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Soudabeh Bolourian, Andrew Angus, Leila Alinaghian

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## Full title: The Impact of Corporate Governance on Corporate Social

## Responsibility at the Board-level: A Critical Assessment

## Soudabeh Bolourian\*

Cranfield School of Management, Cranfield University, College Road, Cranfield, Bedford, MK43 0AL, UK

# soudabeh.bolourian@cranfield.ac.uk +44(0)1234 751122

Andrew Angus

Cranfield School of Management, Cranfield University, College Road, Cranfield, Bedford, MK43 OAL, UK

a.angus@cranfield.ac.uk

Leila Alinaghian

Cranfield School of Management, Cranfield University, College Road, Cranfield, Bedford, MK43 OAL, UK

leila.alinaghian@cranfield.ac.uk

<sup>\*</sup> Corresponding author

The Impact of Corporate Governance on Corporate Social Responsibility at the Board-

level: A Critical Assessment

The purpose of this research is to synthesise and critically evaluate the extant literature

investigating the role of board of directors as a core element of corporate governance in

corporate social responsibility (CSR) performance. Adopting a systematic review approach, a

sample of 67 studies from 18 highly regarded scholarly journals published between 1992 and

2020 is examined. Distinguishing between two board attributes of director characteristics and

board structures, our study uncovers similarities and inconsistencies regarding the effects of

various board characteristics and board structures on CSR performance. First, our study reveals

that these attributes do not work in isolation but interact with each other and the context in

which they are embedded in shaping CSR performance. Additionally, our review identifies

substantial variation in conceptualisations, theoretical frameworks, the use of measurements and

the contexts across studies providing a basis to offer a comprehensive synthesis of dominant

scholarly discourses and an organising lens for future scholarship.

Keywords: Corporate Governance, Corporate Social Responsibility Performance, Social

Performance, Environmental Performance, Board Directors,

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#### 1. Introduction

The critical importance of the relationship between corporate governance and sustainability has been long acknowledged in the literature (Aras and Crowther, 2009; Unerman and Bennett, 2004). Corporate social responsibility (CSR) has been noted as a development of good governance (Harjoto and Jo, 2011; Jo and Harjoto, 2012), where companies with better governance are often found to be more socially responsible (Ntim and Soobaroyen, 2013). While corporate governance is the force behind CSR aims and objectives in organisations (Elkington, 2006; Jamali et al., 2008), the board of directors as a core element of corporate governance (Eccles et al., 2011) are responsible for achieving and monitoring the set aims and objectives (de Villiers et al., 2011; Eccles et al., 2011; Elkington, 2006; Harjoto et al., 2015; Jamali et al., 2008). The achievement and realisation of these objectives are often investigated through the notion of CSR performance
(Brower and Mahajan, 2013; Harjoto et al., 2015; Wood, 2010, 1991). Specifically, adopting various indices, researchers have examined CSR performance in terms of the company social performance (e.g. Community, Employee Relations and Human Rights, Bai, 2013; Mallin and Michelon, 2011) environmental performance (e.g. environmental strength, energy-related CO2

performance (e.g. Community, Employee Relations and Human Rights, Bai, 2013; Mallin and Michelon, 2011) environmental performance (e.g. environmental strength, energy-related CO<sub>2</sub> emissions, regulatory performance and pollution prevention, Dixon-Fowler et al., 2017; Ortiz-de-Mandojana and Aragon-Correa, 2015; Rodrigue et al., 2013) and/or the overall CSR performance: the combination of company social and environmental performance (e.g. Chams

and García-Blandón, 2019; Oh et al., 2019).

Scholars increasingly recognise that the composition of the board plays an instrumental role in driving the organisations' outcomes in general (Johnson et al., 2013) and CSR in particular (Harjoto et al., 2015). Specifically, the critical impact of board attributes in terms of director characteristics (e.g. gender, age, expertise etc.) and different structures used by boards (e.g. independence, committees, CEO-duality etc.) on CSR has been evidenced in prior studies

(Crifo et al., 2018; Marquis and Lee, 2013; Oh et al., 2019; Walls and Hoffman, 2013). For instance, literature has explored the influence of board attributes on CSR reporting and disclosure (e.g. Jizi 2017; Nekhili et al. 2017) and CSR engagement (e.g. Harjoto and Jo 2011). Similarly, scholars have devoted their research to investigating the impact of board attributes on CSR performance (e.g. Bai, 2013; Glass et al., 2016; Walls and Berrone, 2017).

While there appears to be a consensus among scholars regarding the importance of board attributes in driving CSR performance, there are a number of inconsistencies and a lack of overall clarity regarding their specific effects in the literature. For instance, some studies suggest that female-directors negatively impacts environmental performance (Walls et al., 2012). Contrary to this view, others (Cook and Glass, 2018; Hussain et al., 2018; Lu and Herremans, 2019) have demonstrated positive or non-significant effects of female-directors on environmental performance. Similarly, while the positive effects of board independence (the percentage of non-executive directors (NEDs) on the board) on CSR performance have been demonstrated by some studies in the literature (Burke et al., 2019a; Choi et al., 2013), others have reported a negative (Deckop et al., 2006; Naciti, 2019) or non-significant effect (Galbreath, 2018).

In recent years, some review studies have addressed different elements of the overlap between corporate governance and CSR. For example, Jain and Jamali (2016) conducted a review highlighting the positive role of corporate governance on CSR performance at three levels; firm, group and individual. Focusing on board diversity, particularly gender diversity, Rao and Tilt (2016) have critically reviewed the relationship between the composition of boards and both CSR performance and reporting from a strategy and decision making point of view. While these studies emphasise the link between corporate governance and CSR, a comprehensive account of various board attributes including both directors' characteristics and structure, their interaction and their sometime inconstant role on CSR performance has remained relatively unexplored.

This issue is particularly salient as recent studies have highlighted the role of interactive effects of the two in shaping CSR performance (Walls et al., 2012). For instance, Hafsah and Turgut (2013) suggest that the relationship between diversity within the board and CSR performance is moderated by the diversity of board structures. Similarly, Galbreath (Galbreath, 2017) illustrated that while the executive directors have a negative impact on both environmental and social performance, when explored together with executive directors CSR knowledge, the impact will be positive.

Thus, the purpose of this paper is to synthesise this rich and diverse literature in addressing the question of: What is the impact of Corporate Governance at board-level on Corporate Social Responsibility Performance? Specifically, using the framework demonstrated in figure 1 we aim to review and assess the current state of research to explain inconsistencies in the literature and provide an organising lens for future scholarship.

### Figure 1: Research Framework

Our study contributes to the existing literature in several ways. First, it extends the understanding of the role of board attributes on CSR performance through a transparent and replicable systematic review of literature (Petticrew and Roberts, 2006; Rousseau et al., 2008; Tranfield et al., 2003). Specifically, we uncover similarities and highlight the existing inconsistencies in the current literature regarding the role of board composition, structure and their interactions on CSR performance. Second, our study explains the inconsistencies that were uncovered by identifying the variations in conceptualisations, theoretical frameworks and the measurement scales. Furthermore, our work highlights the interactive effects of board attributes with each other as well as context in which they are embedded in shaping CSR performance. Having identified the possible reasons behind the inconsistent results of previous literature, the authors offer multiple avenues for advancing research in this field.

#### 2. Theoretical Background

Agency theory as one of the dominant paradigms in corporate governance implies that directors have the best interests of shareholders in mind and as their agents ensure mangers have the same interests (Fama and Jensen, 1983; Jensen and Meckling, 1976). While this theory has been largely applied to explain the role of board attributes; particularly board structure from a monitoring perspective (Hillman and Dalziel, 2003), it cannot sufficiently explain why and/or how social aims should be considered in corporate strategic goals due to its focus on economic issues (Walls et al., 2012). The stakeholder theory where the relationship of a firm is seen to go beyond shareholders (Freeman, 2010), on the other hand, appears to provide a better lens when examining the impact of board attributes on issues related to the benefits of all stakeholders (Adams et al., 2017; Chams and García-Blandón, 2019; Wang and Coffey, 1992). From a corporate governance perspective, board diversity is not just variety within the board. It is the manner in which this diversity in characteristics and expertise of board members can contribute to the different board processes, decision making and outcomes (van der Walt and Ingley, 2003). This may be one of the main reasons why researcher have turned to resource-dependency theory when exploring the impact of board attribute on CSR performance (e.g. Endo, 2020; Hafsi and Turgut, 2013) and often empirically conducted studies imply that board diversity positively impacts CSR performance (e.g. Hafsi and Turgut 2013; Harjoto et al. 2015). In recent years researchers have turned to other theories when exploring the impact of board attributes on CSR performance (e.g. upper echelon, legitimacy, accountability Burke et al., 2019b; Moussa et al., 2020; Olthuis and van den Oever, 2020) In section 6 this paper will explore the underlying theories used in the current sample and provide more insight regarding theoretical views in this area of research.

#### 3. Methodology

Using an evidence-based approach, a systematic review of 67 articles from 18 peer-reviewed, highly regarded journals (Figure 2) associated with time span between 1992 and May 2020 is conducted.

### Figure 2: Journals included in the Review

The research follows the three stages of Planning the Review, Conducting the Review and Reporting and Dissemination suggested by Tranfield et al. (2003). Figure 3 illustrates and details the process followed to identify the set of articles we reviewed. The literature search was executed in EBSCO, Scopus, and ABI/INFORM Collection by allowing combination of keywords reflecting the core phenomena of interest (i.e., corporate governance, CSR and board attributes). Only articles examining both board attributes and CSR performance were coded as "Include". In other words, papers exploring anything outside the scope, for instance the impact of board attributes and CSR reporting and disclosure, CSR engagement, development and orientation were coded as "Not Include". The investigation incorporates a descriptive and thematic analysis to identify patterns that synthesise constructs and their relationships.

## Figure 3: Literature Identification and Coding Process

As mentioned in figure 1 the following sections set out the key themes that emerged from the review of articles.

#### 4. Director Characteristic Attributes and CSR performance

Director characteristics have been considered in a variety of ways. Here we discuss four of the most commonly explored characteristics: Gender, Knowledge, Skills, Expertise, and Experience, Age and Tenure.

#### 4.1 Gender

One of the most widely considered director characteristics is the presence of female-directors (over 57% of current sample) explored mostly as either the number of female-directors (e.g. Cook and Glass, 2018) or the proportion of said directors on the board (e.g. Francoeur et al.,

2019) (Table 1). The literature has reported inconsistent association between this attribute and different dimensions of CSR performance. Previous research argues that women tend to lean more towards social performance issues compared to men (Backhaus et al., 2002). Women are also typically more concerned with long-term outcomes and the interests of stakeholders, relative to men, even if that means sacrificing short-term profits (Matsa and Miller, 2013). Furthermore, female-directors are more likely to be from non-business backgrounds, community influencers (Hillman et al., 2002; Singh et al., 2008) and often engage more in charitable and philanthropic activities (Bear et al., 2010; Wang and Coffey, 1992; Williams, 2003). Also, women tend to use their experience and influence to form sustainability-themed alliances (Post et al., 2015). Therefore, boards with female members are more likely to engage the firm in CSR activities (Bear et al., 2010; Périlleux and Szafarz, 2015; Williams, 2003).

Prior research has suggested that female-directors' communal characteristics such as being friendly, kind, unselfish, concerned for others and expressiveness (Eagly et al., 2003; Eagly and Karau, 2002) enhance their sensitivity towards various stakeholders (Mallin and Michelon, 2011; Nielsen and Huse, 2010). This in turn improves the role of the board in driving CSR activities and leads to higher CSR performance (Mallin and Michelon, 2011). Women's collective decision-making style (Konran et al., 2008; Nielsen and Huse, 2010) also helps boost CSR performance strengths (Bear et al., 2010; Harjoto et al., 2015).

On the other hand, it has been argued that in transitional economies, like China, where agency costs pose a critical problem for male-dominate boards, women directors have a significant role in increasing the decision-making quality and stopping unreasonable waste of corporate resources (Jia and Zhang, 2011). Therefore, unlike western countries where it has been suggested that women directors tend to support corporate philanthropy (Adams et al., 2017; Bear et al., 2010; Kabongo et al., 2013; Wang and Coffey, 1992; Williams, 2003), in some

Asian countries women directors will have a negative effect on corporate philanthropy, yet an overall positive impact on organisational performance (Jia and Zhang, 2011).

Although the presence of one or two female-directors can make a positive contribution, this has been referred to as "tokenism" and to acquire the full benefit of women on boards, it has been suggested that the 'magic number' is the presence of three or more (critical mass) female-directors (Bear et al., 2010; Konran et al., 2008). Also, that a small female presence on boards is insufficient to effect CSR performance (Périlleux and Szafarz, 2015) and boards with more women tend to act more socially responsible compared to boards with no or few women (Post et al., 2015). However, Ellwood and Garcia-Lacalle (2015) argue that it is the importance of the position held by women that counts not the proportion.

Table 1: The Impact of Director Gender Attributes on CSR performance

## 4.2. Knowledge, Skills, Expertise and Experience

Relevant knowledge, skills, expertise and experience are attributes the board needs to advise and monitor management (Hillman and Dalziel, 2003). As Table 2 suggests, these attributes have been gaining attention in relation to CSR performance. For example, the number of outside directorships, as a proxy for experience, held by directors has been suggested to have no significant relation to CSR performance (Harjoto et al. 2015). However, with a positive influence on CSR performance, the percentage of community influential directors is explored for the experience they bring to the board in addition to their influence in the community (Mallin and Michelon, 2011). The number of other boards directors simultaneously may sit on is explored as a proxy for experience brought to the boardroom and it's positive impact on environmental performance (Ortiz-de-Mandojana and Aragon-Correa, 2015). Research conducted in countries like South Korea, with male-dominant and ethnically homogeneous boards, have used education as a proxy for exploring the effect of diversity on CSR performance (Chang et al., 2017). Also, academic faculty members on firm boards appear to have a positive

effect on CSR performance (Cho et al., 2017). This might be because of the knowledge brought through these directors education, which is needed to effectively govern organisations (Hillman and Dalziel, 2003). By sifting through the literature it would appear that the impact of the expertise, experience and knowledge may depend on both the industry and the relevance of the expertise and experience. Bai (2013) reports that having a physician on the board of a hospital will impact social performance positively, but government officials will impact this dimension of CSR performance negatively. Furthermore, it can be argued that the relevance of the experience and the dimension of CSR explored may also be important. Walls and Hoffman (2013) find a positive relationship between environmental deviance and environmental experience of board members. Similarly, Homroy and Slechten (2019) found that the existence of non-executive directors with previous experience in environmental issues positively impacts environmental performance by lowering company greenhouse gas emissions, on the other hand legal expertise on the board has no impact on this dimension. Galbreath (Galbreath, 2017) argues that CSR training among executive directors positively impacts both environmental and social performance. However, again the literature is divided on this as Rodrigue et al. (2013) found that environmental awareness of board directors does not significantly impact environmental regulatory performance or pollution prevention. Also, de Villiers et al. (2011) argue that having a lawyer on the board will positively impact environmental performance strengths.

Table 2: The Impact of Director Knowledge, Skills, Expertise and Experience on CSR performance

#### 4.3. Age

Director's age, sometimes explored as board director's average age (e.g. Chams and García-Blandón, 2019; Post et al., 2011) and sometimes studied as age diversity on the board (e.g. Hafsi and Turgut, 2013) is another characteristic studied by researchers in relation to CSR

performance. It has been suggested that younger directors are usually more concerned about environmental issues (Galbreath, 2010; Hafsi and Turgut, 2013). Specifically, younger directors learning ability and innovativeness contribute more to practices that address climate-change, leading to a higher performance (Galbreath 2010). However, similar to the previous characteristics (Table 3), the literature is divided on the role of directors' age in CSR performance.

A negative effect of age diversity within the board could be caused by generation conflict and disagreement among directors (Hafsi and Turgut, 2013). However, contrarily to men, it has been suggested that boards with a critical mass of female representation, age diversity of the women directors strengthens the influence of women on corporate philanthropic disaster response (Jia and Zhang, 2013).

Table 3: The Impact of Director Age on CSR performance

# 4.4. Tenure

It has been argued that director tenure is a driving factor of CSR activity in organisations (Harjoto et al., 2015). However, as another board attribute explored in relation to CSR performance similar to age either explored from a diversity aspect (e.g. Olthuis and van den Oever, 2020) or average directors tenure (e.g. Homroy and Slechten, 2019), a review of the literature suggests mixed results (Table 4). It has been suggested that tenure positively influences the overall CSR performance by lowering CSR performance concerns (Harjoto et al., 2015). When exploring the different dimensions of CSR performance, de Villiers et al. (2011) concluded that the relationship between total environmental performance strengths and tenure is insignificant. However, Hafsi and Turgut (2013) suggest that the insignificant relationship may arise because directors with shorter tenure are more hesitant to speak and higher tenured

directors may prefer to follow management, when it comes to dealing with controversial CSR issues, such as environmental matters.

Table 4: The Impact of Director Tenure on CSR performance

## 5. Board structure attributes and CSR performance

Board structures have also been considered in several ways. This section sets out four of the most commonly explored board structure attributes: independence, CEO-Duality, size and committees.

## **5.1. Board Independence**

One of the most frequently researched board structures in relation to CSR performance is the number or percentage of non-executive/independent/outside directors (over 61% of current sample) (Table 5). Similar to female-directors, NEDs tend to use their diverse experience and network ties to build sustainability-themed alliances to indirectly influence social performance (Post et al., 2015). Prior studies have indicated that NEDs tend to show more interest in the voluntary aspects of CSR than to economic performance (Ibrahim et al., 2003; Ibrahim and Angelidis, 1995). Mallin and Michelon (2011) believe that because of their dedication to stakeholders' expectations, NEDs will increase their own reputation in society and lead the organisation towards engaging more in CSR activities. On the same note, NEDs reputation is linked to addressing stakeholder issues. Therefore, these directors are more inclined to consistently satisfy stakeholder concerns compared to executive directors (Post et al., 2015). For instance, they align themselves with stakeholders to improve environmental performance and reduce the likelihood of environmental litigation (Kassinis and Vafeas, 2002) and are argued to positively impact environmental performance (Endo, 2020).

As Table 5 suggests, in contrast, it is interesting to note that some studies indicate NEDs have no significant impact on CSR performance (Brown et al., 2006; Harrison and Coombs, 2012; McGuinness et al., 2017; Parthiban et al., 2007). Chang et al.(2017) suggest that in countries,

like South Korea, where there is a minimum requirement of NEDs set by regulators, said directors tend to positively influence CSR performance when regulatory requirements are exceeded. Contrary to all the above findings, Naciti (2019) finds a negative impact on social and overall CSR performance and argues that the information passed on to NEDs from the company in regard to CSR can at times be deceptive. The possible threat of such misleading information on NEDs reputation can influence their decisions and consequently impact CSR performance negatively.

Table 5: The Impact of Board Independence on CSR performance

#### 5.2. CEO-Duality

Whilst also used as a factor to examine leadership structure, CEO-duality or joint CEO and board chair is another attribute explored in relation to CSR performance. From an agency view, said roles should be separated to prevent the influence and dominance of a powerful CEO over the board (van der Walt and Ingley, 2003). Like previous board attributes, the literature is divided on the association between this structural attribute and CSR performance (Table 6). Drawing upon an agency view, some studies demonstrated that CEO-duality negatively influences CSR performance (Hussain et al., 2018; Mallin and Michelon, 2011; Naciti, 2019), whereas others have suggested no significant relationship between the two (Chams and García-Blandón, 2019; McGuinness et al., 2017; Surroca and Tribo, 2008). In contrast, Fabrizi et al. (2014) have found a positive relation when the CEO holds the position of the chairman of the board with a high tenure. The authors further argue that power and establishment of such a CEO will encourage them to engage more in CSR activities. Similar to NEDs, Hafsi and Turgut (2013) argue that as CEO-duality is a norm in countries like the USA, results regarding the impact of this attribute on CSR performance, when using a sample from such countries, will have no significant influence. This may be a reason why in a study using a diverse geographical context, results suggested that firms with a separate CEO and board chair demonstrate higher performance on board oversight in regards to climate change (Galbreath, 2010). When explored as a control variable, CEO-duality has recently been seen to have a positive impact on greenhouse gas emissions in high carbon □ intensive industries and no significant impact in low carbon □ intensive industries (Moussa et al., 2020), indicating that the industry where the company operates also plays a role in this attributes' impact.

Table 6: The Impact of CEO-Duality on CSR performance

#### 5.3. Board-Size

The literature has generally suggested that larger boards are linked to better stakeholder representation, which in turn can lead to higher sensitivity towards stakeholder interests and participation in more CSR activities (Chams and García-Blandón, 2019; Ntim and Soobaroyen, 2013; Siciliano, 1996). However, there is no consensus in the literature on the impact of board-size on CSR performance (Table 7). For instance, while it has even been suggested that a larger board is more inclined to break environmental laws and negatively impact environmental performance (Kassinis and Vafeas, 2002) and the overall CSR performance (Olthuis and van den Oever, 2020), some scholars (e.g. Cook and Glass, 2018; Endo, 2020)demonstrate the positive impact of size on environmental performance. Conversely, there are some studies that have reported a non-significant relationship between the two (Post et al., 2011; Walls et al., 2012).

Table 7: The Impact of Board-Size on CSR performance

#### 5.4. Board Committees

The important decisions made by the board often occur in smaller groups or board-level committees (Kesner, 1988). The benefits of using committees has been acknowledged in the literature since 1973 by Bacon and Brown. Therefore, as an advised structural method for improving corporate governance (Spira and Bender, 2004), the effect of board-level committees

dedicated to different CSR issues have been explored in relation to CSR performance. Most studies have investigated the existence of such board-level committees as an independent or control variable (Table 8). Also, more recently in addition to exploring the effect of the existence of said committees on CSR performance, Burke et al (2019a) have focused on the impact of the extent of such committees' diverse responsibilities on CSR performance. The authors argue the relationship between sustainability committee and performance increases when the committee focuses on a specific stakeholder group interests (i.e. social or environment) in relation to the relevant performance. Similarly, Homroy and Slechten (2019) found that a firms' greenhouse gas emissions lower with the existence of an environmental committee. By exploring CSR performance as strategy to complement entrenchment initiatives by managers, Surroca and Tribo (2008) argue that having independent Audit, Nomination and Remuneration board-level committees, what they refer to as independent control committee will have a negative impact on CSR performance. Therefore, stopping mangers from misusing CSR performance.

Table 8: The Impact of Board-Committees on CSR performance

#### 5.5. Board Attribute Interactions

While the literature has predominantly focused on specific board attributes in explaining CSR performance, more recently studies have begun to shift the emphasis to the interactions between two board attributes (Table 9). Although limited, these recent studies are indicating that board attributes do not work in isolation, but affect each other's impact on CSR performance. For instance Walls et al (2012) argued that when explored separately board-size and CEO-duality had positive and non-significant impacts on environmental concerns respectively, yet their interaction had a negative impact on environmental concerns.

Table 9: The Impact of Board Attribute Interactions on CSR performance

#### 6. Underlying Theories

When exploring corporate governance in relation to CSR, especially concerning the implementations of board attributes on CSR performance, the literature has used a wide range of theories. Consistent with previous reviews (Jain and Jamali, 2016), our review identified three main theoretical frameworks that have underpinned the relationship between board attributes and CSR performance; namely agency theory, resource-dependence and stakeholder theory (Table 10). Addionally, to overcome limitations of existent theories and to capture all the complexities of the relevant literature, in recent years some researchers (over 35% of the current sample) have used more than one theory in their theorisation, arguing that one single theory can not comprehensively explain the relationship between various board attributes and CSR performance (e.g. Dixon-Fowler et al., 2017; Hussain et al., 2018; Moussa et al., 2020) . Often agency and resource-dependence theories are coupled together or alongside other theories (Table 10). The reason for this approach may lie on the fact that boards have two main functions, from the agency perspective to overlook and control, and from the resourcedependence perspective to increase access to a variety of resources (Hillman and Dalziel, 2003; Mallin et al., 2013). The belief that board diversity influences performance is also based on the latter perspective (Pfeffer and Salancik, 1978; van der Walt and Ingley, 2003) and often empirically conducted studies imply that board diversity positively impacts CSR performance (e.g. Hafsi and Turgut 2013; Harjoto et al. 2015).

It has been argued that multiple theoretical perspective is a means to fully recognize the diverse roles that the board plays (de Villiers et al., 2011; Moussa et al., 2020). Considering the results obtained in the current review and echoing previous research (Jain and Jamali, 2016), it would seem that this approach is a positive step in developing theory to fully understand the overlap of corporate governance and CSR. Nonetheless, Walls et al. (2012) argue that with all the progress made to understand this, there is still no dominant paradigm to help explain the phenomenon

completely. They go on to suggest that stronger evidence is needed from a "facts" perspective before more theory based empirical research can be conducted.

Table 10: Theory Used in Research explaining the impact of Board attributes on CSR performance

## 7. Discussion and Suggestions for Future Research

Our review sought to unravel multiple attributes of boards and their impact on CSR performance. Specifically, in examining the underpinning effects, our study has distinguished the two prevailing attributes of director characteristics and board structure, where we have highlighted and identified a number of inconsistencies regarding their specific effects in the literature.

## 7.1. Reasons for inconsistencies in the effects of board attributes on CSR performance

First, researchers believe that contextual factors such as the country and industry where the company is active moderates the effects of board attributes on CSR performance (Chams and García-Blandón, 2019; Chang et al., 2017; Harjoto et al., 2015; Jia and Zhang, 2013). Conducting a meta-analysis of 87 independent samples from over 20 countries, Byron and Post (2016) concluded that in countries with greater gender parity and shareholder protection, the relationship between women directors and CSR performance is more positive. This line of reasoning is echoed by Chang et al. (2017) who believe that existing theories used by western countries in regard to the overlap of corporate governance and CSR may not apply in the exact same way in eastern countries, and depends on the institutional contexts of where the organisation lies.

Second, the reason for said discrepancies could lie with conceptualisation and theorisation of the relationship between board attributes and CSR performance. Some researchers have theorised this relationship as linear (Bear et al., 2010; Harjoto and Jo, 2011; Johnson and Greening, 1999). However, more recently it has been suggested that the relationship might be non-linear for some

attributes. For instance, Chang et al. (2017) have demonstrated that the relationship between diversity in directors education and CSR performance is convex (U-shaped). Similarly, de Villiers et al (2011) have suggested that the relationship between board independence and environmental performance is concave (invert U-shaped). Furthermore, some scholars have stated that board attributes in relation to CSR performance are exogenous (e.g. Mallin and Michelon 2011; Rodrigue et al. 2013). Yet, taking into consideration that, in corporate governance, the relationship between director characteristics and organisation performance often tends to be considered endogenous (Adams et al. 2010), some researchers have recently begun treating the relationship as such (e.g. Harjoto et al. 2015; Shaukat et al. 2016). Shaukat et al. (2016) have even found that there is a positive cyclical relation between boards CSR attributes, strategies and CSR performance, and suggested this cyclical relation as an indication of the leaders and laggards in CSR activities.

Furthermore, it has been argued that CSR performance is a complex and multidimensional concept (Harjoto et al., 2015; Mallin and Michelon, 2011; Walls et al., 2012), where different attributes affect different dimensions differently (Francoeur et al., 2019; Galbreath, 2010; Harjoto et al., 2015; Mallin and Michelon, 2011; Naciti, 2019). For instance, Mallin and Michelon (2011) found that the proportion of NEDs affects the overall CSR performance by influencing environmental performance but has no significant effect on other CSR performance dimensions. Also, the authors found board-size as a control variable has no significant effect on the overall CSR performance but positively affects human rights performance. Therefore, as industries tend to implement the social and environmental dimensions differently (Bansal et al., 2014), in explaining the effects of board attributes, recent research suggests an examination of individual CSR performance dimensions (Mallin and Michelon, 2011; Nadeem et al., 2020; Shaukat et al., 2016; Walls et al., 2012)

Lastly, the inconsistent results can be explained by the way CSR is measured. Using different indices may lead to different results (Boulouta, 2013; Shaukat et al., 2016). Particularly as the CSR performance indices used by researchers tend to follow different methodologies, with some using positive screening criteria like Dow Jones or negative screening criteria like KLD and others a mix of both (FTSE4Good) (Fowler and Hope, 2007). Also, some indices are made up of CSR performance concerns or strength or both (Boulouta, 2013). Therefore, considering just the overall score of CSR performance (a linear aggregation of the strength and concerns) may not present the whole picture (Walls et al., 2012).

#### 7.2. Direction for Future Research

Taking all of the above into consideration, it is only natural to reiterate previous literature and suggest future studies are necessary to help shed more light on the aforementioned issues. Specifically, we have identified two suggestions that could address some of the inconsistencies in literature regarding the impact of board attributes on CSR performance.

**7.2.1.** Identifying the Combined Impact of Board Attributes on CSR performance: As mentioned above, it has been argued that the interaction of some board attributes affects CSR performance. By building on these findings and focusing on more than two attributes at a time, a new line of research may lie in identifying the combinations of multiple, interrelated attributes and their impact on CSR performance, where exploring different configurations of board attributes can be seen as a step towards finding a better understanding of the phenomenon. While general linear regression models may be limited in interpreting interactions of more than two variables, new methodological advancement such as Qualitative Comparative Analysis (QCA) would enable the exploration of multiple configurations of board attributes that lead to CSR performance (Misangyi et al., 2017). Board attributes do not work in isolation but interact with each other in shaping CSR performance. For instance, as suggested by some studies female board members, female CEO, female board chair or executive family female-directors positively

impact CSR performance (Cruz et al., 2019; Galbreath, 2010; Mallin and Michelon, 2011; McGuinness et al., 2017). However, the interaction of a female board chair and female-directors has no significant impact (McGuinness et al., 2017). Thus, we may conclude that gender when combined with all these attributes can create different outcomes than in isolation.

7.2.2. Identifying Board-level CSR Committee Attributes and their Combined impact on **CSR performance:** The composition of board-level committees are also important as they may differ from the boards as a whole (Kesner, 1988). In business, where the importance of relations with key stakeholders have become paramount, organisations voluntarily set up additional board-level committees dedicated to stakeholder interests and concerns (Burke et al., 2019a; Dixon-Fowler et al., 2017). However, it has been argued that prior studies have predominantly focused on exploring the implication of the board as a whole (Johnson et al., 2013; Kesner, 1988). There is limited research on board-level sustainability committees as a component of board structure. While the literature is divided on the role of the existence of these committees on CSR performance (Burke et al., 2019a; Dixon-Fowler et al., 2017), the composition of these committees and their effect on CSR performance have remained largely unexplored; notwithstanding the efforts of Eberhardt-Toth (2017) who examined the composition of the board-level sustainability committee of 177 non-financial companies in relation to obtaining higher sustainability performance. The results indicate that higher CSR performance has a positive relation with some characteristics within the sustainability committee. Therefore, another new line of research would examine the effect of board-level sustainability committee attributes, composition and interaction with other board attributes on CSR performance.

#### 8. Theoretical and Practical Implementation

From a theoretical perspective by identifying and distinguish between two prevailing board attributes; namely board characteristics and board structures. Our study uncovers similarities and inconsistencies regarding the effects of board attributes on CSR performance. Specifically,

we find substantial variation in conceptualisations, theoretical frameworks used, the use of measurements as well as the contexts across studies. The identified factors provided a basis to explain the inconsistent results, identify research gaps and offer directions for future research. While there has been a call for examining corporate social responsibility in light of corporate governance mechanisms (Jain and Jamali, 2016; Walls et al., 2012), only a few comparative studies have adopted a corporate governance view in explaining CSR performance. Our study contributes to this line of research by extending the understanding of the role of board attributes in CSR performance through offering a synthesis of dominant scholarly discourses and an organising lens for future scholarship. Furthermore, the move towards multi-theory usage in recent literature is seen as a positive step to better understand this research area and the need to explore culture and country when applying theory is suggested.

From a practical point of view our study reveals that board attributes do not work in isolation but interact with each other in shaping CSR performance. This calls for practitioners to consider the combinatory effects of these attributes in forming a board that can help promote CSR performance. For instance when appointing female-directors, chairs and CEOs although argued as impacting CSR performance positively (Cruz et al., 2019; Galbreath, 2010; Mallin and Michelon, 2011; McGuinness et al., 2017), companies would need to consider the positions appointed as it has been suggested that the interaction of a female board chair and female-directors has no significant impact (McGuinness et al., 2017). On the other hand, the number of female-directors and the diversity of age among these directors is argued to have positive impact on CSR performance (Jia and Zhang, 2013). Indicating that not only the role but the number and age of females appointed at board level matters. Relevant CSR specific training and knowledge is also important and it has been indicated that directors with CSR knowledge and training have a positive impact on CSR performance (Galbreath, 2017; Homroy and Slechten, 2019). Overall,

it can be argued that the composition of the director attributes sitting at the board table needs to be considered and not individual attributes.

#### 9. Conclusions

This systematic review of literature was conducted with the aim of identifying what literature says regarding board attributes associated with directing CSR goals in the organisation. The effect of director characteristics and board structure, as two dimensions of board attributes, on CSR performance and the external elements impacting the effect of this relationship - that contribute to the inconsistent results found in the current literature - was explored. To the knowledge of the authors, this is the first review to take this point of view. This is especially important as it has been suggested that board structures, though fundamental components in corporate governance, can only fully explain CSR performance alongside director characteristics (Hafsi and Turgut, 2013). By building on the literature, some answers were provided for the main research question. What is the impact of Corporate Governance at board-level on Corporate Social Responsibility Performance? However, new questions have arisen, particularly in regard to exploring the impact of more than two board attribute at a time. The answers to such questions may lie in exploring the areas identified for future research in this paper.

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Table 1: The Impact of Director Gender Attributes on CSR performance

Year	Author	Female- Director***		Other Female Attributes	CSR performance <sup>1</sup> Dimension*		CSR performance Index	Results with respect to CSR performance
		%	No.		Social	Environmental		performance
2020	Nadeem et al.	X			X	Ç.	ASSET4	+
						X		+
2020	Olthuis and van-den- Oever			Gender Diversity (Blauindex)	· C	CSR	Telos	0
2019	Chams and Garcia- Blandon	X			CSR		Dow-Jones Sustainability Index	+
	Cruz et al.	x			Employee & Community			+
2019					Employee			+
					Community			+
				Age	Employee & Community			0
					Employee			0
					Community			0
				Tenure	Employee & Community			0
					Employee			0
					Community			0
				Minimum one family	Employee & Community			+

<sup>&</sup>lt;sup>1</sup> Corporate Social Responsibility Performance

	Т	1			Б 1			
				executive	Employee		_	+
				director  Minimum one non-family executive director	Community			+
					Employee + Community			0
					Employee			0
					Community			0
			Minimum one family non-	Employee + Community	Ś.	1	0	
				executive director	Employee	-0)		0
					Community	0		0
				Minimum one non-family non-	Employee + Community			+
				executive	Employee			+
				director	Community			+
	Francoeur et al.	x		7071L	CSR		Sustainalytics	+
					(0)	X		+
2010					Employees			0
2019					Contractors			+
					Customers			0
					Community			+
2019	Lu and Herremans			Gender Diversity (Blau- index)		x	Sustainalytics	+
2019	Oh et al.	X		·	CSR		Korea Economic Justice Institute	0
2018	Cook and Glass	x		Community		KLD	+	
				Strength				
			Λ		Product Strength			0
						Strengths		+

2018	Galbreath	х			CSR	Sustainable Investment Research Institute	+
2018	Hussain et al	х		X	x	Company Sustainability Reports	0 +
2017	Adams et al.	X		Donating  Amount	, oó	Annual reports, Accounts, Internet and Charity sources, and UK insurance company directories	+++
2017	Cho et al.	х		Community Donations Employee Benefit Diversity Commitment CSR		KLD	+ + + + +
2017	McGuinness et al.	X	CEO/Vice-CEO Chair/Vice- Chair		CSR	Rankins	+ + + +
2016	Byron and Post		Presence		All	Several(meta- analysis)	+
2016	Galbreath	X		CSR		Sustainable Investment Research Institute	+
2016	Glass et al.	X	No. Interlinks CEO		Strengths/Concerns	KLD	+/0 +/0 0/0

2016	Jain and Jamali		Diversity		CSR	Review	
2016	Rao and Tilt		Diversity		All	Review	
			%executive director			Disclosure notes	0
2015	Ellwood and Garcia-Lacalle		%non-executive director	Clinical negligence costs		on financial statements of NHS	0
			Chair		Ç.	Foundation Trust	+
			CEO		0)		+
			11.	CSR	Overall****		+
2015	Harjoto et al		Heterogeneity Index	CSR	Strengths	KLD	+
			Index	CSR Concerns			-
2015	Périlleux and		Female- dominated	Average loan size		UM-PAMECAS —	0
2010	Szafarz		boards	% female borrowers			+
2015	Post et al.	X			Strengths	KLD	+
				CSR (	Overall****		+
2013	Boulouta	X	10	CSR Strengths		KLD	0
			3	CSR Concerns			-
2013	Hafsi and Turgut	X		CSR	Strengths	KLD	+
			Critical mass			China Securities	+
2012			Age diversity	Corporate		Regulatory	0
2013	Jia and Zhang		Chair/CEO	Philanthropy disaster response		Commission, corporate website	0
						and press release	
2013	Kabongo et al.	X		Corporate Philanthropy		KLD	+
2013	Marquis and	X		Corporate		National Directory	+

	Lee				Philanthropy		of Corporate Giving	
2013	Zhang et al.	X			Reputatio	on-based CSR	FORTUNE magazine's America's Most Admired Corporations	+
2012	Walls et al.	X				Strength	KLD	0
				Gender Diversity (Blau-	<	Concern		0
2011	Jia and Zhang			index)  %Female on Supervisory Board	Corporate Philanthropy disaster		Corporate Disclosure	0
						CSR		+
		v			Community		KLD	+
2011	Mallin and Michelon				Employee Relations			+
	Wilchelon					X		0
					Human Rights			+
					Product Quality	de ste ste ste		0
						Overall****	_	0
2011	Post et al.			3≥		Strengths	KLD	+
						Concerns		0
2010	Door of -1	ear et al. x		Institutional strength		KID	+	
2010	Bear et al.			Technical strength		KLD	+	

					Board Oversight on climate-change governance		0
					Management Execution on climate-change governance	Coalition for	0
2010	Galbreath	X			Public Disclosure on climate-change governance	Environmentally Responsible Economies	0
				2,6,0	Emissions Accounting on climate-change governance		0
					Strategic Planning on climate-change governance		0
				Corporate Philanthropy (total Donations)			+
				Community service Donations		Corporate 500 Directory of Corporate	+
2003	Williams	X		Arts and Cultural Donations		Philanthropy and National Directory of Corporate	+
				Education Donations		Giving	0
				Public Policy Donations			0
1998	Coffey and	X		Corporate		Council on	0

	Wang		Philanthropy	Economic Priorities	
1996	Siciliano	Diversity	х	240-YMCA Organizations Data and Survey	+
1992	Wang and Coffey	%Female and Minority	Corporate Philanthropy	Council on Economic Priorities	+

<sup>\*</sup> If clearly mentioned in the study a sub-dimension of social and environmental performance has been used this has been recorded under related CSR-dimension. If the environmental/social strengths, concerns or overall performance were used this was recorded as either "strength", "concern", "overall" under the related dimension. Where only social or environmental is mentioned, "x" has been placed in the corresponding cell.

\*\* 0: non-significant, +: positive and -: negative

Table 2: The Impact of Director Knowledge, Skills, Expertise and Experience on CSR performance

<sup>\*\*\*</sup> Where the proportion of female-directors on the board has been considered in the study "x" has been put under "%". Where the number of female-directors has been considered in the study "x" has been put under "No."

<sup>\*\*\*\*</sup> A linear aggregation of the strengths and concerns scores

			CSR perfor	rmance Dimension*	CSD nonformana	Results
Year	Author	Factor	Social	Environmental	- CSR performance Index	Concerning CSR performance **
		Higher Education				0
		PhD				0
	Chams and	MBA			Dow-Jones	0
2019	2019 Garcia- Blandon	Engineering Degree		CSR	Sustainability Index	0
		Business Degree				0
		Western European Education		3.0		0
	Homroy 2019 and Slechten	Legal Expert				0
2019		Existence of non- executive directors with previous experience in environmental issues(EEDs)	JOUITA	Greenhouse gas emissions	European Pollutant Release and Transfer Register	+
		No. EEDs	S			+
2019	Oh et al.	Educational Diversity		CSR	Korea Economic Justice Institute	0
2018	Crifo et al	%General Experts			Vices detabase	0
2018	Chio et ai	%Sector Experts		X	Vigeo database	0
2017	Adams et	Financial Expertise	Donating		Annual reports, Accounts, Internet and Charity sources, and	-
	al.	1	Amount		UK insurance company directories	-

2017	Chang et al.	Educational Diversity		CSR	Korea Economic Justice Institute	U
		Professor-Director Existence				+/+/+
		%Professor- Director	Community Donations/Employee			+/+/+
		%Business professor–directors	Benefit/Diversity Commitment			0/0/0
2017	Cl 4 - 1	%Specialized professor–directors		o <sup>N</sup>	KI D	+/+/+
2017	Cho et al.	Professor-Director Existence		010	- KLD	0
		%Professor- Director		CSR		+
		%Business professor–directors		CSK		0
		%Specialized professor–directors				+
2017	Dixon- Fowler et al.	Environmental Stakeholder Representative on Board Environmental committee	20111.	Strengths	KLD	0
2017	Galbreath	Executive director		X	GES Investment	+
2017	Gaiorean	CSR training	X		Services	+
2016	Jain and Jamali	Experience (Seniority, functional, occupational		CSR	Reviev	V

		background)				
2015	Harjoto et	Outside Directorship Heterogeneity	CSR Overall*	**/Strengths/Concerns	KLD	0/0/0
		Expertise Heterogeneity				+/0/-
2015	Ortiz-de- Mandojana 2015 and Aragon- Correa,	No. Interlock		x	US Environmental Protection Agency	+(when linked to a larger parent company)
		Industry Diversity Interlock		.0,0	Protection Agency	+(for low and high diversity)
2013	Bai	Government Official	X	8	Archival data from California for profit	-
		Physicians			hospitals	+
2013	Hafsi and Turgut	Committee experience	CS	R Strengths	KLD	0
2013	Rodrigue et al.	Environmental	100	Regulatory performance	KLD	0
	ai.			Pollution prevention		0
2013	Walls and Hoffman	Environmental		Positive Environmental Deviance	KLD	+
				CSR		+
			Community			+
2011	Mallin and	Community	Employee Relations		KLD	0
2011	Michelon	Influence	Human Rights			0
			Product Quality			-
				X		+

2011	2011 Post et al.	%Directors Masters' Degree or above		Environment:	WID	0/0/0
2011		% Directors Educated in western Europe		Overall***/Strength/Concerns	KLD	0/0/0
	de Villiers	Directors on multiple boards				0
2011	et al.	CEOs of other firms		Strengths	KLD	+
		Lawyer		*O		+
		Director Diversity	Institutional strengths	.0)		0
2010	Bear et al.	(experience and knowledge)	Technical strengths	10/1	KLD	0
1996	Siciliano	Occupational Diversity	X		240YMCA Organizations Data and Survey	+

<sup>\*</sup> If clearly mentioned in the study a sub-dimension of social and environmental performance has been used this has been recorded under related CSR-dimension. If the environmental/social strengths, concerns or overall performance were used this was recorded as either "strength", "concern", "overall" under the related dimension. Where only social or environmental is mentioned, "x" has been placed in the corresponding cell \*\* 0: non-significant, +: positive and -: negative

Table 3: The Impact of Director Age on CSR performance

<sup>\*\*\*</sup> A linear aggregation of the strength and concerns scores

Year	Author	Measur		Other Measures	CSR performan		CSR performance Index	Results Concerning CSR
		Average	Diversity		Social	Environmental	Illucx	performance **
2019	Chams and Garcia- Blandon	X			CS	SR	Dow-Jones Sustainability Index	Curvilinear
2010	Cook and				Community Strength	C	W.D.	0
2018	Glass	X			Product Strength	Strengths	KLD	0
						6		+
2017	Chang et al.	Х			CSR		Korea Economic Justice Institute	0
2016	Glass et al.	•			.(0)	Strengths	KLD	+
2010	Giass et al.	X				Concerns	KLD	+
					CSR Overall****			0
2015	Harjoto et al			Heterogeneity Index	CSR Strengths		KLD	0
				Index	CSR Concerns			0
2013	Hafsi and Turgut		Х	10/1/	CSR		KLD	-
				2		Overall****		0
2011	Post et al.	X				Strengths	KLD	0
						Concerns	1	0
2010	Galbreath	x				Board Oversight on Climate-change governance Management Execution on	Coalition for Environmentally Responsible Economies	+
						Climate-change governance		+

				Public Disclosure on Climate-change governance		0
				Emissions Accounting on Climate-change governance		0
			01	Strategic Planning on Climate-change governance		0
1996	Siciliano	X	x		240-YMCA Organizations Data and Survey	+

<sup>\*</sup> If clearly mentioned in the study a sub-dimension of social and environmental performance has been used this has been recorded under related CSR-dimension. If the environmental/social strengths, concerns or overall performance were used this was recorded as either "strength", "concern", "overall" under the related dimension. Where only social or environmental is mentioned, "x" has been placed in the corresponding cell \*\* 0: non-significant, +: positive and -: negative

Table 4: The Impact of Director Tenure on CSR performance

Year	Author	Tenure Measurement***	CSR performance Dimension*	CSR performance	Results Concerning
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<sup>\*\*\*</sup> Where age is measured as the average age of all directors on the board "x" has been put under "Average". Where age is measured as diversity of as the directors age on the board "x" has been put under "Diversity"

<sup>\*\*\*\*</sup> A linear aggregation of the strength and concerns scores

		Average	Diversity	Social	Environmental	Index	CSR performance **
2020	Olthuis and van- den-Oever		X		SR	Telos	+
				CSR C	Overall****	MCCLECC CTATC	0
2019	Burke et al.	X		CSR S	trengths	- MSCI ESG STATS - (formerly KLD)	-
				CSR C	oncerns	(IOIIIICITY KLD)	0
2019	Homroy and Slechten	X			Greenhouse gas emissions	European Pollutant Release and Transfer Register	0
				CSR C	Overall****		+
2015	Harjoto et al		X	CSR S	trengths	KLD	0
				CSR Concerns			-
2013	Hafsi and Turgut		X	CSR S	trengths	KLD	0
2013	Walls and Hoffman	X		0	Positive Environmental Deviance	KLD	0
2011	de Villiers et al.	X			Strengths	KLD	0

<sup>\*</sup> If clearly mentioned in the study a sub-dimension of social and environmental performance has been used this has been recorded under related CSR-dimension. If the environmental/social strengths, concerns or overall performance were used this was recorded as either "strength", "concern", "overall" under the related dimension. Where only social or environmental is mentioned, "x" has been placed in the corresponding cell

Table 5: The Impact of Board Independence on CSR performance

<sup>\*\* 0:</sup> non-significant, +: positive and -: negative

<sup>\*\*\*</sup> Where tenure is measured as the average tenure of all directors on the board "x" has been put under "Average". Where tenure is measured

as the diversity of directors' tenure on the board "x" has been put under "Diversity"

<sup>\*\*\*\*</sup> A linear aggregation of the strength and concerns score

		NEI	D <sup>2***</sup>		CSR performance	Dimension*	CSR	Results
Year	Author	%	No. Other Measurements		Social	Environmental	performance Index	Concerning CSR performance **
2020	Endo	x				X	Nikkei newspaper's annual Environmental Management Survey	+
					CSR Over		MSCI ESG	+
2019	Burke et al.	X			CSR Stren	<u> </u>	- STATS	+
					CSR Conc	cerns		0
2019	Chams and Garcia-Blandon	x			CSR		Dow-Jones Sustainability Index	0
					Employee+Community			0
2019	Cruz et al.	X			Employee		CSRHub	+
					Community			0
2019	Homroy and Slechten	x		200		Greenhouse gas emissions	European Pollutant Release and Transfer Register	0
2019	Oh et al.	Х			CSR		Korea Economic Justice Institute	+
					CSR			-
2019	Naciti	ti x				X	Sustainalytics	0
					X			-

-

<sup>&</sup>lt;sup>2</sup> Non-Executive director

		X					0
2018	Crifo et al		%Executive Directors		X	Vigeo database	+
2018	Galbreath	X		CSR		Sustainable Investment Research Institute	0
2018	Hussain et al	X			x	Company Sustainability	+
				Х		Reports	+
				Donation		Annual reports, Accounts,	+
2017	Adams et al.	X		Amount Donated		Internet and Charity sources, and UK insurance company directories	+
2017	Chang et al.	X	10,7	CSR		Korea Economic Justice Institute	Exponentially growing shape
			3	Community Donations			+
2017	Cho et al.	***		Employee Benefit		- KLD	0
2017	Cho et al.	X		Diversity Commitment		KLD	+
				CSR			0
2017	McGuinness et al.	X		CSR		Rankins	0
2017	Walls and Berrone	X			X	Trucost	0
2016	Galbreath	X		CSR		Sustainable Investment Research	+

							Institute	
2016	Jain and Jamali			Independence	CSR		Revi	ew
2015	Ellwood and Garcia-Lacalle	X			Clinical negligence costs		Disclosure on financial statements of NHS Foundation Trust	0
2015	Post et al.		X			Strengths	KLD	0
					CSR			+
2014	Fabrizi et al. 2014			%NED>33%	Community		EIRIS	+
		121 Ct al. 2014		701(227 5570	Employee			0
						X		0
2012	Boulouta			Ratio: NEDs-to-	NEDs-to-			0
2013		Executive-Directors		Executive-Directors	CSR Strer		KLD	0
2013	Choi et al.	X			CSR COR	Letiis	Korea Economic Justice Institute	+
2013	Hafsi and Turgut	X		70	CSR Strengths		KLD	0
2013	Kabongo et al.	X		)	Corporate Philanthropy		KLD	0
2013	Walls and Hoffman	х				Positive Environmental Deviance	KLD	0
2013	Zhang et al.	X			Reputation-based CSR		FORTUNE magazine's America's Most Admired Corporations	+

2012	Harrison and Coombs	X		Community		KLD	0
2012	Walls et al.	X			Strengths	KLD	0
2012	wans et al.	Λ			Concerns	KLD	+
2011	de Villiers et al.	X			Strengths	KLD	+
2011	Harjoto and Jo	X		CSR		KLD	+
					Overall****		0
2011	Post et al.	X			Strengths	KLD	+
				.0	Concerns		0
				CSR			+
		х		Community			0
2011	Mallin and Michelon			Employee Relations		KLD	0
2011				Human Rights			0
				Product Quality			0
				70.	X		+
			2011	Board Oversight on Climate-change governance			+
				Management Execution on Climate- change governance		Coalition for	+
2010	Galbreath		Ratio: Executive- Directors-to-NEDs	Public Disclosure on Climate-change governance		Environmentally Responsible Economies	+
				Emissions Accounting on Climate-change governance			0
				Strategic Planning on Climate-change			+

				governance			
				Corporate Philanthropy (total Donations)		Corporate 500 Directory of	0
	Williams		Ratio: Executive-	Community service Donations		Corporate Philanthropy	0
2003			Directors-to-NED	Arts and Cultural Donations		and National Directory of	0
				Education Donations		Corporate	0
				Public Policy Donations	)	Giving	0
2007	Parthiban et al.	X		CSR		KLD	0
2008	Surroca and Tribo		%NED with respect to the mean value of sector	CSR		Sustainable Investment Research Institute	-
2006	Brown et al.		%Executive- Directors	Corporate Philanthropy		Corporate Giving Directory	0
2006	Deckop et al.	X		CSR		KLD	-
	Johnson and			People (Community, Employee relations)			+
1999	Greening	X			Product (Environment, Product quality)	KLD	+
1998	Coffey and Wang		Executive Directors/NED	Corporate Philanthropy	1 3/	Council on Economic Priorities	+

1992	Wang and Coffey		Executive Directors /NED	Corporate Philanthropy		Council on Economic Priorities	+
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<sup>\*</sup> If clearly mentioned in the study a sub-dimension of social and environmental performance has been used this has been recorded under related CSR-dimension. If the environmental/social strengths, concerns or overall performance were used this was recorded as either "strength", "concern", "overall" under the related dimension. Where only social or environmental is mentioned, "x" has been placed in the corresponding cell \*\* 0: non-significant, +: positive and -: negative

Table 6: The Impact of CEO-Duality on CSR performance

		CSR performan	ce Dimension*	CSR performance	Results Concerning
Year	Author	Social	Environmental	Index	CSR performance

<sup>\*\*\*</sup> Where the proportion of NEDs on the board has been considered in the study "x" has been put under "%". where the number of NEDs has been considered in the study "x" has been put under "No."

<sup>\*\*\*\*</sup> A linear aggregation of the strengths and concerns scores

2020	Moussa et al.		Greenhouse gas emissions	ASSET4	+ (high carbon ☐ intensive industries)  0 (low carbon ☐ intensive industries)  +
2020	Nadeem et al.	X	X	ASSET4	0
2019	Chams and Garcia- Blandon	CS	SR	Dow-Jones Sustainability Index	0
2019	Homroy and Slechten		Greenhouse gas emissions	European Pollutant Release and Transfer Register	0
	Naciti	CS			+
2019			X	Sustainalytics	+
		X			0
		Community Strengths	(O)	<u> </u>	0
2018	Cook and Glass	Product Strengths		KLD	0
			Strengths		0
2018	Galbreath	CSR		Sustainable Investment Research Institute	0
2018	Hussain et al.		X	Company	-
2018	nussam et ai.	X		Sustainability Reports	0
		Donation		Annual reports,	0
2017	Adams et al.	Amount Donated		Accounts, Internet and Charity sources, and UK insurance company directories	0
2017	Cho et al.	Community Donations		KLD	-

		Employee Benefit			0
		Diversity Commitment			0
		CS	R		0
2017	Galbreath		X	GES Investment	0
2017	Gaioreani	X		Services	0
2017	McGuinness et al.	CS	R	Rankins	0
2016	Galbreath	CSR		Sustainable Investment Research Institute	0
2016	Glass et al.		Strengths	KLD	0
2016	Glass et al.		Concern	KLD	+
2016	Jain and Jamali	CSR		Revie	ew
2013	Hafsi and Turgut	CSR Str		KLD	0
2013	Walls and Hoffman		Positive Environmental Deviance	KLD	0
		70	Strengths		0
2012	Walls et al.	2	Concern	KLD	0
2011	de Villiers et al.		Strengths	KLD	0
		CS	R		-
		Community			0
2011	Mallin and	Employee Relations		KLD	-
	Michelon	Human Rights			0
		Product Quality			0
			X		0

			Overall****		0
2011	Post et al.		Strengths	KLD	0
			Concerns		0
2010	Bear et al.	Institutional strengths		KLD	+
2010	Bear et al.	Technical strengths		KLD	0
2010	Galbreath	Board Oversight on Climate-change governance Management Execution on Climate-change governance Public Disclosure on Climate-change governance Emissions Accounting on Climate-change governance Strategic Planning on Climate-change governance Board Oversight on Climate-change	al President	Coalition for Environmentally Responsible Economies	+ + 0 0
		governance			
2008	Surroca and Tribo	CS	SR	Sustainable	0
				Investment Research Institute	

- \* If clearly mentioned in the study a sub-dimension of social and environmental performance has been used this has been recorded under related CSR-dimension. If the environmental/social strengths, concerns or overall performance were used this was recorded as either "strength", "concern", "overall" under the related dimension. Where only social or environmental is mentioned, "x" has been placed in the corresponding cell
- \*\* 0: non-significant, +: positive and -: negative
- \*\*\* A linear aggregation of the strength and concerns scores

Table 7: The Impact of Board-Size on CSR performance

Year	Author	CSR performan	ce Dimension*	CSR performance	Results Concerning CSR
	Author	Social	Environmental	Index	performance **

				Nikkei newspaper's		
2020	Endo		X	annual Environmental	+	
= 3 = 3				Management Survey	·	
				Trianagement Sarvey	0 (high carbon□	
					intensive	
	Moussa et al.		Greenhouse gas		industries)	
2020			emissions	ASSET4	0 (low carbon □	
			Cimissions		intensive	
					industries)	
					+	
2020	Olthuis and van-den- Oever	CS	SR SR	Telos	-	
		CSR O	verall***		+	
2019	Burke et al.	CSR Str	rengths	MSCI ESG STATS	+	
		CSR Co			-	
2019	Chams and Garcia- Blandon	CS	SR	Dow-Jones Sustainability Index	+	
2019	Homroy and Slechten	10/11/1	Greenhouse gas emissions	European Pollutant Release and Transfer Register	0	
2019	Lu and Herremans	)	X	Sustainalytics	+	
2019	Oh et al.	CS	R	Korea Economic Justice Institute	0	
		Community Strengths			+	
2018	Cook and Glass	Product Strengths		KLD	0	
			Strengths		+	
				Sustainable		
2018	Galbreath	CSR		Investment Research	0	
				Institute		
2018	Hussain et al		X	Company	0	

			X	Sustainability Reports	0
2017	Chang et al.	CS	R	Korea Economic Justice Institute	+
		CS	R		+
2017		Community Donations		W D	+
2017	Cho et al.	Employee Benefit		KLD	0
		Diversity Commitment	-0		+
2017	McGuinness et al.	CS	R	Rankins	+
2016	Jain and Jamali	CS	R	Revie	w
2015	Ellwood and Garcia- Lacalle	Clinical negligence costs	Pros	Disclosure notes on financial statements of NHS Foundation Trust	0
2015	Ortiz-de-Mandojana and Aragon-Correa	.:(\)?	X	US Environmental Protection Agency	0
			Overall***		0
2011	Post et al.	10	Strengths	KLD	0
		)	Concerns		0
2013	Bai	X		Archival data from California hospitals	-(for- profit)/+(non- profit)
2013	Choi et al.	CS	R	Korea Economic Justice Institute	0
2013	Jia and Zhang	Corporate Philanthropy disaster response		China Securities Regulatory Commission, corporate website and press release	0

2013	Kabongo et al.	Corporate Philanthropy		KLD	+
2013	Marquis and Lee	Corporate Philanthropy		National Directory of Corporate Giving	+
2013	Walls and Hoffman		Positive Environmental deviance	KLD	-
2012	Walls et al.		Strengths	KLD	0
2012	vv ans et ar.		Concerns	KLD	+
2011	de Villiers et al.		Strengths	KLD	+
2011	Jia and Zhang	Corporate Philanthropy disaster	.,0	Corporate Disclosure	+
	Mallin and Michelon	CSR	40		0
		Community			0
2011		Employee Relations		KLD	0
2011		Human Rights		KLD	+
		Product Quality			0
			X		0
		Board Oversight on Climate-change governance			+
2010	Galbreath	Management Execution on Climate- change governance		Coalition for Environmentally	+
	Guiorean	Public Disclosure on Climate-change governance		Responsible Economies	+
		Emissions Accounting on Climate-change governance			+

		Strategic Planning on			+
		Climate-change			
		governance Board			
2006	Brown et al.	Corporate		Corporate Giving	+
		Philanthropy		Directory(2000)	
				Enforcement and	
				Compliance	
2002	Kassinis and Vafeas		Violation	Assurance	+ (breaks law)
			X	Accomplishments	
				Report	
			40	240-YMCA	+
1996	Siciliano	X		Organizations Data	
				and Survey	

<sup>\*</sup> If clearly mentioned in the study a sub-dimension of social and environmental performance has been used this has been recorded under related CSR-dimension. If the environmental/social strengths, concerns or overall performance were used this was recorded as either "strength", "concern", "overall" under the related dimension. Where only social or environmental is mentioned, "x" has been placed in the corresponding cell

Table 8: The Impact of Board-Committees on CSR performance

Year	Author	Committee	CSR performance Dimension*	CSR performance	Results Concerning
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<sup>\*\* 0:</sup> non-significant, +: positive and -: negative

<sup>\*\*\*</sup> A linear aggregation of the strength and concerns scores

					Index	CSR performance **
			CSR Overall***			0
			CSR Strength			+
			CSR Concern			+
			Community Strengths			Focus>No focus
			Employee relations Strengths	ķ		Focus>No Focus
2010	D 1 4 1	COD	Consumer & Supplier Strengths	100,	MSCI ESG	Focus>No Focus
2019	Burke et al.	CSR		Strengths	STATS	Focus>No Focus
			Community Concerns			Focus=No Focus
			Employee relations Concerns			0
			Consumer & Supplier Concerns			Focus=No Focus
			Concerns			Focus>No Focus
	Chams and Garcia-	No. Committees	10		Dow-Jones	+
2019	Blandon	CSR	CSR		Sustainability Index	0
2019	Homroy and Slechten	Environment		Greenhouse gas emissions	European Pollutant Release and Transfer Register	+
2010		CGD		Х	Company	+
2018	Hussain et al	CSR	Х		Sustainability Reports	+
2017	Dixon-Fowler et al.	Environmental		Strengths	KLD	+

2017	Walls and Berrone	CSR		х	Trucost	0
2013	2013 Rodrigue et al.	Environmental		Regulatory performance	- KLD	0
2013	Rodrigue et al.	Environmentar		Pollution prevention	KLD	0
2012				Strengths	W 5	+
2012	2012 Walls et al.	Environmental		Concerns	KLD	+
2011	de Villiers et al.	Governance		Strengths	KLD	+
			CSR			0
			Community			+
2011	Mallin and	CSR/Director	Employee Relations		– KLD	0
2011	Michelon	responsible for CSR	Human Rights			+
			Product Quality			0
				X		0
2008	Surroca and Tribo	Control Committee (existence of Audit, Nomination and Remuneration committees with NEDs)	CSR		Sustainable Investment Research Institute	-

<sup>\*</sup> If clearly mentioned in the study a sub-dimension of social and environmental performance has been used this has been recorded under related CSR-dimension. If the environmental/social strengths, concerns or overall performance were used this was recorded as either "strength", "concern", "overall" under the related dimension. Where only social or environmental is mentioned, "x" has been placed in the corresponding cell \*\* 0: non-significant, +: positive and -: negative

<sup>\*\*\*</sup> A linear aggregation of the strength and concerns scores

Table 9: The Impact of Board Attribute Interactions on CSR performance

Year	Author	Interceptions	CSR performan	ce Dimension*	CSR performance	Results Concerning	
1	eai	Author	Interactions	Social	Environmental	Index	CSR performance **

2010	Homroy and	EED <sup>3</sup> *average tenure of EEDs		Greenhouse gas	European Pollutant	+
2019	Slechten	EEDs*Environmental- Committee		emissions	Release and Transfer Register	+
2018	Hussain et al			X	Company	-
2010	Trussam et ar		X		Sustainability Reports	0
2017	Galbreath	Insider*Insider CSR Training		X	GES Investment	+
2017	Gaioreani	misider misider CSK Training	X		Services	+
2017	McGuinness et al.	Female CEO*Female- Director	CS	<sup>10</sup> 0,	Rankins	0
2017	McGuilliess et al.	Female Chair*Female- Directors	Cs	K	Rankins	0
2016	Galbreath	Non-executive*Female- Director	CS	R	Sustainable Investment Research Institute	+
2013	Jia and Zhang	Critical Mass of Female- Directors*Age Diversity of Female-Directors	Corporate Philanthropy disaster response		China Securities Regulatory Commission, corporate website and press release	+
2013	Walls and Hoffman	Degree- centrality <sup>4</sup> *Environmental Expertise		Positive Environmental deviance	KLD	+
		Eigenvector <sup>5</sup> *Environmental Expertise				+
2012	Walls et al.	Non-executive*CEO-Duality		Strengths	KLD	-

<sup>&</sup>lt;sup>3</sup> Non-executive directors with previous experience in environmental issues
<sup>4</sup> "short-term influencing effects"
<sup>5</sup> "friends-of-friends influence"

		Concerns	-
Boa	oard-Size*CEO-Duality	Concerns	-

<sup>\*</sup> If clearly mentioned in the study a sub-dimension of social and environmental performance has been used this has been recorded under related CSR-dimension. If the environmental/social strengths, concerns or overall performance were used this was recorded as either "strength", "concern", "overall" under the related dimension. Where only social or environmental is mentioned, "x" has been placed in the corresponding cell

Table 10: Theory Used in Research explaining the impact of Board attributes on CSR performance

	Author*		Theory							
Year		Agency	Resource- Dependence	Stakeholder	Critical mass	Resource-based view	Upper Echelons	Others**		
2020	Endo	X	X							
2020	Moussa et al.	X	X					X		
2020	Nadeem et al.		X	X						
2020	Olthuis and van-den- Oever						X			
2019	Burke et al.							X		

<sup>\*\*0:</sup> non-significant, +: positive and -: negative

2010	Chams and Garcia-							
2019	Blandon			X				
2019	Cruz et al.							X
2019	Francoeur et al.							X
2019	Homroy and Slechten		X					
2019	Lu and Herremans		X					
2019	Naciti	X		X				
2019	Oh et al.	X	X		C			X
2018	Cook and Glass				X			X
2018	Galbreath			X				
2018	Hussain et al	X		X				
2017	Adams et al.			X	) '			
2017	Chang et al.	X	X	.01				
2017	Dixon-Fowler et al.	X	X					
2017	McGuinness et al.				X			
2016	Byron & Post						X	
2016	Galbreath	X		<b>O</b> -1		X		
2016	Shaukat et al.	X	X			X		
2015	Ellwood and Garcia-			X			X	X
2013	Lacalle		10	Λ			Α	A
2015	Ortiz-de-Mandojana and					X		X
	Aragon-Correa					Λ		Λ
2015	Harjoto et al.			X				
2015	Périlleux and Szafarz							X
2015	Post et al.		X				X	
2013	Boulouta							X
2013	Hafsi and Turgut	X	X					
2013	Jia & Zhang				X			
2013	Kabongo et al		X					
2013	Marquis and Lee						X	
2013	Rodrigue et al.							X

2013	Walls and Hoffman						X
2013	Zhang et al.						X
2012	Harrison and Coombs	X		X			
2011	Post et al.	X			X		
2011	de Villiers et al.	X	X				
2011	Harjoto and Jo	X					
2011	Jia and Zhang	X					
2011	Mallin and Michelon	X	X	X	C		X
2010	Bear et al.	X	X				X
2010	Galbreath	X					
2008	Surroca and Tribo	X					
2006	Brown et al.	X			) `		
2002	Kassinis and Vafeas	X	X	.01			
1999	Johnson and Greening	X	X	X			
1996	Siciliano		X				X
1992	Wang and Coffey	X					

<sup>\*</sup> Only studies included where the theory/theories used/contributed to were clearly stated by the researchers

<sup>\*\*</sup> Includes theories that have been used in one or maximum two of the sample literatures and are as follows: Accountability, Social Role, Stewardship, Social Capital, Token, Role Congruity, Systematic, Substantive, Institutional, Legitimacy, Signalling, Impression Management and Pluralism

Figure 1: Research Framework

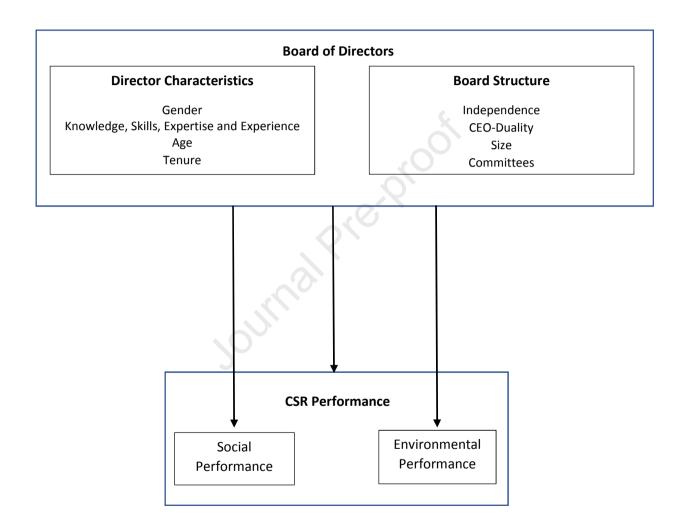
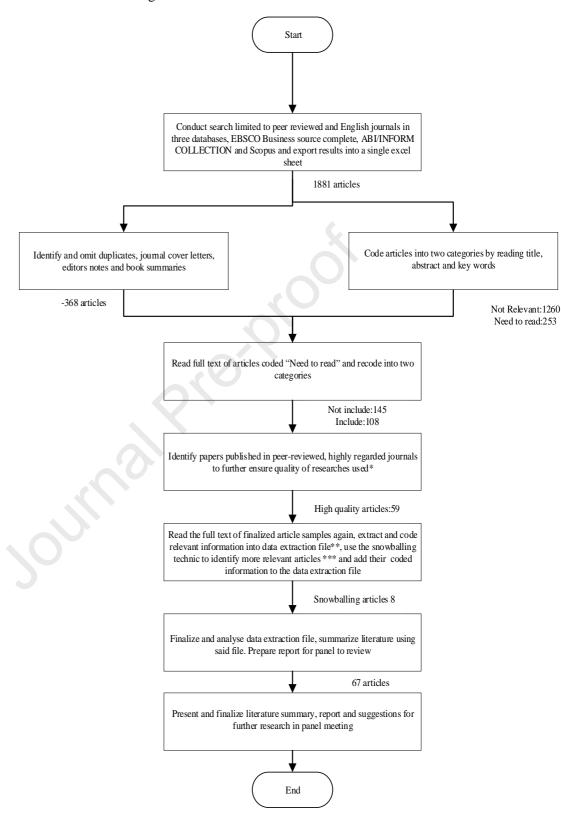


Figure 2: Journals included in the Review



Figure 3: Literature Identification and Coding Process



<sup>\*</sup> and \*\* (Tranfield et al., 2003) \*\*\* (Greenhalgh, 2005; Greenhalgh et al., 2005)

## Journal Pre-proof

## **Highlights**

- Board attributes do not work in isolation in shaping CSR Performance
- Results indicate inconsistent effects of various board attributes on CSR Performance
- Country and Industry moderates the effects of board attributes on CSR performance
- Different board attributes affect different CSR dimensions differently
- Director characteristics and board structures must be separated in examining boards

## Journal Pre-proof

**Declaration of interests** 

☑ The authors declare that they have no known competing that could have appeared to influence the work reported in	·
☐The authors declare the following financial interests/persons potential competing interests:	onal relationships which may be considered
None	