilities that may often involve benefits toward others. In this regard, policy-makers should broaden the responsibility of corporate governance to include firms' responsibilities not only towards shareholders, but also stakeholders by encouraging the appointment of board mem-

bers with competencies that enhance CSR disclosure. Thus, policy-makers should consider how board competences and CSR regulation may influence a firm's diverse stakeholders and how firms could use their competitive advantage in the field of CSR. Fourthly, our findings should encourage other researchers to extend our research to other board competences and other moderating variables in order to shed new light on the ideal board composition for greater CSR disclosure. Finally, our evidence extends the previous literature focused on board composition and CSR reporting. Our findings may help reinforce the views of resource dependence theory, which recognises the benefits of appointing board members with diverse backgrounds, experience, opinions and cultural beliefs.

Several limitations should be acknowledged. Firstly, we use an international sample of countries, but the majority are in North America and Europe. Extending this research to a wider sample of countries, including those from other regions, would help to generalise the findings of our research. Secondly, although the items used in constructing our CSR index have been validated through factorial analysis, the inclusion of these items is subjective.

Our findings may provide ideas for new research opportunities. Firstly, extending our research to financial entities may shed new light on how board competences affect CSR reporting in this sector. Additionally, we encourage other researchers to analyse the effect of board competences on CSR disclosure in family, non-listed or non-listed family firms. This type of firm presents an interesting context because the majority of previous research on this topic focuses on listed and non-family firms. Furthermore, analysis of other board characteristics, such as race or religion, might provide evidence about the optimum board composition for improving CSR disclosure. Finally, it would be useful for future research to examine the impact of board competences in another type of non-financial information disclosure, such as integrated reporting, sustainability reporting or social reporting, or indeed in the disclosure of financial information.

Funding

The authors acknowledge financial support from the Spanish Ministry of Economy, Industry and Competitiveness for the research project ECO 2017-82259-R, from the University Jaume I for the research project UJI-B2018-15, from the Junta de Castilla y León and the European Regional Development Fund (Grant CLU-2019-03) for the financial support to the Research Unit of Excellence "Economic Management for Sustainability" (GECOS).

Conflict of interest

Authors declare that they have no conflict of interest.

References

Agrawal, A., & Knoeber, C. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Finance and Quantitative Analysis*, 31(3), 377-397. https://doi.org/10.2307/2331397

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, 273-294. https://doi.org/10.1002/csr.1410

Amin, M. H., Mohamed Ehab., K. A., & Elragal, A. (2020). Corporate disclosure via social media: a data science approach. *Online Information Review*, 44 (1), 278-298. https://doi.org/10.1108/OIR-03-2019-0084

Ammer, M. A., & Ahmad-Zaluki, N. A. (2014). Absolute forecast errors of earnings in Malaysian IPO prospectuses: The impact of ethnic diversity. *Jurnal Teknologi*, 68, 97-104. http://doi.org/10.11113/jt.v68.2954

Amorelli, M.F., & García-Sánchez, I. M. (2020). Critical mass of female directors, human capital, and stakeholder engagement by corporate social reporting. Corporate Social *Responsibility and Environmental Management*, 27 (1), 204-221. https://doi.org/10.1002/csr.1793

Archambeault, D., & DeZoort, F. T. (2001). Auditor opinion shopping and the audit committee: An analysis of suspicious auditor switches. *International Journal of Auditing*, 5(1), 33-52. https://doi.org/10.1111/1099-1123.00324

Arellano, M y Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations". *Review of Economic Studies*, vol. 58, pp.277-297. https://doi.org/10.2307/2297968

Arora, P., & Dharwadkar R. (2011). Corporate governance and corporate social responsibility (CSR): the moderating roles of attainment discrepancy and organization slack. *Corporate Governance: An International Review*, 19 (2), 136-152. https://doi.org/10.1111/j.1467-8683.2010.00843.x

Ayuso, S., Arino, A. M., & Garcia-Castro, R. (2014). Maximizing stakeholders' interests: An empirical analysis of the stakeholder approach to corporate governance. *Business and Society*, 53(3), 414-439. https://doi.org/10.1177/0007650311433122

Azmat, F. (2013). Opportunities or obstacles? Understanding the challenges faced by migrant women entrepreneurs. *International Journal of Gender and Entrepreneurship*, 5(2), 198-215. http://hdl.handle.net/10536/DRO/DU:30051849

Azmat, F., & Rentschler, R. (2017). Gender and Ethnic Diversity on Boards and Corporate Responsibility: The Case of the Arts Sector. *Journal of Business Ethics*, 141, 317-336. https://doi.org/10.1007/s10551-015-2707-0

Balachandran, Ch., Wennberg, K., & Uman, T. (2019). National culture diversity in new venture boards: The role of founders' relational demography. *Strategic Entrepreneurship Journal*, 13(3), 410-434. https://doi.org/10.1002/sej.1327

Barako, D. G., Hancock, P., & Izan, H. Y. (2006). Factors influencing voluntary corporate disclosure by Kenyan companies. *Corporate Governance: An International Review*, 14(2), 107-125. https://doi.org/10.1111/j.1467-8683.2006.00491.x

Barnea, A., & Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of*

Business Ethics, 97(1), 71-86. https://doi.org/10.1007/s10551-010-0496-z

Bhatia, A., & Tuli, S. (2017). Corporate attributes affecting sustainability reporting: An Indian perspective. *International Journal of Law and Management*, 59(3), 322-340. https://doi.org/10.1108/IJLMA-11-2015-0057

Baysinger, B., & Butler, H. (1985). Corporate governance and the board of directors. Performance effects of changes in board composition. *The Journal of Law, Economics, & Organization*, 1, 101-124. https://doi.org/10.1093/oxfordjournals.jleo.a036883

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

Belkaoui-Riahi, A., & Kahl, A. (1978). Corporate Financial Disclosure in Canada. Vancouver, Canada: Research Monograph of the Canadian Certified General Accountants Association.

Belkaoui-Rishi, A., & Karpik, P. (1989). Determinants of the corporate decision to disclose social information. *Accounting, Auditing and Accountability Journal*, 2 (1), 36-51. https://doi.org/10.1108/09513578910132240

Boyd, B. (1990). Corporate linkages and organizational environment: A test of the resource dependence model. *Strategic Management Journal*, vol. 11, pp. 419-430. https://doi.org/10.1002/smj.4250110602

Boyd, B. K. (1994). Board control and CEO compensation. *Strategic Management Journal*, 15(5), 335-344. https://doi.org/10.1002/smj.4250150502

Brammer, S., & Millington, A. (2008). Does it pay to be different? An analysis of the relationship between corporate social and financial performance. *Strategic Management Journal*, 29, 1325-1343. https://doi.org/10.1002/smj.714

Brannen, M. Y., & Thomas, D. C. (2010). Bicultural individuals in organizations: Implications and opportunity. *International Journal of Cross Cultural Management*, 10(1), 5-16. https://doi.org/10.1177/1470595809359580

Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly*, 19, 533-546. http://doi.org/10.2307/2391809

Blundell, R., and Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, vol. 87, pp. 115–143. https://doi.org/10.1016/S0304-4076(98)00009-8

Butler, S. R. (2012). All on board! Strategies for constructing diverse boards of directors. *Virginia Law & Business Review*, 7(1), 61-96. http://dx.doi.org/10.2139/ssrn.1954173

Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Review*, 12(1), 85-105. https://doi.org/10.1111/j.1468-2370.2009.00275.x

Clarkson, P.M., Li, Y., Richardson, G.D., & Vasvari, F.P. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of Accounting and Public Policy*, 30(2), 122-144. https://doi.org/10.1016/j.jaccpubpol.2010.09.013

Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *The American Journal of Sociology*, 94, 95-120. https://doi.org/10.1086/228943

Cooke, T. E. (1989). Voluntary Corporate Disclosure by Swedish Companies. Journal of International *Financial Management and Accounting*, 1, 171-195. https://doi.org/10.1111/j.1467-646X.1989.tb00009.x

Cucari, N., Esposito De Falco, S., & Orlando, B. (2018). 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

Chan, A., Sun, J., & Sun, J. (2013). Independent audit committee members' board tenure and audit fees. *Accounting and Finance*, 53(4), 1129-1147. https://doi.org/10.1111/j.1467-629X.2012.00490.x

Chang, Y. K., Oh, W. Y., Park, J. H., & Jang, M. G. (2017). Exploring the relationship between board characteristics and CSR: Empirical evidence from Korea. *Journal of Business Ethics*, 140 (2), 225-242. https://doi.org/10.1007/s10551-015-2651-z

Chau, G., & Gray, S. J. (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

Chen, H.L. (2014). Board capital, CEO power and R&D investment in electronics firms. *Corporate Governance*. 22, 422-436. https://doi.org/10.1111/corg.12076

Chen, W.T., Zhou, G. S., & Zhu, X. K. (2019). CEO tenure and corporate social responsibility performance. *Journal of Business Research*, 95, 292-302. https://doi.org/10.1016/j.jbusres.2018.08.018

Dalton, D. R., & Kesner, I. F. (1987). Composition and CEO duality in boards of directors: An international comparison. *Journal of International Business Studies*, 18(3), 33-42. https://doi.org/10.1057/palgrave.jibs.8490410

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

Deegan, C., & Blomquist, B., (2006). Stakeholders influence on corporate reporting: an exploration of the interaction between WWWF-Australia and Australian minerals industry. *Accounting, Organization and Society*, 31 (4-5), 343-372. https://doi.org/10.1016/j.aos.2005.04.001

De Villiers, Ch., Naiker, V., & Van Staden, Ch. J. (2011). The Effect of Board Characteristics on Firm Environmental Performance. *Journal of Management*, 37 (6), 636-1663. https://doi.org/10.1177/0149206311411506

Ewert, A., & Baker, D. (2001). Standing for where you sit: an exploratory analysis of the relationship between academic major and environment beliefs. *Environment and Behavior*, 33, 687-707. https://doi.org/10.1177/00139160121973197

Fallah, M. A., & Mojarrad, F. (2019). Corporate governance effects on corporate social responsibility disclosure: empirical evidence from heavy-pollution industries in Iran. *Social Responsibility Journal*, 15(2), 208-225. https://doi.org/10.1108/SRJ-04-2017-0072

Fiegener, M. K., Brown, B. M., Druex, D. R. V., & Dennis, W. J. J. (2000). CEO stakes and board composition in small private firms. *Entrepreneurship Theory and Practice*, 24(4), 5-24. https://doi.org/10.1177/104225870002400401

FriasAceituno, J. V., RodriguezAriza, L., & GarciaSanchez, I. M. (2013). The role of the board in the dissemination of integrated corporate social reporting. *Corporate Social Responsibility and Environmental Management*, 20 (4), 219-

233. https://doi.org/10.1002/csr.1294

Fuente, J. A., García-Sánchez, 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

Galbreath, J. (2005). Which resources matter the most to firm success? An exploratory study of resource-based theory. *Technovation*, 25(9), 979-987. https://doi.org/10.1016/j.technovation.2004.02.008

Galbreath, J. (2016). Exploratory study of climate change innovations in wine regions in Australia. *Regional Studies*, vol. 50 (11), pp. 1903-1918, https://doi.org/10.1080/00343404.2015.1073849

Gales, L., & Kesner, I. (1994). An analysis of board of director size and composition in bankrupt organizations. *Journal of Business Research*, 30, 271-82. https://doi.org/10.1016/0148-2963(94)90057-4

Gallego-Álvarez, I., & Ortas, E. (2017). Corporate environmental sustainability reporting in the context of national cultures: A quantile regression approach. *International Business Review*, 2, 337-353. https://doi.org/10.1016/j.ibusrev.2016.09.003

Gallego-Álvarez I, & Quina-Custodio IA (2017). Corporate social responsibility reporting and varieties of capitalism: An international analysis of stateled and liberal market economies. *Corporate Social Responsibility and Environmental Management*, 24(6), 478-495. https://doi.org/10.1002/csr.1421

García-Meca, E., & Palacio, C.J. (2018). Board composition and firm reputation: The role of business experts, support specialists and community influential. *BRQ Business Research Quarterly*, 21(2), 111-123. https://doi.org/10.1016/j.brq.2018.01.003

García-Sanchez, I.-M., Raimo, N. & Vitolla, F. (2021). CEO power and integrated reporting. *Meditari Accountancy Research*, 29(4), 908-942. https://doi.org/10.1108/MEDAR-11-2019-0604

García-Sánchez, I., & Martínez-Ferrero, J. (2019). Chief executive officer ability, corporate social responsibility, and financial performance: The moderating role of the environment. *Business Strategy and the Environment*, 28(4), 542-555. https://doi.org/10.1002/bse.2263

Giner, B. (1997). The influence of company characteristics and accounting regulation on information disclosed by Spanish firms. *European Accounting Review*, 6 (1), 45-68. https://doi.org/10.1080/096381897336863

Goll, I., Johnson, N.B., & Rasheed, A.A. (2007). Knowledge capability, strategic change, and firm performance: the moderating role of the environment. *Management Decision*, 45(2), 161-179. https://doi.org/10.5465/ambpp.2006.22896767

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). Multivariate Data Analysis. New Jersey, USA: Prentice Hall. https://doi.org/10.4236/ce.2015.612136

Haji, A. A. (2013). Corporate social responsibility disclosures over time: Evidence from Malaysia. *Managerial Auditing Journal*, 28(7), 647-676. https://doi.org/10.1108/MAJ-07-2012-0729

HajiAbdullah, N. M., & WanHussin, W. N. (2009). Audit committee attributes, financial distress, and the quality of financial reporting in Malaysia. *SSRN*, 1-40. http://dx.doi.org/10.2139/ssrn.1500134

Hambrick, D. C., Davison, S. C., Snell, S. A., & Snow, C. C. (1998). When groups consist of multiple nationalities: Towards a new understanding of the implications. *Organization Studies*, 19(2), 181-205. https://doi.org/10.1177/017084069801900202

Hamori, M., & Kakarika, M. (2009). External labor market strategy and career success: CEO careers in Europe and the United States. *Human Resource Management*, 48(3), 355-378. https://doi.org/10.1002/hrm.20285

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

Harris, I. C., & Shimizu, K. (2004). Too busy to serve? An examination of the influence of overboarded directors. *Journal of Management Studies*, 41(5), 775-798. https://doi.org/10.1111/j.1467-6486.2004.00453.x

Haynes, K.T., Hillman, A. (2010). The effect of board capital and CEO power on strategic change. *Strategic Management Journal*, 31, 1145-1163. https://doi.org/10.1002/smj.859

Hillman, A. J., Cannella, A. A., & Paetzold, R. (2000). The resource dependence role of corporate directors: Adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37(2), 235-55. https://doi.org/10.1111/1467-6486.00179

Hillman, A. J., Cannella, A. A., & Harris, I. (2002). Women and racial minorities in the boardroom: How do they differ? *Journal of Management*, 28, 747-763. https://doi.org/10.1177/014920630202800603

Hillman, A.J., & Dalziel, Th. (2003). Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives. *The Academy of Management Review*, 28 (3), 383-396. https://doi.org/10.2307/30040728

Ho, L. Ch., & Taylor, M. (2007). An Empirical Analysis of Triple Bottom-Line Reporting and its Determinants: Evidence from the United States and Japan. *Journal of International Financial Management and Accounting*, 18 (2), 123-150. https://doi.org/10.1111/j.1467-646X.2007.01010.x

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. London, UK: Sage Publications.

Hofstede, G. (2001). Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. London, UK: Sage Publications.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). Cultures and Organizations: Software of the Mind (10th Edition). USA: McGraw-Hill.

Htay, S. N. N., Rashid, H. M. A., Adnan, M. A., & Meera, A. K. M. (2012). Impact of corporate governance on social and environmental information disclosure of Malaysian listed banks: Panel data analysis. *Asian Journal of Finance & Accounting*, 4, 1-24. https://doi.org/10.5296/ajfa.v4i1.810

Jackling, B., & Johl, S. (2009). Board structure and firm performance: Evidence from India's top companies. *Corporate Governance: An International Review*, 17(4), 492-509. https://doi.org/10.1111/j.1467-8683.2009.00760.x

Jamali, D., Safieddine, A. M., & Rabbath, M. (2008). Corporate governance and corporate social responsibility synergies and interrelationships. *Corporate Governance: An International Review*, 16(5), 443-459. https://doi.org/10.1111/j.1467-8683.2008.00702.x

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

Jiraporn, P., & Chintrakarn, P. (2013). Corporate social responsibility (CSR) and CEO luck: Are lucky CEOs socially responsible? *Applied Economics Letters*, 20, 1036-1039. https://doi.org/10.1080/13504851.2013.772291

Jizi, M. (2017). The Influence of Board Composition on Sustainable Development Disclosure. *Business Strategy and the Environment*, 26, 640-655. https://doi.org/10.1002/bse.1943

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

Johnson, J., Daily, C., & Ellstrand, A. (1996). Boards of directors: a review and research agenda. *Journal of Management*, 22, 409-38. https://doi.org/10.1177/014920639602200303

Johnson, S.G., Schnatterly, K., & Hill, A.D. (2013). Board Composition Beyond Independence: Social Capital, Human Capital, and Demographics. *Journal of Management*, 39 (1), 232-262. https://doi.org/10.1177/0149206312463938

Khan, I., Khan, I., & Saeed, B. (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

Khan, T. M., Gang, B., Fareed, Z., & Yasmeen, R. (2020). The impact of CEO tenure on corporate social and environmental performance: an emerging country's analysis. *Environmental Science and Pollution Research*, 27, 19314-19326. https://doi.org/10.1007/s11356-020-08468-y

Kang, H., Cheng, M., & Gray, S. J. (2007). Corporate governance and board composition: Diversity and independence of Australian boards. *Corporate Governance: An International Review*, 15, 194-207. https://doi.org/10.1007/s11356-020-08468-y

Kanter, R. M. (1982). The middle manager as innovator. *Harvard Business Review*, 60(4), 95-105.

Katmon, N., Zuriyati, Z., Norlia, M., Norwani, M., & Farooque, O. A. (2019). Comprehensive board diversity and quality of corporate social responsibility disclosure: Evidence from an emerging market. *Journal of Business Ethics*, 157, 447-481. https://doi.org/10.1007/s10551-017-3672-6

Kim, K., & Yang, J-S. (2014). Director tenure and financial reporting quality. *Review of Integrative Business and Economic*, 3 (1), 237-256.

Kolk, A., & Perego, P. (2010). Determinants of the Adoption of Sustainability Assurance Statements: An International Investigation. *Business Strategy and the Environment*, 19, 182-198. https://doi.org/10.1002/bse.643

Konadu, R. (2017). Gender diversity impact on corporate social responsibility (CSR) and Greenhouse Gas emissions in the UK. *Economics and Business Review*, 3(1), 127-148. https://doi.org/10.18559/ebr.2017.1.7

Krüger, P. (2009). Corporate social responsibility and the board of directors. Working Paper (Job Market Paper). Toulouse School of Economics, Toulouse, 31 May 2010.

Lasagio, V., & Cucari, N. (2019). Corporate governance and environmental social governance disclosure: A metaanalytical review. *Corporate Social Responsibility and Environmental Management*, 26, 701-711. https://doi.org/10.1002/csr.1716

Lee, Y.K., Kim, Y.S., Lee, K.H., & Li, D. (2012). The impact of CSR on relationship quality and relationship outcomes: a perspective of service employees. *International Journal of Hospitality Management*, 31, 745-756. https://doi.org/10.1016/j.ijhm.2011.09.011

Leire, C., & Mont, O. (2010). The implementation of socially responsible purchasing. *Corporate Social Responsibility and Environmental Management*, 17, 27-39. https://doi.org/10.1002/csr.198

Liliç, M., & Kuzey, C. (2019). The effect of corporate governance on carbon emission disclosures. Evidence from Turkey. *International Journal of Climate Change Strategies and Management*, 11(1), 35-53. https://doi.org/10.1108/IJCCSM-07-2017-0144

Liu, W. K. (2010). The environmental responsibility of multinational corporations. *The Journal of American Academy of Business*, 15, 81-88. https://doi.org/10.2307/258806

Liu, X., & Anbumozhi, V. (2009). Determinant factors of corporate environmental information disclosure: an empirical study of Chinese listed companies. *Journal of Cleaner Production*, 17(6), 593-600. https://doi.org/10.1016/j.jclepro.2008.10.001

Louis, O., & Osemeke, N. (2017). The role of ethnic directors in corporate social responsibility: Does culture matter? The cultural trait theory perspectives International *Journal of Disclosure and Governance*, 14, 152-157. https://doi.org/10.1057/s41310-017-0018-7

Makkonen, T., Williams, A.M., & Habersetzer, A. (2018). Foreign board members and firm innovativeness: an exploratory analysis for setting a research agenda. *Corporate Governance: The International Journal of Business in Society*, 18 (6), 1057-1073. https://doi.org/10.1108/CG-12-2017-0301

Mallin, C. (2002). The relationship between corporate governance, transparency and financial disclosure. *Corporate Governance: An International Review*, 10, 253-255. https://doi.org/10.1111/1467-8683.00289

Mallin, C. A., & Michelon, G. (2011). Board reputation attributes and corporate social performance: An empirical investigation of the US Best Corporate Citizens. *Accounting and Business Research*, 41(2), 119-144. https://doi.org/10.1080/00014788.2011.550740

McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, 43(1), 1-18. https://doi.org/10.1111/j.1467-6486.2006.00580.x

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

Miska, C., Szöcs, I., & Schiffinger, M. (2018). Culture's effects on corporate sustainability practices: A multi-domain and multi-level view. *Journal of World Business*, 53(2), 263-279. https://doi.org/10.1016/j.jwb.2017.12.001

Muttakin, M.B., Khan, A., & Mihert, D.G. (2018). The Effect of Board Capital and CEO Power on Corporate Social Responsibility Disclosures. *Journal of Business Ethics*, 150, 41-56. https://doi.org/10.1007/s10551-016-3105-y

New, D., Warsame, H., & Pedwell, K. (1998). Managing Public Impressions: Environmental Disclosures in Annual Reports. *Accounting, Organizations and Society*, 23 (3), 265-282. https://doi.org/10.1016/S0361-3682(97)00008-1

Ntim, C.G., Soobaroyen, T. (2013). Black Economic empowerment disclosures by South African listed corporations: The influence of ownership and board characteristics. *Journal of Business Ethics*, 116, 121-138. https:

//doi.org/10.1007/s10551-012-1446-8

Oba, V. C., Ibikunle, J., & Damagum, Y. M. (2013). The impact of board mechanisms on intellectual capital disclosures in Nigeria. *Journal of Accounting and Management*, 3(1), 65-80. http://journals.univ-danubius.ro/index.php/jam/article/view/1828/1939

Papadakis, V. M. (2006). Do CEOs shape the process of making strategic decisions? Evidence from Greece. *Management Science*, 44(3), 367-394. https://doi.org/10.1108/00251740610656269

Pfeffer, J., & Salancik, G. (1978). The External Control of Organizations: A Resource-Dependence Perspective. New York, USA: Harper and Row.

Pfeffer, J., & Salancik, G. (2003). The External Control of Organizations: A Resource Dependence Perspective. Stanford, California: Stanford University Press.

Plessis, J. J. D., Saenger, I., & Foster, R. (2012). Board diversity or gender diversity? Perspectives from Europe, Australia and South Africa. *Deakin Law Review*, 17(2), 207-249. https://doi.org/10.21153/dlr2012vol17no2art77

Post, C., Rahman, N., & Rubow, E. (2011). Green governance: Boards of directors' composition and environmental corporate social responsibility. *Business and Society*, 50, 189-223. https://doi.org/10.1177/0007650310394642

Quinn, J. B. (1985). Managing innovation: Controlled chaos. *Harvard Business Review*, 63(3), 73-84. https://doi.org/10.20801/jsrpim.2.4/_485/_1

Ramón-Llorens, M.C., García-Meca, E., & Pucheta-Martínez, M.C. (2019). The role of human and social board capital in driving CSR reporting. *Long Range Planning*, 52 (6), 1-17. https://doi.org/10.1016/j.lrp.2018.08.001

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

Rasmini, N. K., Wirakusuma, G., & Yuniasih, N. W. (2014). The effect of board diversity on the extent of intellectual capital disclosure (empirical study in Indonesian stock exchange). *Asia Pacific Journal of Accounting and Finance*, 3(31), 45-58.

Razek, M. A. (2014). The association between corporate risk disclosure and firm performance in emerging country–The case of Egypt. *Journal of Empirical Studies*, 1(3), 105-115.

Reeb, D. M., & Zhao, W. (2013). Director capital and corporate disclosure quality. *Journal of Accounting and Public Policy*, 32(4), 191-212. https://doi.org/10.1016/j.jaccpubpol.2012.11.003

Rodriguez-Gomez, S., Arco-Castro, M.L., Lopez-Perez, M.V., & Rodríguez-Ariza, L. (2020). Where Does CSR Come from and Where Does It Go? A Review of the State of the Art. *Administrative Sciences*, 10 (3), 1-19. https://doi.org/10.3390/admsci10030060

Rupp, D.E., & Mallory, D.B. (2015). Corporate social responsibility: psychological, person-centric, and progressing. *Annual Review of Organizational Psychology and Organizational Behavior*, 2, 211-236. https://doi.org/10.1146/annurev-orgpsych-032414-111505

Sijtsma, K. (2009). On the use, the misuse and the very limited of the Cronbach's Alpha. *Psychometrika*, 74(1), 107-120. https://doi.org/10.1007/s11336-008-9101-0

Suwaidan, M.S. (2004). Social responsibility disclosure and corporate characteristics: the case of Jordanian industrial companies. *International Journal of Accounting, Auditing and Performance Evaluation*, 1 (4), 432 - 447. https://doi.org/10.1504/IJAAPE.2004.006355

Tadmor, C. T., Tetlock, P. E., & Peng, K. (2009). Acculturation strategies and integrative complexity: The cognitive implications of biculturalism. *Journal of Cross-Cultural Psychology*, 40(1), 105-139. https://doi.org/10.1177/0022022108326279

Tamini, N., & Sebastianelli, R. (2017). Transparency among SandP 500 companies: an analysis of ESG disclosure scores. *Management Decision*, 55(8), 1660-1680. https://doi.org/10.1108/MD-01-2017-0018

Tangri, R., and Southall, R. (2008). The Politics of Black Economic Empowerment in South Africa, *Journal of Southern African Studies*, vol. 34(3), pp. 699-716. https://doi.org/10.1080/03057070802295856

Terjesen, S., Couto, E., Francisco, P.M. (2016). Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity. *Journal of Management & Governance*, 20 (3), 447-483. https://doi.org/10.1007/s10997-014-9307-8

Umukoro, O. E., Uwuigbe, O.R., Uwuigbe, U, Adegboye, A., Ajetunmobi, O., & Nwaze, C. (2019). Board expertise and sustainability reporting in listed banks in Nigeria. IOP Conf. Series: Earth and Environmental Science, 1-9. https://doi.org/10.1088/1755-1315/331/1/012048

Vafeas, N. (2003). Length of board tenure and outside director Independence. *Journal of Business Finance and Accounting*, 30 (7-8), 1043-1064. https://doi.org/10.1111/1468-5957.05525

Van Essen, M., Otten, J., & Carberry, E. J. (2015). Assessing managerial power theory: A meta-analytic approach to understanding the determinants of CEO compensation. *Journal of Management*, 41 (1), 164-202. https://doi.org/10.1177/0149206311429378

Veldsman, T.H. (2012). The soft underbelly of corporate governance (Part 2): The software of board dynamics. *African Journal of Business Ethics*, 6(1), 65-74. https://doi.org/10.4103/1817-7417.104704

Velte, P. (2019). Does board composition influence CSR reporting? A meta-analysis. *Corporate Ownership & Control*, 16(2), 48-59. https://doi.org/10.22495/cocv16i2art5

Vitolla, F., Raimo, N., & Rubino, M. (2020a). Board characteristics and integrated reporting quality: an agency theory perspective. *Corporate Social Responsibility and Environmental Management*, 27 (2), 1152-1163. https://doi.org/10.1002/csr.1879

Vitolla, F., Raimo, N., Marrone, A., & Rubino, M. (2020b). The role of board of directors in intellectual capital disclosure after the advent of integrated reporting. *Corporate Social Responsibility and Environmental Management*, 27(5), 2188-2200. https://doi.org/10.1002/csr.1957

Wang, J., & Dewhirst, D.H. (1992). Board of directors and stakeholder orientation. *Journal of Business Ethics*, 11 (2), 115-123. https://doi.org/10.1007/BF00872318

Watson, A., Shrives, P., & Marston, C. (2002). Voluntary disclosure of accounting ratios in the UK. *British Accounting Review*, 34 (2), 289-313. https://doi.org/10.1006/bare.2002.0213

Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics*, 20, 431-460. https://doi.org/10.1016/0304-405X(88)90053-0

Westphal, J. D., & Milton, L. P. (2000). How experience and network ties affect the influence of demographic minorities on corporate board. *Administrative Science Quarterly*,

45(2), 366-401. https://doi.org/10.2307/2667075

Wiersema, M., & Bantel, K.A. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal*, 35 (1), 91-121. https://doi.org/10.2307/256474

Williams, S.M. (2001). Corporate Governance Diversity and its Impact on Intellectual Capital Performance in an Emerging Economy, University of Calgary, Citeseer.

Wincent, J., Anokhin, S., & Örtqvist, D. (2010). Does network board capital matter? A study of innovative performance in strategic SME networks. *Journal of Business Research*, 63 (3), 265-275. https://doi.org/10.1016/j.jbusres.2009.03.012

Yasser, Q.R., Mamun, A. A., & Rodrigs, M. (2016). Director Training and Financial Disclosure: Asian Insights. *Contemporary Economics*, 11(2), 145-160. https://doi.org/10.5709/ce.1897-9254.233

Zhang, L. (2012). Board demographic diversity, independence, and corporate social performance. *Corporate Governance: The International Journal of Business in Society*, 12 (5), 686-700. https://doi.org/10.1108/14720701211275604