

**Full title: Exploring the Role of Board-level Corporate Social Responsibility Committees in
Corporate Social Responsibility Performance: A Configurational Approach**

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ABSTRACT

Board attributes interrelate with one another and the environment in which they are embedded in forming corporate social responsibility (CSR) performance, resulting in configurations of board attributes. By embracing a configurational approach, this study aims to investigate how the CSR-committee as a board structure interacts within different configurations of director characteristics (female-directors, director's age, tenure, and experience) and other board structures (non-executive directors, CEO-duality, board-size) in shaping CSR-performance. The results of a fuzzy-set Qualitative Comparative Analysis (fsQCA) of 789 FTSE350 and S&P500 listed companies during a 4-year period (2013-2016) reveals nine board configurations leading to high CSR-performance, six containing the CSR-committee. Three board archetypes were identified. Their formation is shaped on main differences seen amongst them, leading to distinct archetypes: committee-boards, experience-boards, and hybrid-boards. The result of the configurational approach agrees with the argument "one-size" does not fit all, and different boards can achieve the same results via unique configurations.

Keywords: Corporate Social Responsibility (CSR); Board-level CSR-committee; social performance; environmental performance; qualitative comparative analysis (QCA)

Exploring the Role of Board-level Corporate Social Responsibility Committees in Corporate Social Responsibility Performance: A Configurational Approach

1- Introduction

The preponderance of key decisions made by the board of directors are done in smaller groups or committees (Dixon-Fowler et al., 2017; Kolev et al., 2019). The advantages of utilizing committees was first acknowledged over 50 years ago by Bacon and Brown (1973), with it being argued that committees frequently give way to a higher number of participating members (Kolev et al., 2019; Paine, 2014). Specifically, researchers have noted that by entrusting certain duties to fewer decision-makers, the productivity of the board will increase (Burke et al., 2019; Kolev et al., 2019). In majority of countries with formal corporate governance guidelines, three committees tend to be compulsory or suggested as good practice, specifically audit, compensation/remuneration and nomination, (Burke et al., 2019; Financial Reporting Council, 2018).

The board of directors plays a significant role in achieving and tracking the companies' environmental and social aims and objectives (Harjoto et al., 2015). The achievement and fulfilment of such issues are frequently explored using the concept of corporate social responsibility (CSR) performance (Galbreath, 2017; Harjoto et al., 2015). As stakeholders demand for more focus on environmental and social issues increases (Burke et al., 2019; Kolev et al., 2019), companies readily set up supplementary committees at board-level to enable more focused and specialised attention on such matters; thus achieving their set aims and objectives (Burke et al., 2019; Dixon-Fowler et al., 2017; Kolev et al., 2019). Establishing board-level committees further allows companies to display their social and environmental accountability to both internal and external stakeholders (Burke et al., 2019; Mallin & Michelon, 2011; Walls et al., 2012). In recent years the number of companies setting up such committees as part of

their board structure (hereafter referred to as CSR-committee) has gradually increased. For example, according to the sample used in the current study, within four years the number of FTSE350 and S&P500 companies with a CSR-committee increased by nearly 22%.

Despite the prevalence of CSR-committees, the literature on the contribution of such committees in CSR-performance has remained somewhat ambiguous (Burke et al., 2019; Endrikat et al., 2020). First, where the role of CSR-committees in CSR-performance has been investigated, it is largely assumed these committees exist in isolation. Specifically, while recent literature has begun to recognise board attributes interrelate with one another and the environment in which they are set in developing CSR-performance (Endrikat et al., 2020; Galbreath, 2017; Homroy & Slechten, 2019; Walls et al., 2012), the interactive effects of CSR-committees and other board attributes have remained largely unexplored. Second, most of the existing literature has only focused on the existence of CSR-committees and its effect on CSR-performance (Dixon-Fowler et al., 2017; Homroy & Slechten, 2019). Indeed, these studies are inadequate to fully explain the nuances of CSR-committees that are influential in shaping CSR-performance.

It has been argued that “one-size-fits-all” board governance is not the best approach (Federo et al., 2020; García-Castro et al., 2013), indicating more than one board composition can lead to achieving the aims and goals of the board. Therefore, it can be argued different board configurations can be considered as “causal recipes” (Ragin, 2008) that achieve the same CSR-performance outcomes. The question is whether the CSR-committee is always a significant condition in the different configurations that lead to such outcomes. Take Unilever and Sky as an example. From 2013 to 2016 both companies were able to achieve comparable high CSR-performance scores (Unilever achieved an average CSR-score of 64.89 and Sky’s average CSR-score is reported as 63.28). However, the configurations of their boards are different. While Unilever maintained a board-level CSR-committee, during the same years Sky did not

have such a committee at board-level. Other board attributes differed too, average director age on Unilever's board was just over 6 years older than Sky (respectively 60.83 and 54.19 years). Alternatively, average director tenure at Sky was nearly twice as much as Unilever (8.09 compared to 4.5 years). Although the presence of female-directors on both boards doubled during the four years studied, Unilever had a considerably higher female presence on their board (respectively 25% to 50% compared to 7.14% to 14.28%).

Using a cross-industry sample of 2891 firm-year observations from 789 listed companies during a 4-year period (2013-2016), this study addresses the question of: 'What is the role of a CSR-committee in shaping CSR-performance?' Specifically, by identifying configurations of various director characteristics (i.e., female-directors, experience, age, and tenure) and board structures (i.e., non-executive directors, CEO-duality, board size, and existence of board-level CSR-committees) that result in high CSR-performance outcomes, our study aims to investigate the role of the CSR-committees in such board configurations. The majority of studies carried out in regard to board attributes and CSR-performance have used general linear regression models (GLMs) (Oh et al., 2019; Walls et al., 2012). This research initially follows these studies to establish the significance of the existence of the CSR-committee on CSR-performance. However, GLMs are often restricted in interpreting the relationships existing between more than two variables (Misangyi et al., 2017). By adopting a Qualitative Comparative Analysis (QCA) perspective built on the logic of fuzzy sets technique (Misangyi et al., 2017; Ragin, 2008), our study explores interactions between numerous configurations of board attributes resulting in high CSR-performance.

It has been suggested that context, such as the country where the company operates, impacts board composition (Aguilera, 2005) and the influence of some board attributes on CSR-performance (e.g., Hafsi & Turgut, 2013; Post et al., 2011). Although UK and USA based companies function according to an Anglo-American shareholder system, their codes and

practices of corporate governance differ in places (Aguilera et al., 2006). Thus, we analyse the FTSE350 and S&P500 companies separately, giving us the opportunity to compare the configurations resulting in high CSR-performance for each group.

This study contributes to the existing literature in several ways: First, it adds to the growing literature on CSR-committees by investigating these committees beyond their presence in shaping CSR-performance. Second, this study contributes to the growing literature on the role of board attributes in CSR-performance by identifying alternative configurations of various attributes that result to high CSR-performance (e.g. Endrikat et al., 2020; Homroy & Slechten, 2019). Therefore, contributing to a growing line of literature that suggests corporate governance mechanisms need to be explored in “bundles”, and looking at each mechanism in isolation will not provide the full picture (e.g., Aguilera et al., 2014; García-Castro et al., 2013; Greckhamer et al., 2018). Specifically, the findings extend the understanding of the role of CSR-committees in CSR-performance by investigating the interactive effects of committee presence with various board attributes.

Furthermore, we investigate alternative, new board archetypes based on distinct combinations of board attributes that yield higher CSR-performance. Three different archetypes are identified, with one that does not require the CSR-committee. These archetypes are named based on the main attributes that differ between them: *committee-boards*, *experience-boards*, and *hybrid-boards*. Thus, contributing and helping strengthen arguments for a “one-size” doesn’t fit all board governance approach (Federo et al., 2020; García-Castro et al., 2013). Lastly, we explore board configurations in both the UK and the US, and further the understanding of the role of geographical context in CSR-performance.

2- CSR-Committees and CSR-Performance

While literature on the attributes of board of directors and CSR-performance is well developed, research associated with CSR-committees as an important component of board governance structure is still in an early stage (Burke et al., 2019; Kolev et al., 2019). The evidence does not go much beyond exploring the influence of such committees' existence on CSR-performance, with some demonstrating a positive relationship (e.g. Dixon-Fowler, Ellstrand and Johnson, 2017; Homroy and Slechten, 2019; Hussain, Rigoni and Orij, 2018) and others reporting a non-significant effect (Chams and García-Blandón, 2019; Rodrigue, Magnan and Cho, 2013).

More recently, a few studies have gone beyond this to explore the focus of the CSR-committee and its impact on social and environmental performance. For instance, Burke et al. (2019) demonstrated the link between the CSR-committee and performance strengthens when the committee is focused on a particular stakeholder groups' interests (i.e. social or environment) compared to when there is no focus. Likewise, Homroy and Slechten (2019) show a company's greenhouse gas emissions are lowered by a board-level committee focused on environmental issues. Contrary, Rodrigue et al. (2013) were not able to find any meaningful relation between board environmental-committees and environmental regulatory performance or pollution prevention.

Overall, except for a limited number of studies, there are important aspects that have remained largely unexplored through empirical literature. For instance, despite the efforts of Dixon-Fowler et al. (2017) – who were not able to find any support for the influence of stakeholder representation on the boards' environmental committee – the interaction of board and CSR-committee attributes and their effect on social and environmental performance have not been investigated. Specifically, clarifying the relationships between board attributes, Endrikat et al.'s (2020) meta-analysis of 82 empirical studies has called for further research into the interactive effects of board attributes including CSR-committees on CSR-performance. The current study addresses this issue, advancing this body of work by simultaneously examining

the CSR-committee and a comprehensive set of other board attributes and their role in shaping social and environmental performance.

2-1- Board Attributes and CSR-Performance

The rich and diverse literature exploring the influence of various board attributes in shaping different dimensions of CSR-performance goes back at least 30 years (Endrikat et al., 2020; Jain & Jamali, 2016). Three major theoretical frameworks have been identified as anchoring the bond among board attributes and CSR-performance: stakeholder, resource-dependence and agency theory (Bolourian et al., 2021; Jain & Jamali, 2016). Additionally, in their theorisation scholars have drawn upon other theories such as critical mass, upper echelons and accountability (e.g. Burke et al., 2019; Byron & Post, 2016; Cook & Glass, 2018). More recently have seen researchers use several theories in their theorisation, stating that one theory cannot explicate the full relationship among different board-attributes and CSR-performance (e.g. Nadeem et al., 2020; Oh et al., 2019).

The effect of board attributes on CSR-performance has predominantly been examined regarding director characteristics (such as gender, experience, age etc.) and various structures utilized by boards (such as independence, CEO-duality, committees etc.) (Bolourian et al., 2021; Endrikat et al., 2020). Researchers have begun to examine the interactive impact of board attributes in shaping CSR-performance (Galbreath, 2016; Homroy & Slechten, 2019). Also, adopting a broad perspective, Hafsi & Turgut (2013) suggested the interrelation between various board characteristics and CSR-performance is influenced by the diversity in board structures.

2-2- CSR-committees as a Board Attribute

From an accountability theory perspective, a person or group will be accountable when they acknowledge and take responsibility for their actions and decision-making processes (Lerner

& Tetlock, 1999; Tetlock, 1983). Accountability theory assumes that one may need to justify actions and behaviour to another party based on formal and informal expectations. In turn this perception will increase the probability one will feel accountable for such decision-making processes (Lerner & Tetlock, 1999). As mentioned, boards voluntarily set up CSR-committees. Doing so requires they publish the main responsibilities of these committees in the annual proxy filings. Communicating their presence and responsibilities towards environmental and social issues to stakeholders (Burke et al., 2019) will then create expectations and hold them accountable to such expectations (Frink & Klimoski, 2004). Specifically, the board may be called upon and held accountable by stakeholders to justify the actions and decision-making processes resulting in CSR-performance. Thus, from an accountability theory perspective, it is predicted the existence of a CSR-committee will increase CSR-performance.

2-3- Director Characteristics and CSR-performance

Director characteristics related to CSR-performance have been explored in multiple ways. gender, experience, age and tenure are four of the most popular characteristics considered in literature (Bolourian et al., 2021).

The presence of female-directors and their influence on CSR-performance, seen as either proportion (e.g, Nadeem et al., 2020) or number of female-directors (e.g. Bear et al., 2010; Cook & Glass, 2018) on the board, is one of the major director characteristics explored (Bolourian et al., 2021). Prior studies argue that in comparison to men, women are inclined to focus more on social performance matters (Backhaus et al., 2002). Also, female-directors are more probably community influencers (Singh et al., 2008), and are generally more likely to participate in charitable and philanthropic projects (Bear et al., 2010).

However, prior research has reported conflicting results in relation to this attribute and various elements of CSR-performance. A number of studies found female-directors positively impact

both environmental and social performance (e.g. Nadeem et al., 2020), and some found the same positive impact on the overall CSR-performance (e.g. Chams & García-Blandón, 2019; Harjoto et al., 2015). Other studies found a negative or non-significant impact on these dimensions (Oh et al., 2019).

Relevant experience and knowledge are attributes boards require to effectively guide and control management (Hillman & Dalziel, 2003). Various variables have been used to quantify experience and explore its impact on CSR-performance. For example, with a positive impact, community influential board-directors are examined in relation to both the experience they provide to the board and their influence (Mallin & Michelon, 2011). Outside directorships held by directors has no impact on CSR-performance, but positively influences environmental performance (Harjoto et al., 2015; Ortiz-de-Mandojana & Aragon-Correa, 2015). Alternatively, others have found a non-significant relationship (de Villiers et al., 2011).

Prior literature has said younger board-directors are generally more worried in regard to environmental matters (Hafsi & Turgut, 2013). However, empirical literature does not fully agree on the impact of this attribute either. Some studies were not able to find a relationship between directors' age and CSR-performance (e.g. Chang et al., 2017; Harjoto et al., 2015), with others showing a positive (Cook & Glass, 2018) or negative relationship (e.g. Hafsi & Turgut, 2013).

Director tenure is argued to be an influential element in shaping CSR activities in organisations (Harjoto et al., 2015). Consistent with age, tenure is looked at either through diversity or average tenure of board-directors (e.g. Homroy & Slechten, 2019; Olthuis & van den Oever, 2020), and the literature demonstrates mixed results on the effect of this board attribute on CSR-performance too. It has been demonstrated that tenure positively impacts the overall CSR-performance indirectly as it helps lower CSR-performance concerns (Harjoto et al., 2015).

However, when examining environmental performance strengths de Villiers et al. (2011) deduced that the effect of this board attribute was insignificant.

2-2- Board structure and CSR-performance

Like director characteristics, board structures and their influence on CSR-performance have been considered in a variety of ways. In addition to the existence of CSR-committees, three mainly explored board structures are: board independence (the percentage/number of non-executive directors), CEO-duality, and board size (Bolourian et al., 2021).

By relying on their diverse network ties and experience, non-executive directors (NEDs) form “sustainability-themed alliances” and indirectly effect social performance (Post et al., 2015). However, some studies have not been able to find a meaningful relationship between NEDs and CSR-performance (e.g. McGuinness et al., 2017). Contrary to this, Hussain et al. (2018) found a positive impact on social and environmental performance, while other studies demonstrate a negative effect on CSR-performance (Naciti, 2019)

Drawing on agency theory, CEO-duality or joint CEO and board chair has been argued to have a negative effect on CSR-performance (e.g. Mallin & Michelon, 2011; Naciti, 2019). Several studies found a non-significant impact (e.g. Chams & García-Blandón, 2019; Nadeem et al., 2020), while others found a positive impact (e.g. Moussa et al., 2020). Fabrizi et al. (2014) demonstrate a positive relationship when the CEO holding the position of the board chair had a high tenure. Leading them to suggest the establishment and power of such an individual positively impacts CSR-performance.

Generally it has been indicated larger boards provide better representation of stakeholders, which consequently can result to higher focus on stakeholder concerns and engagement in a greater number of CSR activities (Chams & García-Blandón, 2019; Ntim & Soobaroyen, 2013). Several studies reported a positive relationship among board-size and CSR-performance

(Chams & García-Blandón, 2019; Cook & Glass, 2018), while a few demonstrated a negative impact (e.g. Olthuis & van den Oever, 2020). A number of studies also were not able to find any meaningful relationship between this attribute and CSR-performance (e.g. Homroy & Slechten, 2019; Post et al., 2011; Walls et al., 2012).

2-4- Board Attributes, CSR-performance, and Country

The effect of different board attributes on CSR-performance can be moderated by contextual determinants, such as the country where the organisation operates (Chams & García-Blandón, 2019; Chang et al., 2017; Harjoto et al., 2015). Through a meta-analysis of 87 samples covering more than twenty countries, Byron and Post (2016) were able to demonstrate in countries where there was higher gender equality and shareholder protection female-directors positive impact on CSR-performance was stronger. It has been suggested in some Asian countries where agency costs are a serious issue for male-dominant boards, female-directors will positively influence the decision-making process and stop irrational squandering of corporate resources (Jia & Zhang, 2011). Thus, contrary to western countries, female-directors in some Asian countries such as China will negatively influence corporate philanthropy, while positively effecting the overall organisational performance (Bear et al., 2010; Jia & Zhang, 2011). Furthermore, in countries with ethnically homogeneous and male-dominated boards like South Korea, director education is used as a factor to explore the impact of diversity on CSR-performance (Chang et al., 2017).

It has been proclaimed country regulation and norms around some board attributes can impact CSR-performance. For instance where regulations monitor the presence of NEDs on boards, this attribute will positively impact CSR-performance when requirements are exceeded (Chang et al., 2017). Similarly, in some countries such as the USA, CEO-duality is a usual occurrence.

For this reason, it has been argued that insignificant results are seen in these countries (Hafsi & Turgut, 2013).

Even though the literature has largely looked at individual board attributes in explaining CSR-performance, considering the inconsistent results found, there have been calls to transfer the focus to investigating interactions among various board attributes (e.g. Bolourian et al., 2021; Endrikat et al., 2020; Walls et al., 2012). Although limited, some studies have demonstrated the significance of this view (Homroy & Slechten, 2019; Hussain et al., 2018). Following previous literature and by focusing on the CSR-committee in addition to other attributes that have been empirically proven to significantly impact CSR-performance (positively or negatively) in previous studies, our study seeks to extend this understanding and tries to identify configurations of various board attributes that separately result in high CSR-performance among FTSE350 and S&P500 companies (Figure. 1).

- Figure 1 around here -

3- Data and Method

3-1- Sample and Data

The sample used in this research includes all companies listed at the end of March 2018 in the FTSE350 (FTSE100 and FTSE250) and S&P500. This sample is multi-industry and enables exploration and comparison of companies operating in two countries with different governance systems, rules, regulations, and corporate governance guides.

The current sample covers the years 2013 to 2016. However, considering CSR reporting and scoring is an annual activity and to allow time for results of decisions made today to become evident in the future, (consistent with previous studies such as Chang et al., 2017; Cook & Glass, 2018), the data collected on board attributes is lagged by one year. CSR-performance

scores are taken from the Thomson Reuters ESG database, and the board of directors' attributes are collected from BoardEx. Table. 1 provides a summary of the data collected. CSR-committees with only one member were removed from the sample. Also, to ensure a consistent sample, companies with more than one board committee dedicated to CSR activities were omitted.

-Table 1 about here-

3-2- Method and Calibration

Consistent with more recent empirical investigations (e.g. Chang et al., 2017; Oh, Chang and Jung, 2019), first this study uses a generalised estimating equations (GEE) estimation to investigate the significance of the CSR-committee. When possible dependence can result to autocorrelation, the GEE model is considered more robust and consistent in comparison to the fixed or random effects models (Liang & Zeger, 1986). In addition to the correlation matrix, inflation factors (VIFs) were used to control for multicollinearity.

Then this study utilises fuzzy-set Qualitative Comparative Analysis (QCA) (Ragin, 2008) to explore the possible configuration within boards that lead to high CSR-performance. This method is consistent with the theorising mentioned above, where interconnected configurations of board attributes (conditions) are better able to explain the role of the board in driving CSR-performance (outcome) than an isolated or selected interaction of two board attributes. QCA uses Boolean logic and set-theory, treating each board (case) as a member of multiple sets, and considers both the conditions and the outcome as sets (Ragin, 2008; Rihoux & Ragin, 2009). Table. 2 presents an explanation for all the sets used in the current study.

-Table 2 about here-

In accordance with the QCA methodology, cases need to be assigned with membership scores for each set, indicating whether the case is fully in, out or somewhere in-between, this is referred to as calibration (Fiss, 2007; Greckhamer et al., 2018; Ragin, 2008). The calibration technique used in this study is suitable for quantitative large N-samples, following data structure for crisp sets (i.e. binary data) and distribution parameters for fuzzy-sets (Cooper & Glaesser, 2016). Except for CEO-duality and the existence of a CSR-committee (CSRSom) conditions, where crisp sets were applied (1 fully in and 0 fully out), fuzzy-sets were applied for all other conditions and the outcome. To calibrate the outcome (CSRP) and the following conditions: average director age (DAge), average director tenure (DTenure), average director experience (DExp) and board size (BSize), the 75th percentile for each measure was used as the threshold for acquiring full set membership. Cases in the 25th percentile were assumed to be fully out and the other remaining cases were considered somewhere in-between (Fiss, 2007; Misangyi et al., 2017; Razmdoost et al., 2020). It is considered best practice to use theory and substantive knowledge where possible (Greckhamer et al., 2018; Misangyi & Acharya, 2014). Therefore, the proportion of female-directors and NEDs were both calibrated using literature and corporate governance guidelines. To obtain the full benefit of women on boards, the presence of at least three female-directors has been recommended (Bear et al., 2010; Konran et al., 2008). Considering the average board size in the full sample (FTSE350 and S&P500) is just over ten, 30% was considered as fully in and zero as fully out. Although insufficient to convey the full benefits (Périlleux & Szafarz, 2015), the presence of less than three female-directors can make a positive impact (Bear et al., 2010; Konran et al., 2008). Boards with more female-directors typically seem to be more socially responsible in comparison to boards with none or fewer female-directors (Post et al., 2015). Thus, the cross-over point for this condition was considered as 15%. Considering corporate governance guidelines and best practices indicate boards need to be made up of a suitable proportion of executive and non-executive

directors, ensuring no individual or group can influence the decision making process (Financial Reporting Council, 2018; NYSE Governance Services, 2014), 50% is assigned as fully out for NEDs. Also, it is typical for the CEO to sit on the board, and considering the average board-size of the current sample is nearly ten, 90% has been considered as fully in and the other remaining cases for this set are considered somewhere in-between. Table. 3 provides an overview of the calibrations process in addition to the thresholds used for set memberships.

-Table 3 about here-

Since only 15 cases in the FTSE350 sample had CEO-duality, this condition was removed from the analysis for determining the configurations leading to high CSR-performance in these companies. Also, among the S&P500 companies, all boards had at least 50% NEDs (only one exactly 50%) and around 97% had at least 70% NEDs (over 53% had at least 90% NEDs on the board). Therefore, this condition was omitted for the S&P500 cases. Although a longitude dataset has been used, it has been considered as pooled data. This is because the CSR-performance scores (outcome) do not appear to depend on previous year scores, each individual year for both S&P500 and FTSE350 was analysed separately and no trend (for instance increase or decrease) was observed over the years. Furthermore, in the study we are interested in the configuration(s) that lead to high CSR-performance, not in the change in each case.

4- Data analysis and results

Table. 4 presents the descriptive statistics for the board and the CSR-committee. The results of the regression analysis clearly indicate the presence of a CSR-committee positively impacts CSR-performance¹. This is interesting as Table. 4 demonstrates that the maximum CSR-performance score (67.4) belongs to a company without a CSR-committee, suggesting that

¹ the regression analysis confirmed at $p < .01$ that the presence of a CSR-committee positively impacts CSR-performance.

setting up this committee does not necessarily guarantee a higher score. Hence, strengthening the argument that to fully understand the role of the CSR-committee a more comprehensive method such as QCA is required.

-Table 4 about here-

4-1- Configurational analysis

QCA develops theory by determining necessary and/or sufficient conditions (board attributes) for an outcome of interest (high CSR-performance) to transpire. Results of a configurational analysis are configurations of several elements instead of the elements in isolation (Fiss, 2007; Greckhamer et al., 2018; Misangyi et al., 2017).

4-2- Necessity analysis

A necessary condition is required for the outcome to happen, and without it the outcome will never happen. For necessity analysis, a consistency benchmark of a minimum >0.9 is suggested for all individual conditions (Greckhamer et al., 2018; Ragin, 2008; Schneider & Wagemann, 2012). This analysis was run separately for S&P500 and FTSE350 cases, all conditions had a consistency below 0.9.

4-3- Sufficiency analysis

In cases where the condition or combination of conditions happens alongside the outcome, that condition(s) is considered sufficient. This sufficiency conveys that the condition(s) is a subset of the outcome (Ragin, 2008). A sufficiency analysis consistency of minimum 0.8 has been considered for raw consistency (Greckhamer et al., 2018; Ragin, 2008). In order to avoid having simultaneous subset relations, where a condition has a high consistency in both the presence and absence of high CSR-performance (i.e. a condition satisfies the formula $x \leq y$ and $x \leq \sim y$) (Ragin, 2008), proportional reduction in inconsistency scores (PRI) are also taken into

consideration. It is recommended that PRI scores should be relatively high and not much lower than raw consistency scores, with a PRI score of below 0.5 being counted as significant inconsistency. In line with best practice, 0.7 has been considered in this study (Greckhamer et al., 2018). Furthermore, considering this is a large N-sample QCA study, a case frequency for occurrence of configurations is recommended in a way that at least 80% of cases are covered (Greckhamer et al., 2013, 2018). Setting a frequency threshold will avoid including infrequent rare configurations, allowing for more robust explanatory configurations to be considered. The frequency threshold for the FTSE350 cases was considered as 6, covering 83% (frequency of 7 would be 79%). The frequency threshold for the S&P500 cases was considered as 12, again covering 83% (frequency of 13 would be 77%). The analysis was run in FsQCA 3.0, generating the truth table and using the Quine-McCluskey algorithm for the Boolean minimisation (Ragin, 2008). Depending on the way the counterfactual analysis has been applied, QCA provides three solutions: complex, parsimonious, and intermediate. The counterfactual analysis considers logically possible configurations even when no case exists for it (Soda & Furnari, 2012). The complex solution does not consider any counterfactual cases. The parsimonious solution allows for remainders that result in simpler configurations. Finally, the intermediate solution only permits remainders that are built on theoretical and significant knowledge (Ragin, 2008; Schneider & Rohlfing, 2016). As recommended by Ragin (2008), the intermediate solution has been used for interpretation in this study. Configurations resulting in high CSR-performance have been reported in Table. 5. The notations used in the table follow Fiss (2011). “●” represents conditions that are present, “⊗” is for absent conditions, and where the condition is not causal to the configuration it is left blank. Table. 5 shows two separate sets of configurations for the high CSR-performance outcome for FTSE350 and S&P500 cases. In total there are nine configurations leading to high CSR-performance. Five are related to the FTSE350 cases with an overall solution coverage of 0.311 and solution consistency of 0.837. The other four are

related to S&P500 cases with an overall solution coverage of 0.206 and consistency of 0.857. The solution consistency for all sets in both tables are above 0.8, indicating sufficient consistency.

-Table 5 about here-

4-4- Supplement analysis

Goodness of the QCA procedure was tested by putting in place and performing several robustness checks (Cooper & Glaesser, 2016). In addition to considering PRI scores of 0.7, a case frequency threshold to cover at least 80% of the sample (Greckhamer et al., 2013, 2018), and checking for necessary conditions (Ragin, 2008), we changed the outcome from presence to absence (i.e. low CSR-performance), running the analysis separately for FTSE350 and S&P500 companies. Altogether there were seven configurations leading to low CSR-performance. Four related to the FTSE350 cases, with an overall solution coverage of 0.425 and consistency of 0.850. The other three related to S&P500 cases, with an overall solution coverage of 0.159 and consistency of 0.807 (Table. 6). It is interesting to note that the common pattern across all these configurations is the absence of the CSR-committee, a small board-size and absence/indifference of female directors. With this procedure, it was ensured no configuration is applicable for both the presence and absence of high CSR-performance.

-Table 6 about here-

Furthermore, possible patterns among the companies in each configuration and across the three identified archetypes were explored. However, it was concluded that board attribute configurations impacting CSR-performance are shared across industries. The Thomson Reuters ESG score takes industry into consideration when calculating the scores. It is believed that due to this consideration in the calculation of company CSR-performance score, no patterns based on industry were found among the configurations.

5- Discussion

This study sought to explore the role of the CSR-committee in shaping CSR-performance. Recently, limited studies have started exploring the interaction of some board attributes, showing they do not work in isolation (e.g. Endrikat et al., 2020; Galbreath, 2017) . Additionally, it has been argued that “one-size” doesn’t fit all boards (Federo et al., 2020; García-Castro et al., 2013), and board composition does not have to be the same for all boards to reach their aims and goals.

The analysis indicated that the absence of the committee in conjunction with a small board-size and absence/indifference of female directors will probably lead to low CSR-performance regardless of the country where the company is active (Table 6). However, five configurations in the UK and four in the USA leading to high CSR-performance were identified, suggesting country can play a role in determining the right board configuration for shaping CSR-performance. The three main board archetypes identified for high CSR-performance are shared across both countries, with slight differences according to the country. This can be because the UK and USA based companies function according to an Anglo-American shareholder system, but their codes and practices of corporate governance differ in places (Aguilera et al., 2006). Due to a lack of variation in the sets created by these conditions, from the beginning the existence of CEO-duality was removed from the analysis for FTSE350, and the proportion of NEDs was omitted for the S&P500. Slight differences were again visible in the configurations of both groups (Table. 5). This is consistent with prior literature, suggesting board composition in the corporate governance realm depends on the country where the company operates (Aguilera, 2005).

At the same time, the results demonstrate that some commonalities exist across the companies in both groups (FTSE350 and S&P500). The one condition that is present in all configurations,

regardless of country, and results in high CSR-performance is a large board-size (with the opposite being true for low CSR-performance). This is aligned with previous literature, where building on stakeholder theory, it is believed a higher number of directors on the board generate greater stakeholder representation. This consequently can result to more attention towards different stakeholders' interests and involvement in social and environmental activities (Chams & García-Blandón, 2019; Ntim & Soobaroyen, 2013). Another condition that all board configuration apart from configuration 5 share, is the high proportion of female-directors. It has been argued that boards with a greater female presence are highly probable to act more socially responsible in comparison to those with none or low female presence (Post et al., 2011). Typically female-directors rely on their experience and influence to create “sustainability-themed alliances” (Post et al., 2015), and more probably involve the organisation in CSR related activities (Bear et al., 2010; Périlleux & Szafarz, 2015).

Based on the commonalties shared by configurations, three distinct board archetypes that are shared between the two groups have been identified. These archetypes have been named according to the main conditions that differed between them: *committee-boards*, *experience-boards* and *hybrid-boards* (Table. 5). Figure. 2 summarises the commonalties and differences between the countries and archetypes. Below these archetypes are discussed.

-Figure 2 about here-

5-1- Committee-boards

In the first archetype identified and aligned with the results of the GEE, in addition to large boards, high proportion of female-directors and CEO-duality (where it is common practice), the unique characteristic is the presence of CSR-committees, hence the naming of *committee-boards* (i.e. configurations 1, 2, 6 and 7). Increasingly, companies are responding to pressure from stakeholders by voluntarily setting up additional board-level committees focused on

social and environmental issues (Burke et al., 2019; Dixon-Fowler et al., 2017; Kolev et al., 2019). Establishing board-level committees further allows companies to showcase their social and environmental accountability to internal and external stakeholders (Burke et al., 2019; Mallin & Michelon, 2011; Walls et al., 2012). Therefore, taking all the above into consideration the following is proposed:

Proposition 1: *In the UK and USA, large boards with a CSR-committee and high presence of female-directors can be associated with high CSR-performance.*

CEO-duality is common among the S&P500 companies (over 53% of the current cases have joint CEO and board-chair). From an agency theory view, it is believed CEO-duality reduces the independence of the board from management, and has a negative influence on CSR-performance (e.g. Mallin and Michelon, 2011; Naciti, 2019). The CEO and board-chair are powerful roles that can influence the discussions and decisions made by the board. A joint role can increase agency cost and decrease firm performance (Naciti, 2019; van der Walt & Ingley, 2003). However, the results indicate that among the committee-boards in the S&P500 group, the presence of CEO-duality contributes to high CSR-performance (i.e. configurations 6 and 7). The inclusion of this condition in committee-boards could be because of the existence of the CSR-committee. Setting up voluntary CSR-committees where the duty and responsibility of the committee is transparent to stakeholders can be a mechanism for board members' accountability, including the CEO and chair (Burke et al., 2019). Therefore, acknowledgement of responsibility towards social and environmental issues by an influential and powerful individual can be the reason this condition is present in the archetype.

High percentage of NEDs seems to have become a norm in the S&P500 companies. It is a different story amongst committee-board configurations in the FTSE350 group. A high proportion of NEDs is seen to be absent in one configuration, meaning a low proportion of

NEDs is included in such boards (i.e. configuration 2), while in the other this condition is present (i.e. configuration 1).

Concurrently, where a high proportion of NEDs are on the board, the average director tenure is either low (i.e. configurations 1 and 6) or indifferent (i.e. configuration 7). Alternatively, average director age on these boards is either high (i.e. configurations 1 and 7) or indifferent (i.e. configuration 6). The opposite is true when the proportion of NEDs is low on committee-boards, meaning average director tenure is high and age is low. The results seem to indicate a combination of high proportion of NEDs and high average age of directors can be replaced with high average director tenure in committee-boards. NEDs are suggested to be more knowledgeable about other organisations different strategies (Fama & Jensen, 1983; McDonald & Westphal, 2010). Consequently, they increase the access of the board to more resources (Hillman & Dalziel, 2003; Mallin et al., 2013), which along with their sustainability-themed alliances is argued to increase CSR-performance (Hafsi & Turgut, 2013; Post et al., 2011). Also, it has been suggested moral reasoning increases with age, and older directors will exhibit higher moral reasoning and judgement (Forte, 2004; McCabe et al., 2006). This in turn could indicate an increase in these directors' sensitivity towards social and environmental issues. Alternatively, directors with higher tenure gain knowledge and become familiar with the firm's processes, past commitments, capabilities and resources (Kor & Sundaramurthy, 2009; Pfeffer & Salancik, 1978). Director tenure is believed to be one of the determinates shaping CSR activities in organisations, and will impact CSR-performance positively by lowering the CSR concerns (Harjoto et al., 2015). The results indicate under certain circumstances these conditions can replace each other in the "causal recipe", leading to high CSR-performance. This is consistent with the argument that corporate governance doesn't see board diversity as simply diversification on the board. It is the means by which variety of director characteristics

can positively impact the various board decision-making processes and results (van der Walt & Ingley, 2003).

The combination of NEDs, average director age and tenure of committee-boards in the UK (i.e. configurations 1 and 2) and USA (i.e. configurations 6 and 7) is different. As demonstrated to some extent in the current data, this difference could be due to corporate governance practices and geographical context differences that impact board composition (Aguilera, 2005). For instance, in addition to the difference in CEO-duality and NEDs among the FTSE350 and S&P500 companies, the average director age among the S&P500 companies is just over 3 years more than the FTSE350 companies (62.59 compared to 56.99 years). Average tenure is also over 3 years more in the S&P500 companies, 8.87 years compared to 5.78 years in the FTSE350 companies. Examples of companies in the current sample with such boards among the FTSE350 are Tate and Lyle, Standard Life Aberdeen, British American Tobacco (configuration 1), Sainsbury's and Tullow Oil (configuration 2). Among the S&P500, companies such as AT&T, MetLife Insurance (configuration 6), Lockheed Martin and Coca-Cola (configuration 7) have boards with such archetypes. Taking all of the above into consideration, the following more detailed propositions for each country in regard to committee-boards is proposed:

Proposition 1-1: *In the UK, large boards with a CSR-committee, high presence of female-directors, high presence of NEDs, high average director age and low average director tenure OR low presence of NEDs, low average director age and high average director tenure can be associated with high CSR-performance.*

Proposition 1-2: *In the USA, large boards with a CSR-committee, high presence of female-directors, high presence of NEDs and CEO-duality with low average director tenure or high average director age can be associated with high CSR-performance.*

It is interesting to note there are instances where a board, with the same membership score, can be categorised as either configuration 6 or 7 (such as PG&E and Mondelez International). This indicates a configuration very similar to configuration 1, a committee-board under the UK configurations. However, unlike the boards under configuration 1 where both a high director age and low tenure is a requirement for driving CSR-performance, in this situation although both are present, either a high director age or a low tenure is required in the board configuration to achieve high CSR-performance. This strengthens the argument that various companies, regardless of the country they operate in, can share common board attribute traits that help drive CSR-performance. The minor differences in the impact of such attributes could be related to the differences in director age and tenure seen among the boards of the two countries (Table. 3).

5-2- Experience-boards

The next archetype identified is similar to the committee-boards, except instead of CSR-committees these boards have directors with high external experience gained through other board directorships (i.e. configurations 3, 4 and 8). This archetype emphasises the results of Table. 4 where the highest CSR-performance score is related to a board without a CSR-committee. The results suggest experience gained from sitting on other boards could become more profound when a committee dedicated to social and environmental issues has not been set up at board-level. It is believed when directors sit on other boards they are exposed to knowledge and practices of those boards, including social and environmental activities, ultimately transferring this information that otherwise may not be known in the company to the board (Hillman & Dalziel, 2003; Ortiz-de-Mandojana & Aragon-Correa, 2015; Pfeffer & Salancik, 1978). Stakeholders are increasingly holding companies responsible for their environmental and social conduct (Burke et al., 2019; Kolev et al., 2019), pushing them to engage in CSR activities (Aguilera et al., 2007). Committee-boards are setting up CSR-

committees, demonstrating their social and environmental responsibility to both internal and external stakeholders (Burke et al., 2019; Mallin & Michelon, 2011; Walls et al., 2012). Therefore, knowledge and information from these boards will be transferred to the experience-boards through interlocking directorships. Experience-boards have a high number of directors, generating better stakeholder representation and attention towards different stakeholders interests and involvement in social and environmental activities (Chams & García-Blandón, 2019; Ntim & Soobaroyen, 2013). Similar to committee-boards, the high proportion of female-directors can also be seen as another factor helping experience-boards achieve high CSR-performance. Therefore, considering the above discussion the following is proposed:

Proposition 2: *In the UK and USA, large boards with high average director external experience and high presence of female-directors, can be associated with high CSR-performance.*

Having CEO-duality on experience-boards can be seen as beneficial too. The need for social legitimization and providing balance among stakeholders will be driving the board to engage in CSR activities (Aguilera et al., 2007; Aguilera & Jackson, 2003). A powerful and influential CEO and chair will help move this goal forward. Like committee-boards, the results for experience-boards indicate under certain circumstances the proportion of NEDs (for UK based companies), average director age and tenure can replace each other in the configurations, leading to high CSR-performance. This is again consistent with the above argument that board diversity is not simply heterogeneity on the board, but how the diversity in board characteristics can contribute to various board practices (van der Walt & Ingley, 2003). Examples of companies with such boards in the current sample among the FTSE350 are International Consolidated Airlines Group, Royal Dutch Shell (configuration 3) and WhitBread (configuration 4). Among the S&P500, Cisco Systems is a good example of a company with

this board archetype. Taking all the above into consideration, the following more detailed propositions for each country in regard to experience-boards is proposed:

Proposition 2-1: In the UK, large boards with high average director external experience, high presence of female-directors, high presence of NEDs, high average director age and low average director tenure OR low presence of NEDs, low average director age and high average director tenure can be associated with high CSR-performance.

Proposition 2-2: In the USA, large boards with high average director external experience, high presence of female-directors, high presence of NEDs and CEO-duality with low average director age and high average director tenure can be associated with high CSR-performance.

5-3- Hybrid-boards

The third archetype identified are boards that have both high average director external experience and a CSR-committee (i.e. configurations 5 and 9), which has been called *hybrid-boards*. The main difference in this archetype is the simultaneous presence of a CSR-committee and high director experience. Therefore, CSR-performance on such boards benefits from accountability towards stakeholders and experience gained from other boards. The presence of female-directors for the FTSE350 companies is indifferent, whereas it is present in the other two archetypes. In the S&P500 the same pattern can be seen for CEO-duality. This condition is indifferent in hybrid-boards. Hence, the third main archetype proposed is as below:

Proposition 3: In the UK and USA, large boards with a CSR-committee, high average director external experience and large proportion of NEDs can be associated with high CSR-performance.

There are slightly more differences between the conditions of these boards depending on the country. Similar to the previous two archetypes, the difference in corporate governance

practices and geographical context (Aguilera, 2005) could play a greater role than the conditions themselves. This is the only configuration among the FTSE350 companies where high presence of female-directors is indifferent (i.e. configuration 5). At the same time, high proportion of NEDs and high average director age is a sufficient condition. One reason for this could be how each of these conditions contribute to the “causal recipe”, leading to CSR-performance. Much like female-directors, NEDs usually utilize their extent experience and network ties to shape “sustainability-themed alliances” and consequently effect social performance (Post et al., 2015). Moral reasoning increases with age. Older directors will exhibit higher moral reasoning and judgement (Forte, 2004; McCabe et al., 2006), which similar to female-directors (Bear et al., 2010; Mallin & Michelon, 2011) could suggest an increase in these directors’ sensitivity towards social and environmental issues. The results indicate that on a large board with CSR-committee and high average director experience, these conditions can replace each other in the “causal recipe”, leading to high CSR-performance. Emphasising again that board diversity is not simply heterogeneity within the board (Van Marrewijk & Were, 2003).

Among the S&P500 companies, the hybrid-board (i.e. configuration 9) is the only configuration where the CEO-duality condition is indifferent and all other conditions are present. A powerful and influential individual – who either due to acknowledging responsibility for CSR-performance and accountability to stakeholders (committee-boards) or the need for legitimation and providing balance among stakeholders (experience-boards) positively impacts CSR-performance – seems to have been replaced with the combination of high female presence, high average tenure, and age. This indicates that a combination of these three conditions can make the same contribution to different decision-making processes and outcomes as a powerful CEO and chair backed by either a CSR-committee or resources in the

form of director experience. Taking all of the above into consideration, the following more detailed propositions for each country in regard to hybrid-boards is proposed:

Proposition 3-1: *In the UK, large boards with high average director external experience, CSR-committee, high presence of NEDs and high average director age can be associated with high CSR-performance.*

Proposition 3-2: *In the USA, large boards with high average director external experience, CSR-committee, high presence of female-directors, high presence of NEDs, high average director age and high average director tenure can be associated with high CSR-performance.*

Examples of companies in the current sample with hybrid-boards listed among the FTSE350 are BHP Billiton, Unilever, Fresnillo and Coca-Cola Hellenic Bottling Company (HBC). On these boards, according to the configuration, the impact of female presence and director tenure is indifferent. As a result, regardless of the status of these two attributes on the board, such boards should expect high CSR-performance. This can clearly be seen in the current examples. Unilever, Fresnillo and Coca-Cola HBC have a relatively low average director tenure (below the sample average of 5.78) compared to BHP Billiton (over the sample average of 5.78). Fresnillo, BHP Billiton and Coca-Cola HBC have a low presence of female-directors on their boards (below the sample average of 17.48), while Unilever has gradually increased the number of female-directors from 2012 to 2015, reaching an equal proportion of male and female-directors in 2015. All three companies maintain a CSR-performance score that places them either in the upper quartile of the current sample or very close (above 52.23).

Among the S&P500, General Mills is an interesting example for this archetype, as this company is also one of the cases under configuration 7 (committee-boards). This can indicate that either CEO-duality is required in the board configurations to help drive CSR-performance, which is indifferent for configuration 9, or high experience and tenure are both required, which

is indifferent for configuration 7. In other words, a company like General Mills that has high presence of female-directors, high director age and a large board with a CSR-committee does not need the presence of all three attributes (CEO-duality, high experience, and tenure) to achieve high CSR-performance. This example further emphasises the point that the configuration of board attributes, and not individual attributes, contribute towards high CSR-performance. Also, some attributes or a combination of attributes can replace each other's impact on the board configurations and "one-size" does not fit all.

6- Conclusion

The current study was conducted with the aim of shedding light on the role of CSR-committee in shaping CSR-performance. We demonstrated that board attributes cannot be segregated, as they interrelate with one another in forming CSR-performance, and more than one configuration of board attributes can lead to the same outcome for CSR-performance. Depending on the configuration the CSR-committee alongside other attributes can be present, absent, or insignificant (Table. 5). This result, to some extent, can explain some of the inconsistencies of previous literature in terms of the influence of various board attributes in shaping CSR-performance.

Furthermore, by exploring FTSE350 and S&P500 companies separately, we were able to explore the differences and similarities between companies operating in two countries with slightly different rules and regulations. We were able to identify 9 configurations generating high CSR-performance and categorise them into three archetypes shared by both countries. Geographical context and corporate governance guidance seems to impact board configuration. However, regardless of the country the company operates in, board attribute configurations shaping CSR-performance share common traits. The same can be said for companies in different industries. As can be seen from the examples of various companies in different

archetypes mentioned in the previous section, board attribute configurations impacting CSR-performance is shared across industries as well.

6-1- Theoretical Implication

By conducting this research, our study provides some answers for the main research question: *What is the role of a CSR-committee in shaping CSR-performance?* Our results suggest that although this can be a useful board-level committee, it will not necessarily lead to high CSR-performance. Out of the nine board configurations associated with high CSR-performance, six contain the CSR-committee. The interaction of various board attributes is important, several different combinations of board attributes can result in the same CSR-performance and “one-size” does not necessarily have to fit all. Hence, exploring governance mechanisms in “bundles” can provide better understanding of their impact.

Although the configurational approach has been used to analyse various topics related to corporate governance mechanisms – for instance the impact of corporate governance mechanisms on investor’s perception of foreign initial public offerings (IPO) value (Aguilera et al., 2014), the impact of corporate governance practices in different geographical context on firm performance (return on equity (ROE)) (García-Castro et al., 2013) – it has not been used to explore the role of the CSR-committee as a board attribute in shaping CSR-performance. This is especially important, as in addition to identifying three archetypes associated with high CSR-performance, this approach can provide a more comprehensive view of the influence of the CSR-committee in shaping CSR-performance. By moving away from traditional GLM methods based on testing theoretically developed hypotheses that lead to inconsistent results, this research took a step back to explore the phenomena and practice of boards and their role in shaping CSR-performance. Overall, this study can be seen as a step in this direction, paving

the way for other such studies in the development of appropriate theorisation and research designs in the impact of board attributes on CSR-performance (Ployhart & Bartunek, 2019)

6-2- Practical Implications

Exploring CSR-committees beyond their existence, helps organisations understand the role of CSR-committees and its interaction with other key board attributes shaping CSR-performance. The reason this is important lies in the increasing number of companies voluntarily setting up CSR-committees at board-level, and the lack of detail in the corporate governance realm regarding the board's role in monitoring corporate social responsibility and sustainability (Burke, Hoitash and Hoitash, 2019; Dixon-Fowler, Ellstrand and Johnson, 2017; Paine, 2014). Furthermore, by identifying the various configurations of other board attributes, the study helps businesses understand the interaction of these attributes and the board combinations that can lead to high CSR-performance. Also, depending on where they operate, exploring the geographical context of boards provide businesses with an additional level of guidance on what they should focus on. These insights can guide companies in deciding the best set-up of boards to achieve their social and environmental objectives. At the same time this research has implications for policymakers as well. Taking the nine board configurations and 3 archetypes identified into consideration, policymakers can provide companies with policy proposals, guidelines and frameworks for shaping CSR-performance at board-level. Additionally, the geographical context of boards explored, provides policymakers with an additional level of guidance on what to take into consideration depending on the country.

6-3- Limitations and Directions for Future Research

By moving away from the traditional GLM methods some possible reasons to the inconsistent results of previous research have been found, however the QCA method comes with its own limitations. It must be kept in mind that in this study the aim was to find the most consistent

board configurations that lead to high CSR-performance and explore the role of the CSR-committee within them. Hence, the benchmarks for case frequency, consistency and PRI were implemented. It is understood the board configurations found may not be the only ones leading to high CSR-performance in companies. However, they are the most frequently seen board configurations that lead to such an outcome. Furthermore, aligned with best practice and due to complexity issues in the QCA method the number of board attributes (conditions) were limited to the eight most commonly explored in the literature (Bolourian et al., 2021; Greckhamer et al., 2013).

The companies included in the sample for this study have the highest market capitalisation of the country they operate in. However, firm performance can influence CSR-performance (Zhao & Murrell, 2016), indicating configurations and archetypes that might be suitable for companies similar to the current sample may not be suitable for others. It would be advisable to separately explore cases from other companies, for instance with smaller market capitalisation.

Furthermore, the board configurations in eastern countries can be different from western countries, for instance male-dominant boards from similar ethnicity backgrounds is a common occurrence in countries like South Korea (Chang et al., 2017; Oh, Chang and Jung, 2019). Also, configurations of boards with a continental European/Japanese stakeholder-oriented corporate governance systems where a two-tier system is more common may differ too (Aguilera et al., 2006). Another avenue for further research would lie in exploring the possible board configuration of other countries that could be associated to high CSR-performance, and the differences they might have compared to the configurations found in this study. In addition to exploring board configurations, it would seem sensible to consider the dynamic of the directors themselves in various board configurations and how they may/may not perceive their role as a

director in conjunction with other attributes (Boivie et al., 2021). Also, whether this perspective would change depending on the board archetype.

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Table. 1: Overall View of Sample

Year	No. Companies on the FTSE350	No. Companies on the S&P 500	No. Committees Selected	No. Committees Deleted
2013	222	452	138	15
2014	224	461	149	9
2015	287	474	154	17
2016	303	468	168	14
Total	1036	1855	609	55

Table. 2: Set Explanation

Sets	Explanation
CSRP	Aggregated environmental and social performance score
FemD	Proportion of female-directors on the board
DExp	Average years directors on the board have served on other boards
DAge	Average age of directors on the board
DTenure	Average board tenure of directors on the board
BNED	Proportion of NEDs on the board
BSize	The number of directors on the board
CEO-duality	CEO and chair are the same
CSRCom	Board has a committee dedicated to social and/or environmental issues [*]

^{*} The name of the committee was self-explanatory; it was a committee dedicated to social and environmental issues (names such as CSR, sustainability, social performance, environmental performance, etc.). When the committee's name did not explicitly indicate a connection to social and environmental issues, and it was not one of the three main board committees (i.e. nomination, audit and remuneration/compensation), the committee charter was accessed through the company website. If the responsibilities of the committee involved any aspect of social and environmental issues, the committee was considered a CSR-committee and thus added to the sample

Table. 3: Descriptive statistics and calibration rules for set-membership

Variable	FTSE350 Cases						S&P500 Cases					
	Mean	Min	Max	Thresholds for set membership			Mean	Min	Max	Thresholds for set membership		
				Fully in	Cross-over	Fully out				Fully in	Cross-over	Fully out
CSRP	42.83	10.32	67.39	52.23	43.44	34.42	43.06	7.79	66.99	53.2	44.92	34.25
FemD	17.48	0	57.17	30	15.1	0	18.16	0	55.55	30	15.1	0
DExp	3.18	0	10.63	3.88	3	2.17	4.78	0.2	15.31	5.79	4.62	3.69
DAge	56.99	46.22	68.33	59.17	56.99	54.79	62.59	46.88	75.57	64.61	62.7	60.63
DTenure	5.78	0.1	24.7	7	5.36	4.14	8.87	0.1	22.92	10.58	8.71	6.78
NED	71.89	37.5	100	90	70.1	50	87.23	50	100	90	70.1	50
BSize	9.07	3	26	10	9.1	7	10.8	2	30	12	10.1	9
CEO-Duality				1		0				1		0
CSRCom				1		0				1		0

Table. 4: Descriptive statistics of the variables

Variables	Mean	Median	St.D	Min	Max
Board					
No. Female	1.9	2.0	1.1	0.0	7.0
FemD	17.9	18.2	9.7	0.0	57.1
No.NED	8.4	8.0	2.6	1.0	28.0
%NED	81.7	86.7	11.8	37.5	100.0
BSize	10.2	10.0	2.5	2.0	30.0
DExp	4.2	4.0	1.8	0.0	15.3
DInExp*	1.0	0.5	1.2	0.0	7.9
DTenure	7.8	7.5	3.5	0.1	24.8
DAge	60.6	60.9	4.2	46.2	75.6
CSRCom	0.2	0.0	0.4	0.0	1.0
ROA	8.1	6.8	11.5	-61.4	269.1
CSRP	43.0	44.4	12.6	7.8	67.4
No. FemCEO	121				
No. CEODuality	1002				
No. Year-Company	2891				
With CSR-Committee					
CSRP	49.55	51.24	9.62	16.43	66.23
No. Year-Company	609				

* Average years directors on the board have worked in the company excluding years on the board

Table 5: Distinct configuration of board attributes leading to HIGH CSR-performance

		Solutions related to FTSE 350 Listed Companies					Solutions related to S&P500 Listed Companies			
		1	2	3	4	5	6	7	8	9
Director Characteristics	FemD	●	●	●	●		●	●	●	●
	DExp		⊗	●	●	●			●	●
	DAge	●	⊗	●	⊗	●		●	⊗	●
	DTenure	⊗	●	⊗	●		⊗		●	●
Board Structure	NED	●	⊗	●	⊗	●				
	CEO-duality						●	●	●	
	BSize	●	●	●	●	●	●	●	●	●
	CSRCom	●	●		⊗	●	●	●		●
Board Archetype		Committee Board	Committee Board	Experience Board	Experience Board	Hybrid Board	Committee Board	Committee Board	Experience Board	Hybrid Board
Raw Coverage		0.0855521	0.0304166	0.195994	0.0772197	0.127257	0.0962326	0.0977328	0.0806099	0.0692412
Unique Coverage		0.0084824	0.0172003	0.0795117	0.0362855	0.0509585	0.027195	0.00786492	0.0563401	0.020348
Consistency		0.916265	0.920882	0.848793	0.845055	0.875608	0.875085	0.890722	0.856248	0.903523
N		1036					1855			
Frequency cut-off		6					12			
Consistency cut-off		0.808948					0.811931			
Solution coverage		0.311192					0.205934			
Solution consistency		0.837156					0.857952			

Note: The notation applied by Fiss (2011) has been followed. Central conditions are represented by “●” (presence), “⊗” (absence), and blank (indifference)

Table. 6: Distinct configuration of board attributes leading to LOW CSR-performance

		Solutions related to FTSE 350 Listed Companies				Solutions related to S&P500 Listed Companies		
		1	2	3	4	5	6	7
Director Characteristics	FemD	⊗	⊗			⊗		⊗
	DExp		⊗	●	⊗	⊗	⊗	⊗
	DAge	⊗	⊗	●	●		●	●
	DTenure				●	●	●	●
Board Structure	NED	⊗		●	⊗			
	CEO-duality					⊗	⊗	
	BSize	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	CSRCom	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Raw Coverage		0.206712	0.180146	0.190301	0.093771	0.099366	0.075911	0.109608
Unique Coverage		0.031837	0.0169902	0.12972	0.0370553	0.03654	0.013084	0.0467811
Consistency		0.84616	0.843035	0.853103	0.880548	0.799284	0.835662	0.829746
N		1036				1855		
Frequency cut-off		6				12		
Consistency cut-off		0.828474				0.802863		
Solution coverage		0.425142				0.159231		
Solution consistency		0.850749				0.807316		

Note: The notation applied by Fiss (2011) has been followed. Central conditions are represented by “●” (presence), “⊗” (absence), and blank (indifference)

Figure. 1: Impact of Board Attributes Configuration on CSR Performance

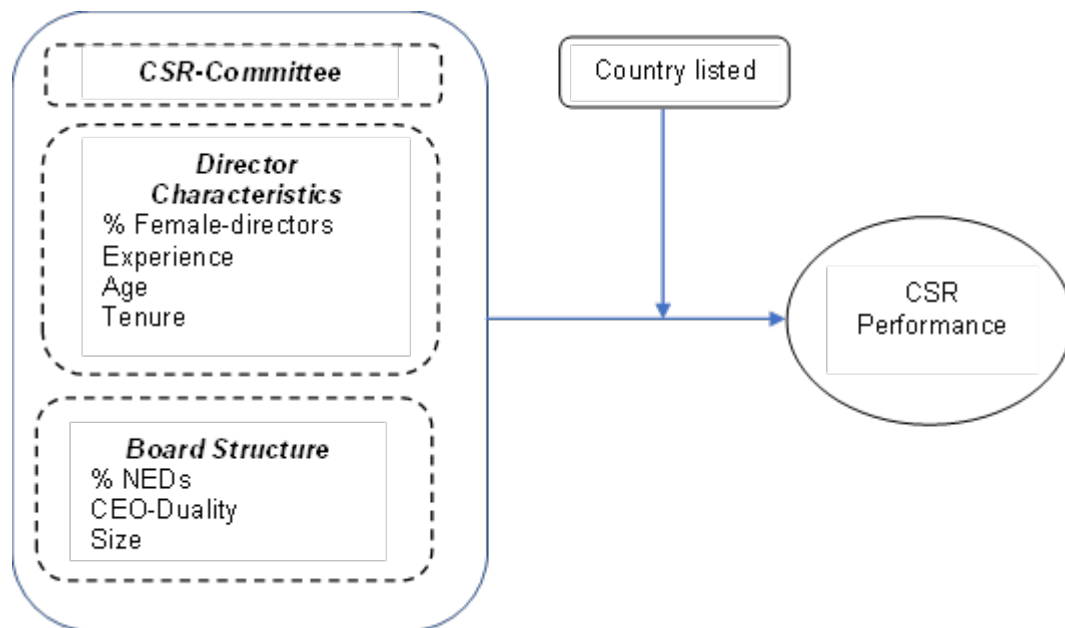


Figure. 2: Commonalities and Differences between UK and USA (FTSE350 and S&P500)

