*Business Ethics, the Environment & Responsibility*

WILEY

Business Ethics,
the Environment & Responsibility

ORIGINAL ARTICLE OPEN ACCESS

# Steering Sustainability: Empirical Insights Into Enhancing ESG Ratings via CSR Committees

Andrea Caccialanza[1,2] | Matteo Cotugno[3] | Salvatore Perdichizzi[4] | Riccardo Torelli[3]

[1]Department of Management, University of Bologna, Bologna, Italy | [2]Department of Management, University of Bergamo, Bergamo, Italy | [3]Department of Economic and Social Sciences, Università Cattolica del Sacro Cuore, Piacenza, Italy | [4]Department of Economics and Management "Marco Fanno", University of Padua, Padova, Italy

**Correspondence:** Andrea Caccialanza (andrea.caccialanza@unibo.it)

**Received:** 11 December 2024 | **Revised:** 18 May 2026 | **Accepted:** 13 July 2026

**Keywords:** board | CSR committee | diversity | ESG | ESG performance | sustainability committee

## ABSTRACT

This study contributes to the ongoing discussion on the increasing importance of corporate social responsibility (CSR) committees and their characteristics in driving a stronger focus on sustainability. Using ESG and financial data from Refinitiv/Datastream, governance information from BoardEx, and country-level indicators from Eurostat, we examine a panel of 2202 listed non-financial firms from 11 G20 countries over the period 2010–2021, resulting in 16,505 firm-year observations. Our findings confirm that board size, board gender diversity, and the proportion of independent directors have a positive impact on environmental, social, and governance (ESG) performance. Moreover, we show that both the presence of a CSR committee and the proportion of independent directors on that committee positively influence a company's ESG performance scores. Furthermore, our study indicates that having a CFO on a CSR committee is associated with fewer ESG controversies. Additional analyses explore heterogeneity across countries and sectors, showing that the effectiveness of CSR committees varies depending on institutional and industry contexts. From a policy perspective, the findings suggest that regulators, governance code setters, and ESG rating agencies should pay greater attention not only to the existence of CSR committees, but also to their composition, particularly committee independence and CFO involvement, when evaluating firms' sustainability governance.

**JEL Classification:** M14, G30, Q56

## 1 | Introduction

International organizations and policymakers have intensified their focus on environmental and social issues—exemplified by the UN 2030 Agenda for Sustainable Development and the European Green Deal—spurring a growing literature on how market characteristics and firm-specific factors shape corporate environmental and social performance (Agarwala et al. 2024; Gillan et al. 2021). Within firm-specific factors, governance attributes have attracted sustained attention for their relationship with corporate social and environmental outcomes (Nandi et al. 2023, 2025). A large body of work links board attributes to CSR performance by examining both director characteristics (e.g., gender diversity, experience and tenure, education, age) and governance structures (e.g., CEO duality, board independence, board committees) (Bolourian et al. 2021, 2023; Pareek et al. 2025).

Among governance attributes, gender diversity has been investigated most extensively across CSR dimensions (Ludwig and Sassen 2022; Luo and Tang 2020; McGuinness et al. 2017; Orazalin and Mahmood 2021). Building on the ethics-of-care perspective (Gilligan 1977), several studies argue that female directors place greater weight on long-term outcomes and stakeholder welfare, even when this entails sacrificing short-term profits (Matsa and Miller 2013). Consistent with this view, boards

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2026 The Author(s). *Business Ethics, the Environment & Responsibility* published by John Wiley & Sons Ltd.

with adequate gender diversity appear less prone to unethical behavior—such as financial fraud (Cumming et al. 2015) and tax avoidance (Richardson et al. 2016)—and more inclined toward philanthropic initiatives associated with stronger CSR performance (Bear et al. 2010). Relatedly, the literature documents a positive association between CSR disclosure and environmental and social performance (Agarwala et al. 2024), suggesting that more transparent firms may also be those investing in substantive sustainability actions. Evidence on board independence is more mixed. On the one hand, independent boards are arguably better positioned to balance shareholder and stakeholder demands (Mallin and Michelon 2011; Mallin et al. 2013; Post et al. 2015), and several studies report a positive association between independence and CSR outcomes (Burke et al. 2017; Orazalin 2020). On the other hand, some contributions fail to find statistically significant effects (Harrison and Coombs 2012; McGuinness et al. 2017), indicating that the impact of independence may be contingent on firm context, measurement choices, or the specific mechanisms through which oversight is exercised. A growing stream of research has shifted attention from board-level characteristics to the role of board subcommittees in shaping CSR outcomes. For example, sub-committees have been shown to influence not only the quality of CSR reporting but also broader dimensions of CSR performance and assurance, with their effectiveness largely depending on their internal composition, expertise, and monitoring capacity (Velte 2025). Similarly, research has shifted from broad board characteristics to the role of specialized board-level CSR committees. The presence of a CSR committee is generally associated with higher CSR performance, and the literature frequently argues that smaller, more focused decision-making groups can enhance board productivity by improving monitoring intensity and expertise allocation (Michelon and Parbonetti 2012; Burke et al. 2017; Bolourian et al. 2023). Yet, despite these advances, comparatively little is known about which committee-level attributes actually drive outcomes, how committee composition shapes the quality of oversight, and whether the involvement of top executives is ultimately beneficial or detrimental to sustainability performance.

To provide a theoretical foundation for these inquiries, this study draws on the Reasoned Action Approach (RAA) (Fishbein and Ajzen 1975, 2009), a behavioral framework that explains how individual attitudes, perceived social norms, and perceived behavioral control shape intentions and, ultimately, observable behavior. Originally developed in the social psychology literature and subsequently extended to a broad range of organizational and economic contexts, the RAA is particularly well suited to committee-level governance analysis. Unlike board-level theories (such as agency, resource dependence, or stakeholder theory) which treat governance as a collective or structural phenomenon, the RAA enables an examination of the micro-foundations through which individual committee members' characteristics translate into collective decision-making. Specifically, the independence, gender composition, and executive role of CSR committee members are conceptualized as antecedents that shape each member's attitude toward sustainability, the normative pressures they perceive, and their sense of behavioral control over committee decisions. These individual-level dispositions, in turn, aggregate into committee-level behavioral intentions and observable sustainability outcomes—namely, ESG performance and exposure to controversies. This theoretical lens thus complements and extends the predominantly structural perspective that dominates prior governance and sustainability research.

Against this background, this study addresses three research questions. First, does the presence of a CSR committee improve firms' environmental and social performance? Second, do specific CSR committee characteristics—particularly the proportion of independent and female directors and the participation of top executives on the committee—affect ESG outcomes? Third, does the presence of the CEO or CFO on the CSR committee influence firms' exposure to ESG controversies?

Accordingly, the objective of this study is to examine whether the design and composition of CSR committees are associated with firms' ESG outcomes. More specifically, we investigate whether the presence of a CSR committee, the proportion of independent and female directors within the committee, and the participation of the CEO and CFO are related to environmental and social performance, as well as to firms' exposure to ESG controversies. By moving the analysis from the level of the entire board to the finer structure of CSR committees, we extend prior work on the mechanisms through which internal governance channels influence sustainability outcomes and public scrutiny. Our empirical setting is a panel of listed non-financial companies from 11 G-20 countries over the period 2010–2021, yielding 16,505 firm-year observations. We merge environmental and social performance measures from Refinitiv with committee-level governance attributes from BoardEx accessed via Wharton Research Data Services (WRDS). Environmental and social performance are captured through the Refinitiv E and S pillar scores, while ESG controversies are proxied by the controversy indicators reported in the same database. This combination allows us to study both "positive" dimensions of sustainability performance and adverse events that may reflect governance or operational shortcomings. In addition, we test whether the presence of the CEO or CFO on the CSR committee is related to environmental and social performance as well as to the likelihood of ESG controversies. Beyond performance implications, CSR engagement has also been shown to mitigate firm-level risks, as stronger CSR performance can reduce exposure to litigation and reputational damage through enhanced stakeholder trust and corporate reputation (Wang et al. 2025). Prior work suggests that executive directors may tilt deliberations toward shorter-horizon or financially focused considerations; however, the governance–sustainability link at the committee level has not been thoroughly investigated (Ampofo and Barkhi 2024; Kim and Kim 2023). Our study provides systematic evidence on how executive participation is associated with sustainability outcomes and controversy risk.

This study contributes to the literature by examining whether specific CSR committee characteristics are associated with firms' environmental and social performance, as well as with exposure to ESG controversies. Particular attention is devoted to the role of committee independence and the participation of top executives within CSR committees, moving the analysis from broad board-level attributes to the internal structure of sustainability oversight mechanisms. In doing so, the study extends existing research on corporate governance and sustainability by focusing on the organizational configurations through which CSR committees may support environmental and social performance and reduce controversy exposure (Agyei-Boapeah et al. 2024). These



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

aspects are increasingly relevant for regulators, governance code setters, and ESG rating agencies concerned with the effectiveness of board-level sustainability governance.

The remainder of the paper proceeds as follows. Section 2 reviews the related literature and develops testable hypotheses. Section 3 describes the empirical strategy, data sources, and variable construction. Sections 4 and 5 present the main results and additional analyses, including robustness checks and alternative specifications. Section 6 concludes.

## 2 | Literature Review and Research Hypothesis

The relationship between corporate governance and sustainability performance has captured considerable academic interest, underscored by various theoretical frameworks such as agency, resource-dependence, institutional, and stakeholder theories (e.g., Ghosh and Sahu 2026a). These frameworks collectively dissect the nuanced roles and impacts of board characteristics, country-level governance quality, and corporate social responsibility (CSR) strategies on environmental and social outcomes, offering a comprehensive lens to understand these dynamics (Rodrigo et al. 2019). With recent European regulations, political and managerial debates have also received real impetus. The Corporate Sustainability Reporting Directive (CSRD) and, in particular, the Corporate Sustainability Due Diligence Directive (CSDDD), approved by the European Parliament on April 24, 2024, highlight the crucial role of corporate governance in social and environmental responsibility processes, as well as in the sustainable transition of companies and respect for the main corporate ethical values (Garcia-Blandon et al. 2020). Thus, sustainable corporate governance enters, with great determination, the corporate economic debate and, above all, managerial interest, given the recent regulatory obligations on both non-financial disclosure and due diligence (Aboud et al. 2024; Pasko et al. 2024; Velte 2023b, 2023c).

While the existing literature has extensively examined the relationship between board-level characteristics and sustainability performance, there remains a significant gap in understanding how specific subcommittee structures—particularly CSR committees—influence corporate sustainability outcomes. While prior studies highlight that environmental or sustainability committees can enhance the effectiveness of board characteristics—such as gender diversity—in determining environmental disclosure (Gerged et al. 2023), the literature has not sufficiently examined how the internal composition of these committees influences sustainability outcomes. Most studies focus on aggregate board characteristics such as overall gender diversity or independence ratios, without looking into the composition and leadership dynamics of specialized committees responsible for sustainability governance (Giannarakis et al. 2023). This represents a critical oversight, as CSR committees serve as the primary operational mechanisms through which sustainability strategies are formulated and implemented. The academic debate acknowledges board diversity, particularly (but not limited to) gender diversity, as a significant catalyst for fostering sustainable governance practices and enhancing environmental and social performance (see Figure 1 for a map of the papers analyzed

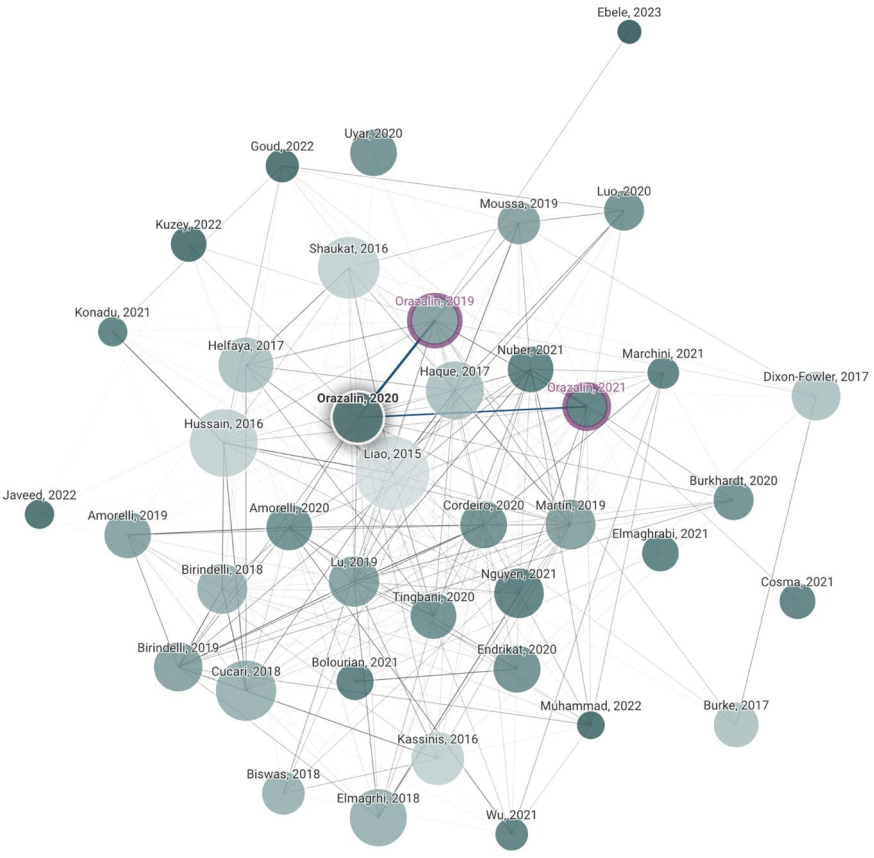



**FIGURE 1** | Literature review map: Corporate governance and ESG performances.



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

in this literature review). Prevailing research demonstrates the beneficial impact of gender-diverse boards on sustainability outcomes, attributing this positive correlation to the diverse perspectives, innovative approaches, and risk management strategies that women contribute to boardrooms (Seckin-Halac et al. 2021). Recent evidence also suggests that the effectiveness of gender diversity may depend on governance structures, such as the presence of specialized committees, which can strengthen its impact on environmental disclosure and sustainability outcomes (e.g., Gerged et al. 2023). Such findings reinforce that gender diversity on boards is not merely a metric of equality but also a strategic asset for sustainable development (Ludwig and Sassen 2022; Luo and Tang 2020; Orazalin and Mahmood 2021). Furthermore, studies have highlighted the presence of female executives in promoting sustainable practices, suggesting a broader impact of gender diversity beyond board composition (Harjoto and Rossi 2019; Muhammad and Migliori 2022).

Additionally, CSR committees have been found to effectively act as conduits for translating governance mechanisms into practical sustainability actions, underscoring their critical role in the governance–sustainability nexus (Burke et al. 2017; Orazalin 2020). Such committees improve the effectiveness of CSR strategies, further validating their importance in corporate governance (Naveed et al. 2023; Orazalin 2020; Tingbani et al. 2020; Velte and Stawinoga 2020).

Literature also underscores the corporate governance mechanisms in promoting environmental disclosure and performance. Effective CSR strategies and a board's orientation toward CSR significantly enhance the quality of environmental sustainability disclosures, highlighting the central role of governance structures in fostering transparency and accountability (Conte et al. 2023; Helfaya and Moussa 2017; Ghosh and Sahu 2026b). The strategic appointment of sustainability managers within organizations is strongly linked to improved corporate environmental performance, indicating that tailored organizational structures and roles are instrumental in driving sustainability outcomes (Binder 2023; Dixon-Fowler et al. 2017; Tingbani et al. 2020).

A critical finding across these studies is the significant influence of a country's governance quality on corporate environmental practices. Firms operating in countries with robust governance frameworks exhibit superior environmental performance, highlighting the crucial role of external regulatory and institutional environments in shaping corporate sustainability efforts (Orazalin and Mahmood 2021). This interplay between internal corporate governance mechanisms and the broader socio-political context elucidates the multifaceted forces driving sustainability outcomes, further emphasized by research on the global shift in theoretical frameworks supporting these investigations (Danish and Ulucak 2020).

Despite the diversity of perspectives and findings within the field, scholars broadly agree on the necessity of an integrated theoretical approach that directly navigates the complex interactions among internal governance mechanisms, CSR strategies, and external institutional environments. The significant influence of board diversity, with particular emphasis on gender diversity, and the establishment of CSR committees are promoters of environmental and social performance. Javeed et al. (2022), Liao et al. (2015), and Martín and Herrero (2019) underscore the positive association between board diversity and sustainability outcomes, indicating that diverse boards are better equipped to address attempts to pursue firms' sustainability. Similarly, Moussa et al. (2019) and Nguyen et al. (2021) highlight the transformative impact of CSR committees in enhancing corporate environmental practices, whereas Kuzey et al. (2022) and Nuber and Velte (2021) provide evidence of the critical role of CSR strategies in improving environmental disclosure and performance. These insights collectively advocate a governance framework that integrates diverse perspectives and specialized committees to navigate the complexities of sustainability in the allocation of organizational resources (Heubeck and Ahrens 2025). However, their effectiveness appears to be conditional, as they do not always succeed in enhancing ESG performance and may exhibit limited capacity in guiding managerial decisions in complex settings (Heubeck and Ahrens 2025).

Cordeiro et al. (2020) and Hussain et al. (2016) emphasize the importance of incorporating diversity and sustainability structures within corporate governance frameworks, suggesting that such integration is crucial for achieving sustainable development goals. Furthermore, Cosma et al. (2021), Javeed et al. (2022), and Liao et al. (2015) highlighted the essential role of sustainability officers and CSR initiatives in fostering a corporate culture committed to environmental stewardship and social responsibility. Cucari et al. (2018) and Wu et al. (2021) expand on these themes and argue for the adoption of strategic CSR initiatives to enhance sustainability outcomes. Luo and Tang (2020), Marchini et al. (2021), and Shaukat et al. (2016) empirically supported the positive impact of governance reforms on corporate sustainability efforts. Bolourian et al. (2021), Ludwig and Sassen (2022), Luo and Tang (2020), and Orazalin and Mahmood (2021) further corroborate the need to embrace diversity, invest in sustainability structures, and implement strategic CSR initiatives, underscoring their collective importance in meeting sustainable development goals and prioritizing environmental stewardship within corporate culture. Although recent studies have started to explore the role of CSR committees in influencing ESG performance, the evidence remains inconclusive and points to a limited and context-dependent effectiveness of these governance structures, leaving open questions regarding how their internal composition influences sustainability outcomes (Heubeck and Ahrens 2025).

Moving beyond the traditional board-level analysis that characterizes much of the existing literature, this study adopts a more granular approach by examining the specific structural characteristics of CSR committees. Unlike previous research that treats governance as a monolithic board function, we recognize that sustainability governance operates through specialized subcommittees with distinct compositions, mandates, and decision-making processes. Building on the discussion of the role of sustainable governance in enhancing CSR strategies and ESG (Environmental, Social, and Governance) performance, this study uses the Reasoned Action Approach (RAA) (Ajzen 1991; Eccles 1983; Fishbein and Ajzen 1975, 2009) to examine the specific characteristics of CSR committees that contribute to enhanced sustainability performance. This committee-specific focus represents a methodological advancement over prior studies, which have typically applied behavioral theories to board-level governance without recognizing



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

the unique dynamics that emerge within specialized sustainability committees. The reasoned action approach (RAA) represents a theoretical framework derived from behavioral psychology and sociology and is widely employed in the economic domain to elucidate decision-making processes in the market and individual choices. The selection of RAA over more traditional frameworks such as stakeholder theory or institutional theory is deliberate and strategic. While stakeholder theory focuses on external relationships and institutional theory emphasizes conformity to external pressures, RAA provides a unique lens to examine the internal psychological processes that drive individual committee members' decision-making. This is particularly relevant for CSR committees, where sustainability decisions emerge from the collective actions of individual members, each bringing their own attitudes, perceived norms, and sense of behavioral control to the decision-making process. Unlike board-level theories that treat governance as a monolithic entity, RAA allows us to unpack the micro-foundations of committee effectiveness by examining how individual characteristics translate into collective outcomes. This theoretical approach aims to predict and explain human social behavior through a three-step process. It commences with the concepts (Step 1) of attitude (toward a specific behavior), perceived norms, and perceived behavioral control. These constitute an individual's distinctive characteristics and initiate a decision-making process that results in specific intentions. This intention dictates a certain behavior (Step 2), ultimately culminating in a final outcome (Step 3) (Fishbein and Ajzen 2009). It is crucial to emphasize that the model views attitude as a latent disposition (tendency) toward specific issues with a certain degree of favor or disagreement. Perceived norm is defined as the perceived social pressure toward a particular action (or inaction) based on others' behavior and formal or informal prescriptions. Perceived behavioral control is defined as the perception of the ability to accomplish something combined with autonomy in doing so.

The presence of independent board members and gender balance in corporate governance and their relationship with the company's economic and non-economic performance have long been analyzed (see, e.g., Dixon-Fowler et al. 2017; Harrison and Coombs 2012; Hussain et al. 2016). However, this becomes crucial in our research design, as the independence of certain CSR committee members and their gender may significantly influence their attitude toward specific choices, especially in terms of sustainability. This influence extends to their perception of norms, considering perceived social pressure, particularly in certain contexts, from female board members (Bongiovanni et al. 2023; Chang et al. 2019; Harjoto and Rossi 2019; Toukabri and Jilani 2023) and non-independent compared to independent board members (Khoo et al. 2022).

Finally, there is a potential impact on perceived behavioral control, both for female members (Chang et al. 2019; Naveed et al. 2023; Sierra-Morán et al. 2024), especially because of elements related to culture, tradition, and managerial customs and concerning independent board members, particularly regarding their perceptions of autonomy (Fang et al. 2023; Mishra 2023; Sierra-Morán et al. 2024).

In light of these theoretical-conceptual considerations, a research design (see Figure 2) was created to identify specific governance characteristics, particularly those related to the company's CSR committee, that could influence the decision-making process and, consequently, intentions, behavior, and the final outcome—in this case, ESG performance. The focus is on the independence and gender diversity of committee members as potential influencing elements of the defined process. The application of RAA to CSR committee governance operates through a clear theoretical mapping. Attitude corresponds to individual committee members' disposition toward sustainability issues, which is influenced by their professional background, personal values, and expertise. Independent directors may exhibit different attitudes compared to executive directors due to their external perspective and reduced conflicts of interest. Perceived norms reflect the social and professional pressures that committee members perceive regarding sustainability actions. Female directors may experience different normative pressures due to societal expectations regarding environmental and social responsibility, while the presence of the CEO/CFO may create normative pressures toward financial performance. Perceived behavioral control relates to committee members' confidence in their ability to influence sustainability decisions and their autonomy in doing so. Independent directors may feel greater behavioral control due to their independence, while gender dynamics may affect female directors' perceived control within traditionally male-dominated boardrooms.

It is important to clarify the epistemological status of the RAA within this study. Rather than functioning as a strict causal-psychological model whose internal mechanisms are directly operationalized and independently estimated, the RAA serves here primarily as a sensitizing theoretical framework: one that motivates the selection of committee-level governance characteristics as predictors and provides the conceptual logic underpinning the hypotheses developed below. The empirical design maps observable structural features of CSR committees (the proportion of independent directors, gender composition, and executive participation) onto the RAA constructs of attitude, perceived norms, and perceived behavioral control, respectively. This mapping establishes a theoretically coherent rationale for the hypotheses and subsequently facilitates the interpretation of empirical findings within a consistent behavioral logic. The RAA is therefore best understood as an

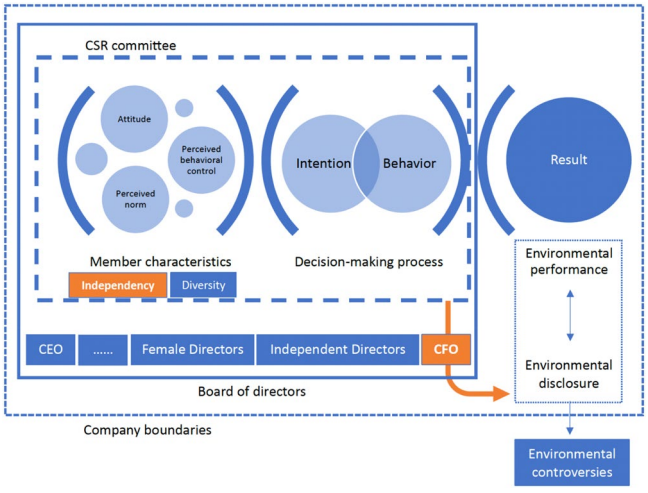



**FIGURE 2** | Research design.



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

interpretative scaffold that bridges individual-level behavioral theory and committee-level governance research, rather than as a model whose psychological mechanisms are directly tested. This approach is consistent with applications of behavioral theory in governance and accounting research, where RAA-derived constructs are frequently employed to frame and contextualize empirical associations rather than to estimate underlying psychological processes directly (Fishbein and Ajzen 2009).

In light of this, two research hypotheses are formulated regarding the characteristics of CSR committee members and their influence on corporate decision-making.

**Hypothesis 1.1.** *The percentage of independent directors within the CSR committee positively influences the company's ESG performance score.*

**Hypothesis 1.2.** *The percentage of female directors within the CSR committee positively influences the company's ESG performance score.*

To investigate the role and characteristics of the CSR committee and its members thoroughly, a potentially negative aspect was included in the research design. This was based on the assumption from the RAA that sometimes participants' intentions in sustainability decision-making might not align with the actions taken due to limiting factors such as internal/external pressures, short-term orientation, and focus on economic results. This includes situations where behavior aligns with intention but both have a deceptive purpose, leading to a negative outcome (in terms of ESG) to create a better external perception and image than reality (Cho et al. 2009; de Vries et al. 2015). This phenomenon, prevalent in ESG debate, is referred to as "greenwashing" (deceptive environmental communication) or better yet, "decoupling" between communicative actions (disclosure) and substantive actions (performance) (Bromley and Powell 2012; Torelli et al. 2020; Velte 2023a).

Consistent with the RAA, two potentially influential elements in this process were identified: the presence of two top figures within the CSR committee: the CEO and CFO. This assumption arises from the established leadership and guiding role these figures represent and their potential influence on the decision-making process (Zhong et al. 2023), particularly regarding ESG issues (Du et al. 2023; Huang and Wei 2023; Kind et al. 2023; Liu et al. 2024). The tendency of these figures to focus on operational and economic–financial issues could act as a filter for committee decisions, preserving the company from choices that are too divergent from its corporate identity and tangible possibilities (Ampofo and Barkhi 2024; Ginesti et al. 2023; Kim and Kim 2023). In light of this, two hypotheses are formulated regarding the presence of the CEO and CFO in the CSR committee and their influence on the decoupling between sustainable actions and sustainability communication, resulting in public ESG controversies:

**Hypothesis 2.1.** *The presence of the CEO within the CSR committee negatively influences the level of ESG controversies related to the company.*

**Hypothesis 2.2.** *The presence of the CFO within the CSR committee negatively influences the level of ESG controversies related to the company.*

RAA theoretical framework provides a robust foundation for our hypotheses. Independent directors' enhanced behavioral control and potentially stronger pro-sustainability attitudes should lead to better ESG performance (Hypothesis 1.1). Similarly, female directors' normative pressures toward social responsibility and their distinct attitudes toward risk and stakeholder concerns should positively influence ESG outcomes (Hypothesis 1.2). Conversely, the presence of CEO/CFO may create conflicting attitudes and normative pressures that prioritize short-term financial performance over long-term sustainability, potentially leading to decoupling behaviors that generate ESG controversies (Hypotheses 2.1 and 2.2).

In summary, our main goal is to emphasize the role of governance structures, particularly CSR committees, in shaping corporate sustainability outcomes. By empirically testing these hypotheses, we aim to identify the effective attributes of CSR committees, such as independence, diversity, and the presence of a CEO/CFO, and how these attributes facilitate the integration of sustainability into corporate strategy and operations, resulting in improved ESG performance and scores. The testing of the hypotheses contributes significantly to our understanding of corporate governance mechanisms and their impact on sustainability performance. While prior research has examined how ESG dimensions influence managerial outcomes such as CEO compensation through board and executive characteristics (Rath et al. 2025), our study complements this perspective by focusing on how governance structures—specifically CSR committee composition—influence ESG performance and controversy outcomes. Specifically, by identifying the specific mechanisms through which CSR committees enhance ESG outcomes, this study addresses a critical gap in the literature on corporate governance and ESG performance, looking at the operationalization of sustainability within corporate governance frameworks. Thus, the convergence of corporate governance and sustainability performance constitutes a critical area of inquiry, revealing the profound impacts of board diversity, CSR committees, and CSR strategies on environmental and social outcomes. Recent evidence also highlights that CSR performance generates protective effects by reducing firm exposure to legal and reputational risks, suggesting that sustainability practices can serve as a risk management mechanism beyond their impact on performance outcomes (e.g., Wang et al. 2025). The insights from this body of work provide a robust foundation for informed decision-making and strategic planning, which are crucial for advancing sustainable development and building resilient, responsible corporations capable of navigating the complexities of the contemporary business environment.

## 3 | Data and Methodology

### 3.1 | Data

We construct a panel of listed non-financial firms from G20 economies over 2010–2021 with ESG coverage from Refinitiv. The focus on the G20 is motivated by their macroeconomic weight and their central role in the effectiveness of multilateral



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

climate-mitigation agreements (International Monetary Fund 2024). According to the IMF (2023), G20 economies account for roughly 73% of global GDP, and UNEP (2023) reports that they are responsible for about 70% of historical contributions to global warming. The different datasets were matched at the firm-year level using common firm identifiers available across the databases. The integration of these databases allows us to combine firm-level ESG indicators, board and committee characteristics, financial information, and country-level institutional variables within a panel structure. Firm-level environmental and social pillar scores and emissions scores are drawn from Refinitiv. Board characteristics—board size, female representation, number of independent directors, and committee participation—are taken from BoardEx. Country-level controls are from Eurostat, including education indicators and environmental taxes (as a share of GDP). Annual accounting variables are obtained from Refinitiv Datastream.

### 3.2 | Variables and Descriptive Statistics

The final merged sample comprises 2202 firms (16,505 firm-year observations) from 11 G20 countries: Australia, Canada, China, France, Germany, Italy, South Africa, Spain, Turkey, the United Kingdom, and the United States. Table 1 reports variable definitions, and Table 2 presents descriptive statistics. The different

**TABLE 1** | Variables description and data sources.

| | Variable description | Data source |
|---|---|---|
| Dependent variables | | |
| E | Environmental score of the firm, based on publicly disclosed data aggregated over resource use, emissions, and innovation; percentile within industry peers (0–100) | Refinitiv |
| Emissions Score | Emissions score of the firm, based on disclosed policies, targets, and outcomes on operational emissions; percentile within industry peers (0–100) | Refinitiv |
| S | Social score of the firm, based on public disclosures across workforce, human rights, community, and product responsibility; percentile within industry peers (0–100) | Refinitiv |
| Controversies_S | Controversies_S is a binary variable which is equal to one for firms that faced at least one social dispute in the previous year, zero otherwise | Refinitiv |
| Controversies_E | Controversies_E is a binary variable which is equal to one for firms that faced at least one environmental dispute in the previous year, zero otherwise | Refinitiv |
| Independent variables | | |
| Board size | Board size refers to the number of members on the board | BoardEx |
| % Female Board | The % Female Board represents the proportion of female directors on the board | BoardEx |
| % Independent Director | The % of independent directors signify the proportion of independent directors on the board | BoardEx |
| CSR Comm. | CSR Comm. is a binary variable that takes the value of one if the firm has a CSR committee, and zero otherwise | BoardEx |
| CEO in Comm. | CEO in Comm. Is a dummy variable equalling one if the CEO is a member of the CSR committee, and zero otherwise | BoardEx |
| CFO in Comm. | CFO in Comm. Is a dummy variable equalling one if the CFO is a member of the CSR committee, and zero otherwise | BoardEx |
| % Independent in Comm. | % Independent in Comm. denotes the proportion of independent directors in the CSR committee | BoardEx |
| Female in Comm. | Female in Comm. is a binary variable indicating the presence of a female director on a CSR committee | BoardEx |
| Control variables | | |
| Education (ln) | Education is the natural logarithm of the percentage of adults with upper secondary education | Eurostat |
| Environmental tax (ln) | Environmental tax is determined as the total amount of any type of environmental tax on the total GDP | Eurostat |
| ROA (%) | ROA (Return on Assets) is calculated as net income divided by total assets | Datastream |
| Size (ln) | Firm size is measured by the natural logarithm of total firm assets | Datastream |
| Debt ratio | The debt ratio represents total liabilities over total assets | Datastream |



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

datasets were matched at the firm-year level using common firm identifiers available across the databases.

The dependent variables in our analysis capture both positive sustainability outcomes and downside ESG risk. Specifically, we use the Refinitiv Environmental score (E), Emissions score, and Social score (S) as measures of firms' environmental and social performance. In addition, to examine whether governance structures are associated with downside ESG outcomes, we use the environmental and social controversy indicators (Controversies_E and Controversies_S), which equal one if the firm faced at least one controversy in the previous year and zero otherwise.

Our main independent variables relate to CSR committee existence and composition. We first consider CSR Comm., a dummy variable equal to one if the firm has a CSR committee and zero otherwise. We then examine the committee's internal design through CEO in Comm., CFO in Comm., % Independent in Comm., and Female in Comm. To account for broader governance characteristics that may also shape sustainability outcomes, we include board-level variables capturing board size, board gender diversity, and board independence. Finally, we control for firm-level characteristics (ROA, Size, and Debt ratio) and country-level factors (Education and Environmental tax), which may independently influence firms' environmental, social, and controversy outcomes.

The E (Environmental) score has a mean of 30.197, while the S (Social) score averages 47.204. For governance, the mean board size is 9.928 directors; the average board shares of female and independent directors are 21.3% and 74.0%, respectively. On average, 4.3% of firm-year observations report a CSR committee (mean of the *CSR Comm*. indicator = 0.043). We manually classified BoardEx committee labels to identify CSR committees aligned with an ESG/sustainability mandate. Specifically, we coded 1 for committees clearly consistent with a CSR mandate—e.g., "Environmental and Sustainability," "Corporate Responsibility and Ethics," or "Corporate Governance, ESG and Sustainability"—and 0 for committees with no CSR/sustainability focus—e.g., "Loans," "Risk Review," or "People and Remuneration." The average presence of a CEO, CFO, or female director on the CSR committee is 1.1%, 0.1%, and 3.4%, respectively. The average proportion of independent directors on the CSR committee is 2.5%.

### 3.3 | Methodology

Our empirical approach is based on panel-data regressions commonly employed in the ESG and corporate governance literature. Panel-data estimation allows us to exploit both the cross-sectional and longitudinal variation in ESG outcomes and governance characteristics across firms and over time, widely used in literature (Baldini et al. 2018; Guérin and Suntheim 2021; Velte 2023c). We focus on the period from 2010 to 2021, and estimate the following equation:

$$Y_{it} = \alpha + \beta_1 CSR\ Comm_{it} + \beta_2\ CSR\ Committee\ Characteristics_{it} + \beta_3\ CG_{it} + \beta_4\ M_{it-1} + \beta_5\ X_{it-1} + Z_{it} + \varepsilon$$

The firm-dependent variables of interest, $Y_{it}$, alternatively represent the logarithm of the *Environmental score*, *Emissions score*, and *Social score*. In the controversy analyses, the dependent variable alternatively represents the environmental controversy indicator (Controversies_E) or the social controversy indicator (Controversies_S). Given the binary nature of the controversy indicators, these specifications are interpreted as examining the association between CSR committee characteristics and firms' exposure to ESG-related controversy events. Regarding the variables that may explain firms' environmental, emissions, and social performance, we define $CSR\ Comm_{it}$ as the commitment of firms to sustainability issues and, in particular, to environmental factors. A dummy variable that takes the value of one if the firm has a CSR committee and zero otherwise. Furthermore, to gain deeper insight into the underlying factors ($CSR\ Committee\ Characteristics_{it}$) associated with better environmental performance, we investigate whether the presence of the CEO, CFO, female directors, and a higher percentage of independent directors on the CSR committee has differing impacts on environmental, emissions, and social performance.

To reduce omitted-variable bias, we include a set of board-level, firm-level, and country-level control variables that prior research has linked to sustainability outcomes ($CG_{it}$). The board structure is characterized by size, independence, and gender diversity. Board size (*Board Size*) is represented by the total number of directors. Board independence (*% Independent Director*) is determined by the percentage of independent directors on the company's board of directors. *% Female Board* is calculated as the percentage of female directors on boards.

The inclusion of firm-level controls and multiple fixed effects aims to mitigate omitted-variable concerns associated with persistent sectoral, temporal, and country-specific heterogeneity. Consequently, the empirical specification was estimated using various combinations of fixed effects ($Z_{it}$). Initially, year fixed effects are incorporated to account for time-varying unobservable characteristics, such as the growing recognition among businesses over time of the significance of environmental issues and climate change. Subsequently, sector fixed effects were introduced to adjust for heterogeneity in the level of environmental (emissions or social) scores across sectors. The industrial sectors were classified using SIC codes at the two-digit granularity level. However, since firms' environmental (emissions or social) scores may differ within sector clusters based on firm-specific attributes, we include vector $X_{it-1}$, comprising lagged firm-level variables commonly utilized to evaluate firms' ESG performance or financial health, such as the logarithm of total assets (*Size*), return on assets (*ROA*), and the ratio of current liabilities plus non-current liabilities to total assets (*Debt ratio*) (Sandberg et al. 2023). Additionally, country-level socioeconomic factors influence firms' environmental (emissions or social) scores. Finally, we include country-fixed effects to account for persistent cross-country differences in regulatory frameworks, institutional quality, and the implementation of ESG-related initiatives (Baldini et al. 2018). Thus, we introduce the vector $M_{it-1}$ encompassing lagged country-level variables, such as the educational attainment and the proportion of environmental tax relative to GDP. All macroeconomic and firm control variables are lagged by 1 year and winsorized at the 1% level. We include a parsimonious, theory-motivated set of controls to limit omitted-variable



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

**TABLE 2** | Descriptive statistics.

| | Obs. | Median | Mean | SD | Min | Max |
|---|---|---|---|---|---|---|
| E | 16,505 | 20.390 | 30.197 | 30.756 | 0.000 | 93.820 |
| Emissions Score | 16,505 | 22.330 | 33.941 | 35.319 | 0.000 | 98.890 |
| S | 16,505 | 44.350 | 47.204 | 21.874 | 2.500 | 93.480 |
| Board size | 16,505 | 9.000 | 9.928 | 3.595 | 2.000 | 33.000 |
| % Female Board | 16,505 | 0.200 | 0.213 | 0.129 | 0.000 | 0.800 |
| % Independent Director | 16,505 | 0.778 | 0.740 | 0.197 | 0.000 | 1.000 |
| CSR Comm. | 16,505 | 0.000 | 0.043 | 0.203 | 0.000 | 1.000 |
| CEO in Comm. | 16,505 | 0.000 | 0.011 | 0.106 | 0.000 | 1.000 |
| CFO in Comm. | 16,505 | 0.000 | 0.001 | 0.026 | 0.000 | 1.000 |
| % Independent in Comm. | 16,505 | 0.000 | 0.025 | 0.138 | 0.000 | 1.000 |
| Female in Comm. | 16,505 | 0.000 | 0.034 | 0.181 | 0.000 | 1.000 |
| Education (ln) | 16,505 | 3.772 | 3.741 | 0.157 | 2.949 | 4.089 |
| Environmental tax (ln) | 16,505 | 0.560 | 2.836 | 3.324 | 0.445 | 8.114 |
| ROA (%) | 16,505 | 0.034 | 0.008 | 0.176 | −1.101 | 0.349 |
| Size (ln) | 16,505 | 15.152 | 15.202 | 2.063 | 8.553 | 20.370 |
| Debt ratio | 16,505 | 0.387 | 0.404 | 0.311 | 0.000 | 1.000 |

*Note:* This table presents descriptive statistics for all variables used in the primary regression analyses. The sample period spans December 31, 2011, to December 31, 2020. For each variable, the following statistics are displayed: the number of observations (Obs.), median (median), mean (mean), standard deviation (SD), minimum value (min), and maximum value (max). The dependent variables consist of the environmental score (E), the Emissions Score (Emissions Score), and social score (S). Board size refers to the number of members on the board. The % Female Board represents the proportion of female directors on the board, whereas the % of independent directors signifies the proportion of independent directors on the board. CSR Comm. is a binary variable that takes the value of one if the firm has a CSR committee and zero otherwise. Similarly, the CEO in Comm. and CFO in Comm. are binary variables, equaling one if the CEO or CFO is a member of the CSR committee, and zero otherwise. % Independent in Comm. denotes the proportion of independent directors in the CSR committee. Female in Comm. is a binary variable indicating the presence of a female director on a CSR committee. Education is the natural logarithm of the percentage of adults with upper secondary education. Environmental tax is determined as the total amount of any type of environmental tax on the total GDP. ROA (Return on Assets) is calculated as net income divided by total assets, while firm size is measured by the natural logarithm of total firm assets. The debt ratio is calculated as total liabilities divided by total assets. All variables are winsorized at the 1st and 99th percentiles.

bias and improve comparability across specifications. Because these variables are not the object of inference—and may be jointly determined with firms' sustainability choices—we refrain from interpreting their coefficients and retain them solely as conditioning covariates. Our focus remains on the existence and design of CSR committees and their association with environmental, emissions, and social performance.

The inclusion of control variables is motivated by the need to isolate more clearly the association between CSR committee design and firms' sustainability outcomes. At the board level, board size, board gender diversity, and board independence are included because they may affect monitoring quality, stakeholder orientation, and the allocation of attention and resources to sustainability issues. At the firm level, size, ROA, and debt ratio are included because firms with different resource endowments, financial constraints, and visibility may differ systematically in environmental and social performance as well as in controversy exposure. At the country level, education captures differences in human capital, stakeholder awareness, and institutional capacity, whereas environmental tax proxies for the regulatory intensity of the sustainability environment in which firms operate (Zhang et al. 2023). These factors may affect the dependent variables independently of CSR committee characteristics; accordingly, they are included as conditioning covariates to reduce omitted-variable bias rather than as variables of primary theoretical interest.

## 4 | Results and Discussion

This section discusses the main results of the impact of the board and CSR committee (characteristics) on *Environmental Performance, Emissions Score* and *Social Performance*. As mentioned in the previous section, we tested various models to understand how the presence and characteristics of a board influence environmental and social performance. The dependent variables are measured in logarithms, so coefficients have a semi-elastic interpretation. To complement statistical with economic significance, we translate key coefficients into percentage changes using the exact transformation $100 \times [\exp(\beta \cdot \Delta) - 1]$, where $\Delta$ denotes a 10 percentage point (pp) change for share variables (e.g., the fraction of women or independent directors) and a 10% change for log regressors (e.g., Board Size). All specifications include country, sector, and year fixed effects, control for standard covariates, cluster standard errors at the firm level, and winsorize variables at the 1st and 99th percentiles as described in the table notes. Different subsections structure the results and



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

discussion section according to the dimensions, namely, board characteristics and CSR committee characteristics.

### 4.1 | Board Characteristics

A large literature links corporate governance (CG) to sustainability outcomes through both the structure of internal working groups and the attributes of the individuals who sit on them. Villalba-Ríos et al. (2023) show that board composition—size, gender diversity, and ownership—shapes environmental sustainability; their optimization strategies imply that larger boards with more women and fewer family members enhance sustainability, whereas the absence of a dedicated CSR committee and limited independence hinder it. In a related vein, Helfaya and Moussa (2017) and Bolourian et al. (2021) highlight how board characteristics map into reporting quality and ESG practices, while Treepongkaruna et al. (2024) emphasize the role of board structure in supporting stakeholder engagement. Naveed et al. (2023) and Sierra-Morán et al. (2024) document positive associations between gender diversity and sustainability, and Fang et al. (2023) and Khoo et al. (2022) provide evidence that board independence enhances monitoring and constrains agency problems that can impede environmental performance. Against this backdrop, we examine the association between board attributes and the Refinitiv E (Environmental), Emissions, and S (Social) pillar scores. Tables 3–5 report the regression estimates for the Environmental, Emissions, and Social pillar scores, respectively. In sum, the results consistently show that governance characteristics exert heterogeneous effects across ESG dimensions, with stronger and more robust associations emerging for environmental-related outcomes, as discussed for each variable below.

Board size enters positively and is included in all specifications. Because both the dependent variables and board size are in logs, the coefficients are elasticities. A 10 pp increase in the number of directors is associated with approximately 5.6% higher E (Table 3, $\beta = 0.558$), 5.6% higher Emissions (Table 4, $\beta = 0.560$), and 1.7% higher S (Table 5, $\beta = 0.170$). These magnitudes are economically meaningful and align with the view that broader boards embed a wider mix of skills, oversight capacity, and stakeholder links that can be mobilized toward sustainability objectives (Helfaya and Moussa 2017; Bolourian et al. 2021; Treepongkaruna et al. 2024).

Gender diversity at the board-level is likewise economically and statistically significant. A 10 pp increase in the share of female directors is associated with roughly 16.1% higher E (Table 3, $\beta = 1.493$), 16.6% higher Emissions (Table 4, $\beta = 1.532$), and 5.1% higher S (Table 5, $\beta = 0.499$). These effects are sizable for the environmental dimensions and non-trivial for S, consistent with the hypothesis that heterogeneous boards improve information processing and broaden the objective function relevant for sustainability investment (Naveed et al. 2023; Sierra-Morán et al. 2024; Eliwa et al. 2023).

Board independence is also positively related to sustainability performance. A 10 pp increase in the fraction of independent directors corresponds to about 6.0% higher E (Table 3, $\beta = 0.578$), 6.1% higher Emissions (Table 4, $\beta = 0.595$), and 3.8% higher S (Table 5, $\beta = 0.374$). Taken together with the gender results, the pattern is consistent with theories that stress monitoring and expertise as channels through which boards influence sustainability outcomes (Fang et al. 2023; Khoo et al. 2022; Sierra-Morán et al. 2024).

### 4.2 | CSR Committee Characteristics

The CSR committee is a salient governance lever for coordinating sustainability strategy and disclosure across functions, but its effectiveness appears context dependent. In the United States, Berrone and Gomez-Mejia (2009) find that environmental committees in more polluting industries can be largely symbolic with limited performance effects, whereas Elmaghrabi (2021) reports for the FTSE 100 in the United Kingdom that a CSR committee improves CSR outcomes and that CSR strategy implementation lowers controversies. Li et al. (2023) similarly associate CSR committees with stronger ESG processes. In behavioral terms, a dedicated committee can increase perceived behavioral control, helping to translate intentions into action (Thun and Zülch 2023). Building on this literature, we follow Michelon and Parbonetti (2012), Orazalin (2020), and Chams and García-Blandón (2019) in testing the impact of the CSR committee and its composition on environmental and social scores using the indicator $CSR\ Comm_{it}$.[1]

The $CSR\ Comm_{it}$ indicator is generally positive. In Table 3, moving from no committee to having a committee is associated with approximately 18.9%–23.5% higher $E$ ($\beta = 0.173$–$0.211$), and in Table 4 with about 17.9%–20.9% higher *Emission Score* ($\beta = 0.165$–$0.190$). For $S$, the specification that includes committee composition yields an effect of roughly 16.3% (Table 5, $\beta = 0.151$). When composition variables are added, the committee indicator's point estimate declines and, in some columns, is not statistically different from zero. This pattern is consistent with part of the "committee effect" being mediated by composition (Elmaghrabi 2021; Li et al. 2023). In Tables 3 and 4, the variable *% Independent in Comm*. is positively associated with environmental performance. It is significant for both the $E$ pillar (Table 3, $p < 0.05$) and the *Emissions score* (Table 4, $p < 0.05$). These results support Hypothesis 1.1 that a higher share of independent directors on the CSR committee improves firms' environmental outcomes. A 10 pp increase in committee independence is associated with approximately 4.0% higher $E$ (Table 3, $\beta = 0.388$, $p < 0.05$) and 6.0% higher *Emission Score* (Table 4, $\beta = 0.584$, $p < 0.05$), while the corresponding coefficient for $S$ is small and not statistically significant (Table 5). By contrast, *% Independent on Board* remains strongly significant ($p < 0.01$). Consequently, Hypothesis 1.1 is partially confirmed: independence within the CSR committee is linked to environmental—rather than social—improvements. This pattern is consistent with independent oversight improving target setting, monitoring, and the adoption of environmentally salient technologies and processes that enter directly into environmental and emissions metrics (Fang et al. 2023; Khoo et al. 2022). The resulting dynamics trigger a better (environmental) performance output identified in Step 3 of the RAA theoretical framework.



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

**TABLE 3** | Environmental performance and CSR committee.

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| **Variables** | **E** | **E** | **E** | **E** | **E** |
| Board Size | 0.558*** | 0.557*** | 0.558*** | 0.559*** | 0.559*** |
| | (6.419) | (6.405) | (6.419) | (6.432) | (6.430) |
| % Female Board | 1.493*** | 1.497*** | 1.493*** | 1.493*** | 1.498*** |
| | (9.256) | (9.274) | (9.256) | (9.254) | (9.273) |
| % Independent Director | 0.578*** | 0.576*** | 0.578*** | 0.561*** | 0.576*** |
| | (4.440) | (4.421) | (4.440) | (4.284) | (4.421) |
| CSR Comm. | 0.173** | 0.211*** | 0.170** | −0.036 | 0.278* |
| | (2.314) | (2.619) | (2.236) | (−0.284) | (1.832) |
| CEO in Comm. | | −0.156 | | | |
| | | (−0.946) | | | |
| CFO in Comm. | | | −0.022 | | |
| | | | (−0.073) | | |
| % Independent in Comm. | | | | 0.388** | |
| | | | | (2.041) | |
| Female in Comm. | | | | | −0.206 |
| | | | | | (−1.311) |
| Education | 1.772*** | 1.779*** | 1.770*** | 1.814*** | 1.774*** |
| | (3.305) | (3.317) | (3.291) | (3.363) | (3.318) |
| Environmental tax | 0.007 | 0.006 | 0.007 | 0.019 | −0.002 |
| | (0.159) | (0.150) | (0.158) | (0.420) | (−0.059) |
| ROA | 0.665*** | 0.666*** | 0.665*** | 0.664*** | 0.665*** |
| | (5.939) | (5.949) | (5.940) | (5.947) | (5.940) |
| Size | 0.371*** | 0.371*** | 0.371*** | 0.371*** | 0.371*** |
| | (5.394) | (5.383) | (5.387) | (5.357) | (5.367) |
| Debt ratio | 0.116 | 0.117 | 0.116 | 0.115 | 0.115 |
| | (1.559) | (1.572) | (1.559) | (1.545) | (1.553) |
| Observations | 16,505 | 16,505 | 16,505 | 16,505 | 16,505 |
| $R^2$ | 0.547 | 0.547 | 0.547 | 0.547 | 0.547 |
| Intercept | Yes | Yes | Yes | Yes | Yes |
| Sector FE | Yes | Yes | Yes | Yes | Yes |
| Country FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Cluster | Firm | Firm | Firm | Firm | Firm |

*Note:* This table shows the panel regression results for the environmental scores from December 2011 to December 2020. The dependent variable is the logarithm of the environmental score. Board size is the natural logarithm of the number of board members. The % Female Board represents the proportion of female directors on the board, whereas the % of independent directors signifies the proportion of independent directors on the board. CSR Comm. is a binary variable that takes the value of one if the firm has a CSR committee and zero otherwise. Similarly, the CEO in Comm. and CFO in Comm. are binary variables, equaling one if the CEO or CFO is a member of the CSR committee and zero otherwise. % Independent in Comm. denotes the proportion of independent directors in the CSR committee. Female in Comm. is a binary variable indicating the presence of a female director on a CSR committee. Education is the natural logarithm of the percentage of adults with upper secondary education. Environmental tax is determined as the total amount of any type of environmental tax on the total GDP. ROA (Return on Assets) is calculated as net income divided by total assets, while firm size is measured by the natural logarithm of total firm assets. The debt ratio is calculated as total liabilities divided by total assets. All variables are winsorized at the 1st and 99th percentiles. Regressions include country-, year-, and sector-fixed effects because ESG ratings differ across sectors. Robust *t* statistics are reported in parentheses. $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

**TABLE 4** | Emissions score and CSR committee.

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| **Variables** | **Emissions Score** | **Emissions Score** | **Emissions Score** | **Emissions Score** | **Emissions Score** |
| Board Size | 0.560*** | 0.560*** | 0.560*** | 0.562*** | 0.562*** |
| | (5.318) | (5.312) | (5.317) | (5.333) | (5.327) |
| % Female Board | 1.532*** | 1.534*** | 1.531*** | 1.532*** | 1.537*** |
| | (8.062) | (8.064) | (8.061) | (8.062) | (8.077) |
| % Independent Director | 0.595*** | 0.594*** | 0.595*** | 0.569*** | 0.593*** |
| | (3.775) | (3.767) | (3.776) | (3.591) | (3.759) |
| CSR Comm. | 0.168* | 0.190* | 0.165* | −0.175 | 0.333* |
| | (1.756) | (1.701) | (1.712) | (−1.243) | (1.868) |
| CEO in Comm. | | −0.079 | | | |
| | | (−0.422) | | | |
| CFO in Comm. | | | 0.140 | | |
| | | | (0.357) | | |
| % Independent in Comm. | | | | 0.584** | |
| | | | | (2.480) | |
| Female in Comm. | | | | | −0.210 |
| | | | | | (−1.165) |
| Education | 1.598** | 1.602** | 1.608** | 1.661** | 1.600** |
| | (2.163) | (2.168) | (2.171) | (2.243) | (2.169) |
| Environmental tax | 0.109*** | 0.109*** | 0.109*** | 0.128*** | 0.100*** |
| | (3.459) | (3.451) | (3.468) | (3.051) | (3.689) |
| ROA | 0.708*** | 0.708*** | 0.708*** | 0.707*** | 0.708*** |
| | (5.693) | (5.696) | (5.691) | (5.702) | (5.693) |
| Size | 0.388*** | 0.388*** | 0.388*** | 0.387*** | 0.388*** |
| | (22.119) | (22.119) | (22.113) | (22.067) | (22.097) |
| Debt ratio | 0.131 | 0.131 | 0.131 | 0.129 | 0.130 |
| | (1.563) | (1.569) | (1.563) | (1.544) | (1.557) |
| Observations | 16,505 | 16,505 | 16,505 | 16,505 | 16,505 |
| $R^2$ | 0.513 | 0.513 | 0.513 | 0.514 | 0.513 |
| Intercept | Yes | Yes | Yes | Yes | Yes |
| Sector FE | Yes | Yes | Yes | Yes | Yes |
| Country FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Cluster | Firm | Firm | Firm | Firm | Firm |

*Note:* This table shows the panel regression results for emissions scores from December 2011 to December 2020. The dependent variable was the logarithm of the emissions score. Board size is the natural logarithm of the number of board members. The % Female Board represents the proportion of female directors on the board, whereas the % of independent directors signifies the proportion of independent directors on the board. CSR Comm. is a binary variable that takes the value of one if the firm has a CSR committee and zero otherwise. Similarly, the CEO in Comm. and CFO in Comm. are binary variables, equaling one if the CEO or CFO is a member of the CSR committee, and zero otherwise. % Independent in Comm. denotes the proportion of independent directors in the CSR committee. Female in Comm. is a binary variable indicating the presence of a female director on a CSR committee. Education is the natural logarithm of the percentage of adults with upper secondary education. Environmental tax is determined as the total amount of any type of environmental tax on the total GDP. ROA (Return on Assets) is calculated as net income divided by total assets, while firm size is measured by the natural logarithm of total firm assets. The debt ratio is calculated as total liabilities divided by total assets. All variables are winsorized at the 1st and 99th percentiles. Regressions include country-, year-, and sector-fixed effects because ESG ratings differ across sectors. Robust *t* statistics are reported in parentheses. *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$.



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

**TABLE 5** | Social performance and CSR committee.

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| **Variables** | **S** | **S** | **S** | **S** | **S** |
| Board Size | 0.170*** | 0.170*** | 0.170*** | 0.170*** | 0.171*** |
| | (4.881) | (4.882) | (4.881) | (4.887) | (4.893) |
| % Female Board | 0.499*** | 0.498*** | 0.499*** | 0.499*** | 0.500*** |
| | (7.862) | (7.840) | (7.863) | (7.861) | (7.877) |
| % Independent Director | 0.374*** | 0.374*** | 0.374*** | 0.370*** | 0.373*** |
| | (7.157) | (7.155) | (7.157) | (7.024) | (7.138) |
| CSR Comm. | 0.093*** | 0.089*** | 0.094*** | 0.044 | 0.151*** |
| | (3.326) | (2.999) | (3.310) | (0.921) | (3.133) |
| CEO in Comm. | | 0.015 | | | |
| | | (0.246) | | | |
| CFO in Comm. | | | −0.029 | | |
| | | | (−0.179) | | |
| % Independent in Comm. | | | | 0.084 | |
| | | | | (1.367) | |
| Female in Comm. | | | | | −0.073 |
| | | | | | (−1.404) |
| Education | 1.124*** | 1.123*** | 1.122*** | 1.133*** | 1.125*** |
| | (3.677) | (3.678) | (3.667) | (3.707) | (3.680) |
| Environmental tax | 0.021* | 0.021* | 0.020* | 0.023* | 0.017* |
| | (1.904) | (1.906) | (1.901) | (1.889) | (1.826) |
| ROA | −0.151*** | −0.151*** | −0.151*** | −0.151*** | −0.151*** |
| | (−3.443) | (−3.443) | (−3.442) | (−3.447) | (−3.438) |
| Size | 0.126*** | 0.126*** | 0.126*** | 0.125*** | 0.125*** |
| | (22.848) | (22.839) | (22.842) | (22.822) | (22.830) |
| Debt ratio | −0.030 | −0.030 | −0.030 | −0.030 | −0.030 |
| | (−1.081) | (−1.084) | (−1.081) | (−1.087) | (−1.086) |
| Observations | 16,505 | 16,505 | 16,505 | 16,505 | 16,505 |
| $R^2$ | 0.408 | 0.408 | 0.408 | 0.408 | 0.408 |
| Intercept | Yes | Yes | Yes | Yes | Yes |
| Sector FE | Yes | Yes | Yes | Yes | Yes |
| Country FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Cluster | Firm | Firm | Firm | Firm | Firm |

*Note:* This table shows the panel regression results for social scores from December 2011 to December 2020. The dependent variable is the logarithm of the social score. Board size is the natural logarithm of the number of board members. The % Female Board represents the proportion of female directors on the board, whereas the % of independent directors signifies the proportion of independent directors on the board. CSR Comm. is a binary variable that takes the value of one if the firm has a CSR committee and zero otherwise. Similarly, the CEO in Comm. and CFO in Comm. are binary variables, equaling one if the CEO or CFO is a member of the CSR committee, and zero otherwise. % Independent in Comm. denotes the proportion of independent directors in the CSR committee. Female in Comm. is a binary variable indicating the presence of a female director on a CSR committee. Education is the natural logarithm of the percentage of adults with upper secondary education. Environmental tax is determined as the total amount of any type of environmental tax on the total GDP. ROA (Return on Assets) is calculated as net income divided by total assets, while firm size is measured by the natural logarithm of total firm assets. The debt ratio is calculated as total liabilities divided by total assets. All variables are winsorized at the 1st and 99th percentiles. Regressions include country-, year-, and sector-fixed effects because ESG ratings differ across sectors. Robust *t* statistics are reported in parentheses. $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

By contrast, the percentage of women on the CSR committee (*Female in Comm.*) has no statistically significant effect on *E* (Table 3), *Emission Score* (Table 4), or *S* (Table 5), so Hypothesis 1.2 is not supported. This result should not be read as evidence against gender diversity per se. As Section 4.1 shows, the fraction of women on the board—where agenda setting, resource allocation, and CEO oversight reside—is associated with large gains (about 16.1% for *E* in Table 3 and 16.6% for *Emission Score* per 10 pp in Table 4). The contrast suggests that locus and authority matter since the representation on a subcommittee without leadership or an enhanced mandate may be insufficient to shift measured outcomes. This finding suggests that these CSR-related governance mechanisms within firms—such as board composition, gender diversity, and executive incentives—tend to generate heterogeneous and context-dependent effects, rather than uniformly strengthening sustainability outcomes across different ESG dimensions (Rath et al. 2025). This interpretation is consistent with evidence that the effectiveness of diversity depends on social norms, scrutiny, and decision rights (Chang et al. 2019; Li et al. 2023; Naveed et al. 2023; Sierra-Morán et al. 2024; Eliwa et al. 2023), and that institutional design can constrain the impact of gender diversity in CSR committees (Ludwig and Sassen 2022). In a multi-country context, regulatory and cultural heterogeneity likely shape how diversity translates into practice (Velte and Stawinoga 2020; Velte 2023c).

The *CEO in Comm.* and *CFO in Comm.* indicators are not statistically different from zero for *E, Emission Score*, or *S* (Tables 3–5). This pattern is consistent with the idea that the committee's monitoring capacity—proxied by independence—rather than the mere presence of top executives, is the operative margin for environmental outcomes. Together with the attenuation of the committee coefficient once composition is included, the estimates reinforce the interpretation that committee design and mandate, more than titular membership, underpin effectiveness. These findings are in line with recent evidence suggesting that CSR committees do not exert a uniformly positive influence on ESG outcomes, but rather display limited effectiveness in determining sustainability performance, particularly when complex organizational dynamics are involved (Heubeck and Ahrens 2025).

In summary, board-level governance—larger boards, greater female representation, and higher independence—is associated with economically meaningful improvements in sustainability performance (Villalba-Ríos et al. 2023; Helfaya and Moussa 2017; Bolourian et al. 2021; Treepongkaruna et al. 2024; Naveed et al. 2023; Sierra-Morán et al. 2024; Fang et al. 2023; Khoo et al. 2022). At the committee-level, establishing a CSR committee correlates with better outcomes in parsimonious models, but the most consistent gains materialize when the committee includes a greater share of independent directors (Michelon and Parbonetti 2012; Orazalin 2020; Chams and García-Blandón 2019; Elmaghrabi 2021; Li et al. 2023; Thun and Zülch 2023). Quantitatively, moving from no committee to having a committee is associated with 18.9%–23.5% higher environmental scores and 17.9%–20.9% higher Emissions, while a 10 pp increase in committee independence is associated with 4.0%–6.0% improvements in environmental metrics. These benchmarks complement the statistical evidence and speak to practical significance.

## 5 | Environmental and Social Controversies

From a policy perspective, it is important to determine whether CSR-committee composition can mitigate environmental and social controversies (Aouadi and Marsat 2018; Cicchiello et al. 2023; DasGupta 2022). Controversies have become a focal topic because they are empirically linked to firm value and, therefore, to the economic consequences of sustainability management (Aouadi and Marsat 2018; García-Sánchez et al. 2025; Ghosh et al. 2023, 2024). Governance-driven channels are thus of first-order interest (Elmaghrabi 2021; Orazalin 2020). In parallel, the sustainability orientation of the top-management team shapes how strategy is articulated and implemented (Aguilera et al. 2021), with top-management commitment moderating the link between sustainability risk management and founding values under stakeholder pressures (Binder 2023; Wijethilake and Lama 2019). Although the CEO and the CFO are central to economic performance, their precise roles in promoting ESG outcomes remain underexplored (Garcia-Blandon et al. 2019; Guo et al. 2021; Velte 2020; Wang et al. 2023). Relatedly, Iannuzzi et al. (2023) report that exposure to ESG controversies declines when nomination and CSR committees overlap, and that younger or foreign directors, as well as greater independence in the nomination committee, are associated with fewer conflicts.

We investigate Hypotheses 2.1 and 2.2 by estimating the probability of environmental or social controversy as a function of CSR-committee composition. Following the literature using comparable datasets, controversies are coded as indicators equal to one if the firm experienced at least one controversy in the previous year and zero otherwise (Aouadi and Marsat 2018; Cicchiello et al. 2023; DasGupta 2022). Consistent with Pacelli et al. (2023), environmental (*Controversies_E*) and social (*Controversies_S*) dimensions are analyzed separately. Table 6 reports estimates for environmental controversies, and Table 7 reports estimates for social controversies. All models include the same fixed effects and controls as the baseline specifications, and standard errors are clustered at the firm level.

Two results are central. First, CEO presence on the CSR committee is not statistically associated with the likelihood of controversy in either domain: the coefficient is essentially zero for environmental controversies (Table 6) and small and statistically insignificant for social controversies (Table 7). We therefore reject Hypothesis 2.1, which predicted a negative effect from CEO membership. Second, CFO presence on the CSR committee is associated with an economically and statistically meaningful reduction in controversy risk. The coefficient on CFO membership is −0.076 ($t = -4.07$) for environmental controversies in Table 6 and −0.132 ($t = -3.44$) for social controversies in Table 7, implying decreases of about 7.6 and 13.2 pp, respectively, in the probability of at least one controversy. These estimates confirm Hypothesis 2.2.

The contrast between CEO and CFO membership invites a behavioral interpretation consistent with the Reasoned Action Approach (RAA). Step 1 of the RAA emphasizes attitudes and intentions, which may be reflected in CEOs' education and tenure. Lewis et al. (2014), for example, show that shorter CEO tenure and financial education are linked to a higher likelihood of disclosing environmental performance. However, a change in intentions (Step 1) does not necessarily translate into enacted



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

**TABLE 6** | Environmental controversies and CSR committee.

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| **Variables** | **Controversies_E** | **Controversies_E** | **Controversies_E** | **Controversies_E** | **Controversies_E** |
| Board Size | 0.024** | 0.024** | 0.024** | 0.024** | 0.024** |
| | (2.071) | (2.073) | (2.073) | (2.088) | (2.074) |
| % Female Board | 0.019 | 0.019 | 0.019 | 0.019 | 0.020 |
| | (1.007) | (1.008) | (1.006) | (1.003) | (1.030) |
| % Independent Director | 0.024 | 0.024 | 0.024 | 0.022 | 0.023 |
| | (1.370) | (1.371) | (1.371) | (1.280) | (1.361) |
| CSR Comm. | 0.023 | 0.023 | 0.024 | 0.003 | 0.033 |
| | (0.051) | (1.448) | (1.059) | (0.142) | (1.424) |
| CEO in Comm. | | 0.000 | | | |
| | | (0.004) | | | |
| CFO in Comm. | | | −0.076*** | | |
| | | | (−4.065) | | |
| % Independent in Comm. | | | | 0.035 | |
| | | | | (1.098) | |
| Female in Comm. | | | | | −0.013 |
| | | | | | (−0.505) |
| Education | 0.099 | 0.099 | 0.098 | 0.104 | 0.099 |
| | (0.996) | (0.999) | (0.980) | (1.039) | (0.992) |
| Environmental tax | −0.005 | −0.005 | −0.005 | −0.004 | −0.006 |
| | (−0.677) | (−0.677) | (−0.679) | (−0.581) | (−0.674) |
| ROA | 0.014 | 0.014 | 0.014 | 0.014 | 0.014 |
| | (0.887) | (0.887) | (0.883) | (0.879) | (0.890) |
| Size | 0.015*** | 0.015*** | 0.015*** | 0.015*** | 0.015*** |
| | (8.999) | (8.994) | (9.000) | (8.947) | (9.000) |
| Debt ratio | 0.000 | 0.000 | 0.000 | −0.000 | −0.000 |
| | (0.005) | (0.005) | (0.001) | (−0.006) | (−0.003) |
| Observations | 11,077 | 11,077 | 11,077 | 11,077 | 11,077 |
| $R^2$ | 0.276 | 0.276 | 0.276 | 0.276 | 0.276 |
| Intercept | Yes | Yes | Yes | Yes | Yes |
| Sector FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Cluster | Firm | Firm | Firm | Firm | Firm |

*Note:* This table shows the panel regression results for environmental controversy between December 2011 and December 2020. The dependent variable is Controversies_E, which is equal to one for firms that faced at least one environmental dispute in the previous year and zero otherwise. Board size is the natural logarithm of the number of board members. The % Female Board represents the proportion of female directors on the board, whereas the % of independent directors signifies the proportion of independent directors on the board. CSR Comm. is a binary variable that takes the value of one if the firm has a CSR committee and zero otherwise. Similarly, the CEO in Comm. and CFO in Comm. are binary variables, equaling one if the CEO or CFO is a member of the CSR committee, and zero otherwise. % Independent in Comm. denotes the proportion of independent directors in the CSR committee. Female in Comm. is a binary variable indicating the presence of a female director on a CSR committee. Education is the natural logarithm of the percentage of adults with upper secondary education. Environmental tax is determined as the total amount of any type of environmental tax on the total GDP. ROA (Return on Assets) is calculated as net income divided by total assets, while firm size is measured by the natural logarithm of total firm assets. The debt ratio is calculated as total liabilities divided by total assets. All variables are winsorized at the 1st and 99th percentiles. Regressions include country-, year-, and sector-fixed effects because ESG ratings differ across sectors. Robust *t* statistics are reported in parentheses. *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$.



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

**TABLE 7** | Social controversies and CSR committee.

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| **Variables** | **Controversies_S** | **Controversies_S** | **Controversies_S** | **Controversies_S** | **Controversies_S** |
| Board Size | −0.009 | −0.009 | −0.009 | −0.009 | −0.009 |
| | (−0.411) | (−0.407) | (−0.408) | (−0.409) | (−0.411) |
| % Female Board | 0.143*** | 0.142*** | 0.143*** | 0.143*** | 0.142*** |
| | (3.136) | (3.128) | (3.136) | (3.136) | (3.132) |
| % Independent Director | 0.069** | 0.069** | 0.069** | 0.068** | 0.069** |
| | (2.339) | (2.340) | (2.339) | (2.324) | (2.342) |
| CSR Comm. | −0.007 | −0.010 | −0.007 | −0.010 | −0.012 |
| | (−0.369) | (−0.429) | (−0.342) | (−0.302) | (−0.396) |
| CEO in Comm. | | 0.008 | | | |
| | | (0.208) | | | |
| CFO in Comm. | | | −0.132*** | | |
| | | | (−3.444) | | |
| % Independent in Comm. | | | | 0.005 | |
| | | | | (0.120) | |
| Female in Comm. | | | | | 0.006 |
| | | | | | (0.164) |
| Education | −0.260 | −0.260 | −0.263 | −0.260 | −0.260 |
| | (−1.358) | (−1.353) | (−1.372) | (−1.352) | (−1.358) |
| Environmental tax | 0.025*** | 0.025*** | 0.025*** | 0.026*** | 0.026*** |
| | (4.399) | (4.398) | (4.396) | (4.179) | (4.276) |
| ROA | −0.004 | −0.004 | −0.004 | −0.004 | −0.004 |
| | (−0.124) | (−0.125) | (−0.127) | (−0.124) | (−0.124) |
| Size | 0.041*** | 0.041*** | 0.041*** | 0.041*** | 0.041*** |
| | (11.630) | (11.632) | (11.631) | (11.618) | (11.631) |
| Debt ratio | 0.019 | 0.019 | 0.019 | 0.019 | 0.019 |
| | (1.140) | (1.138) | (1.137) | (1.140) | (1.142) |
| Observations | 11,077 | 11,077 | 11,077 | 11,077 | 11,077 |
| $R^2$ | 0.205 | 0.205 | 0.205 | 0.205 | 0.205 |
| Intercept | Yes | Yes | Yes | Yes | Yes |
| Sector FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Cluster | Firm | Firm | Firm | Firm | Firm |

*Note:* This table shows the panel regression results for social controversy between December 2011 and December 2020. The dependent variable is Controversies_S, which is equal to one for firms that faced at least one social dispute in the previous year and zero otherwise. Board size is the natural logarithm of the number of board members. The % Female Board represents the proportion of female directors on the board, whereas the % of independent directors signifies the proportion of independent directors on the board. CSR Comm. is a binary variable that takes the value of one if the firm has a CSR committee and zero otherwise. Similarly, the CEO in Comm. and CFO in Comm. are binary variables, equaling one if the CEO or CFO is a member of the CSR committee, and zero otherwise. % Independent in Comm. denotes the proportion of independent directors in the CSR committee. Female in Comm. is a binary variable indicating the presence of a female director on a CSR committee. Education is the natural logarithm of the percentage of adults with upper secondary education. Environmental tax is determined as the total amount of any type of environmental tax on the total GDP. ROA (Return on Assets) is calculated as net income divided by total assets, while firm size is measured by the natural logarithm of total firm assets. The debt ratio is calculated as total liabilities divided by total assets. All variables are winsorized at the 1st and 99th percentiles. Regressions include country-, year-, and sector-fixed effects because ESG ratings differ across sectors. Robust *t* statistics are reported in parentheses. $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

practices (Step 2) that shift average outcomes (Step 3), particularly in a multi-country context in which institutional and cultural heterogeneity dampens mean effects. Other CEO attributes have been shown to matter for ESG depending on setting and horizon—e.g., CEO foreign experience (Liu et al. 2023), CEO power (Velte 2020), and attention allocation shaped by peer CSR and irresponsibility (Wang et al. 2023). Ghosh et al. (2023, 2024) further document how managerial and investor long-term orientations interact with ESG outcomes. The lack of a detectable average effect for CEO membership in our data is therefore consistent with heterogeneous mechanisms that wash out at the mean across countries and industries.

By contrast, CFO membership appears to operate through a risk-control channel that affects the tail of the distribution rather than the mean of ESG scores. Integrating ESG metrics into performance evaluation strengthens the CFO's accountability for incident prevention and disclosure (Chatpibal et al. 2024). In our setting, the −7.6 and −13.2 pp associations indicate economically material improvements in downside protection. This finding dovetails with evidence that governance structures can reduce controversy exposure by aligning responsibility and oversight—here, through the executive most directly responsible for financial controls, compliance systems, and disclosure quality (Aguilera et al. 2021; Binder 2023; Wijethilake and Lama 2019).

Other coefficients provide useful context. Board size loads positively on environmental controversies (Table 6, $\beta = 0.024$, $p < 0.05$) and is statistically indistinguishable from zero for social controversies, while firm size (ln assets) is positively associated with both environmental (Table 6, $\beta = 0.015$, $p < 0.01$) and social (Table 7, $\beta = 0.041$, $p < 0.01$) controversies, consistent with larger, more visible firms facing greater scrutiny and incident exposure. Board-level gender diversity is positively related to the probability of social controversies (Table 7, $\beta = 0.143$, $p < 0.01$). We caution against a causal interpretation of this coefficient; one explanation is that more diverse boards strengthen transparency norms and reporting, increasing the recorded incidence of social disputes (Garcia-Blandon et al. 2019; Guo et al. 2021). Board independence is not significantly associated with environmental controversies and is modestly positive for social controversies (Table 7, $\beta = 0.069$, $p < 0.05$), again potentially reflecting enhanced monitoring and disclosure rather than worse underlying behavior. The presence of a CSR committee per se, and the simple indicator for a female member of the committee, are not statistically different from zero in either domain, underscoring that committee design and mandate—rather than titular membership—drive outcomes.

In summary, the controversy analysis yields three takeaways. First, CFO membership on the CSR committee is associated with substantially lower environmental and social controversy risk, confirming Hypothesis 2.2 and supporting a risk-management mechanism (Chatpibal et al. 2024). Second, CEO membership does not correlate with lower controversy incidence on average in our multi-country sample, leading us to reject Hypothesis 2.1; this result aligns with evidence that CEO effects depend on personal attributes, attention allocation, and institutional context (Lewis et al. 2014; Ghosh et al. 2023, 2024; Liu et al. 2023; Velte 2020; Wang et al. 2023). Third, committee composition and mandate—not merely its existence or token representation—appear to be the relevant margins for reducing downside risk, consistent with governance studies that stress the importance of structure and empowerment in shaping ESG outcomes (Elmaghrabi 2021; Orazalin 2020; Iannuzzi et al. 2023).

These results diverge from parts of the literature and motivate further reflection on economic significance through the RAA lens. In line with this reasoning, Lewis et al. (2014) show that CEOs' shorter tenure and financial education increase the likelihood of disclosing environmental performance. This evidence highlights a cautious attitude by top management (Step 1 of the RAA framework). At this stage, we do not observe alternative behaviors (Step 2) leading to significantly different average outcomes (Step 3). Conversely, other CEO characteristics influence ESG given individual attributes, operational settings, and long-term orientation of management (Ghosh et al. 2023) and investors (Ghosh et al. 2024). In particular, Liu et al. (2023) find that CEO foreign experience improves ESG performance, further moderated by female gender, higher education, and state ownership. Moreover, consistent with Wang et al. (2023), CEOs' decisions to appoint CSR managers vary with attention allocation to competition for stakeholder approval triggered by industry peers' CSR and social irresponsibility. Perceiving CSR as a competitive threat or misconduct as a source of future sanctions influences CSR-manager appointments, moderated by CEOs' motivational attributes. These dynamics guide decision-making and influence managerial practices according to predetermined intentions but cannot be generalized in a G20 multi-country context. This level of analysis maps to Step 2 in assessing top management and C-suite behavior (CEO and/or CFO) given contextual and individual drivers of significance. Additionally, other scholars discuss the relation between ESG performance and CEO power, and positive moderation effects are found for CEO power (Velte 2020). This relationship relates to Step 3, concerning the outcomes of CEO and/or CFO actions and capabilities. In line with this perspective, Guo et al. (2021) test similar educational characteristics to estimate effects on higher levels of CSR disclosure. While such profiles may be more prone to environmental disclosure, they may also increase exposure to misreporting or misrepresentation of material environmental or social impacts (as shown on the right side of Figure 2), potentially increasing controversies. Consistent with this reasoning, Chatpibal et al. (2024) show that integrating ESG metrics into CFO performance evaluation criteria raises accountability for incident prevention. In our evidence, of the two hypotheses tested, only the one concerning the CFO (Hypothesis 2.2) is verified: CFO presence on the CSR committee is associated with a lower likelihood of both *Controversies_E* and *Controversies_S*.

### 5.1 | Heterogeneity Across Countries and Sectors

This section provides an integrated interpretation of how the relation between CSR-committee design and sustainability outcomes varies across sectors and countries. We estimate pooled interaction models for environmental performance (log E), Emissions Score (log Emission), and social performance (log S) with the same controls and fixed effects as in the baseline—board size, % female on the board, % independent directors, education, environmental tax, ROA, size, debt ratio, and country-, sector-, and year-fixed effects—and cluster standard errors



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

at the firm level. To convey economic magnitude, coefficients are translated into semi-elastic percentage changes: for the *CSR Comm*. indicator, we report $100 \times [\exp(\beta) - 1]$ for a $0 \to 1$ change; for the share of independent directors on the CSR committee, we report $100 \times [\exp(0.1\beta) - 1]$ for a 10 pp increase.

In Table 8 (Panel A), sectoral splits reveal economically meaningful contrasts. For environmental performance, in non-manufacturing settings the CSR-committee indicator is negative and statistically indistinguishable from zero (Table 8, $\beta = -0.062$, $t = -0.34$), an estimated −6.1% when moving from no committee to having a committee. By contrast, a higher fraction of independent directors on the committee is positively related to E (Table 8, $\beta = 0.524$, $t = 2.66$, $p < 0.01$), implying a 5.4% increase for a 10 pp rise. In manufacturing, the CSR-committee coefficient is positive but imprecisely estimated ($\beta = 0.822$, $t = 1.54$; +127.5% for +10 pp), whereas committee independence loads negatively ($\beta = -1.331$, $t = -1.85$, $p < 0.10$), about −12.5% for a 10 pp rise. The same pattern extends to Emissions: in non-manufacturing, the committee dummy is negative and imprecise ($\beta = -0.116$, $t = -0.60$; −10.9%), while independence is positive and precise (Table 8, $\beta = 0.711$, $t = 2.93$, $p < 0.01$; +7.4% for +10 pp). In manufacturing, the CSR-committee coefficient is positive but imprecise (Table 8, $\beta = 0.777$, $t = 1.33$), and the independence margin is negative and imprecise ($\beta = -1.033$, $t = -1.24$; −9.8% for +10 pp). For social performance, non-manufacturing firms exhibit a positive but imprecise association with the committee dummy (Table 8, $\beta = 0.096$, $t = 1.42$; +10.0%), and a positive, statistically significant relation with committee independence (Table 8, $\beta = 0.138$, $t = 2.11$, $p < 0.05$; +1.4% for +10 pp). In manufacturing, both coefficients are small and imprecise (CSR: $\beta = 0.010$, $t = 0.05$; % independent: $\beta = 0.046$, $t = 0.24$; = +0.5% for +10 pp). Taken together, these contrasts are consistent with an oversight channel operating more strongly outside manufacturing—where strategy, target-setting, and monitoring can directly influence scores—while technology and process constraints in manufacturing, largely absorbed by sector fixed effects, dampen the marginal role of committee design.

Moreover, in Table 8 (Panel B), cross-country heterogeneity is likewise sizable. For environmental performance, the CSR-committee indicator is economically large and statistically significant in the United States (Table 8, $\beta = 0.674$, $t = 2.33$; +96.1%) and Germany (Table 8, $\beta = 1.816$, $t = 6.30$; +514.6%), with no significant negatives at conventional levels. The independence margin is negative and significant in the United Kingdom (Table 8, $\beta = -0.621$, $t = -2.25$; −6.0% for +10 pp) and Germany (Table 8, $\beta = -1.350$, $t = -4.61$; −12.6% for +10 pp). For emissions, the committee dummy is strongly positive in Germany (Table 8, $\beta = 1.578$, $t = 4.65$; +384.7%), while independence is significantly negative in the United Kingdom (Table 8, $\beta = -0.839$, $t = -2.53$; −8.1% for +10 pp) and Germany (Table 8, $\beta = -1.266$, $t = -3.73$; −11.9% for +10 pp). For social performance, the committee dummy is positive and statistically significant in Germany (Table 8, $\beta = 0.538$, $t = 5.81$; +71.3%), and the independence margin is negative and significant in Germany (Table 8, $\beta = -0.278$, $t = -2.85$; −2.7% for +10 pp). Effects for the remaining countries are not statistically different from zero at conventional levels.

These patterns are consistent with cross-country variation in the salience of ESG regulation, disclosure intensity, and the delegation of decision rights to subcommittees, which together shape the extent to which committees translate intentions into measurable outcomes. More broadly, these cross-country differences align with prior evidence suggesting that the effectiveness of CSR and sustainability committees depends on the institutional environment in which firms operate. In particular, existing studies show that the impact of sustainability-related governance mechanisms, including CSR committees, is shaped by institutional factors such as regulatory enforcement, stakeholder pressure, and disclosure requirements (e.g., Nandi et al. 2025; Ghosh and Sahu 2026a). While much of the existing evidence—often based on single-country settings (e.g., Ghosh and Sahu 2026b for India; Heubeck and Ahrens 2025 for the United States) or region-specific contexts (e.g., Gerged et al. 2023 for Sub-Saharan Africa)—reports mixed findings on the role of such committees (e.g., Elmaghrabi 2021; Velte 2025), our results show that their impact varies significantly across countries even within a common sample, reinforcing the importance of institutional context in shaping governance–sustainability relationships.

Overall, three themes emerge. First, the independence margin within the CSR committee carries more information outside manufacturing, consistent with a monitoring and target-setting mechanism rather than process engineering. Second, the presence of a CSR committee correlates with economically large gains in jurisdictions with strong disclosure and enforcement traditions but is muted elsewhere, suggesting that committees are most effective when embedded in supportive institutional environments. Third, the absence of systematic effects in several cells indicates that composition and mandate, rather than nominal existence, are the operative margins—a reading that echoes the attenuation of the committee dummy once composition is controlled for in the baseline. These estimates should be interpreted as conditional associations rather than causal effects.

## 6 | Conclusion

This study examined whether the design and composition of CSR committees are associated with firms' sustainability outcomes. Using a panel of 2202 listed non-financial firms from 11 G20 countries over the period 2010–2021, with the Reasoned Action Approach employed as an interpretative lens, we find that board-level governance characteristics—especially board gender diversity and board independence—are positively associated with environmental and social performance. At the committee level, the presence of a CSR committee is generally linked to stronger sustainability outcomes, while a higher proportion of independent directors within the committee is particularly associated with better environmental performance, as captured by both E and Emissions scores. By contrast, gender diversity within the CSR committee is not statistically significant in the baseline specifications. With respect to controversies, the mere presence of a CSR committee does not appear to be decisive, whereas CFO participation in the committee is associated with fewer environmental and social controversies. Overall, the findings suggest that not only the existence of a CSR committee, but also its internal composition, matters for understanding firms' ESG performance and controversy risk. While prior studies focus on the role of CSR performance in mitigating legal and litigation



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

**TABLE 8** | Heterogeneity of CSR committee effects by sector and country.

| **Panel A. sector (Manufacturing vs. Non-manufacturing)** | | | | | | |
|---|---|---|---|---|---|---|
| **Group** | **CSR: E** | **CSR: Emission** | **CSR: S** | **% Indep.: E** | **% Indep.: Emission** | **% Indep.: S** |
| Non-manufacturing | −0.062 [−6.1%] (−0.34) | −0.116 [−10.9%] (−0.60) | 0.096 [10.0%] (1.42) | 0.524*** [5.4%] (2.66) | 0.711*** [7.4%] (2.93) | 0.138** [1.4%] (2.11) |
| Manufacturing | 0.822 [127.6%] (1.54) | 0.777 [117.6%] (1.33) | 0.010 [1.0%] (0.05) | −1.331* [−12.5%] (−1.85) | −1.033 [−9.8%] (−1.24) | 0.046 [0.5%] (0.24) |
| **Panel B. Countries (United States, United Kingdom, France, Germany, Canada, Italy)** | | | | | | |
| **Country** | **CSR: E** | **CSR: Emission** | **CSR: S** | **% Indep.: E** | **% Indep.: Emission** | **% Indep.: S** |
| United States | 0.674** [96.1%] (2.33) | 0.692* [99.7%] (1.83) | 0.228 [25.6%] (1.56) | 0.121 [1.2%] (0.37) | 0.429 [4.4%] (1.06) | 0.002 [0.0%] (0.01) |
| United Kingdom | −0.094 [−9.0%] (−0.53) | −0.044 [−4.3%] (−0.21) | 0.046 [4.7%] (0.40) | −0.621** [−6.0%] (−2.25) | −0.839** [−8.1%] (−2.53) | −0.038 [−0.4%] (−0.32) |
| France | −0.094 [−8.9%] (−0.48) | −0.256 [−22.6%] (−1.03) | 0.026 [2.6%] (0.30) | −0.378 [−3.7%] (−1.46) | −0.257 [−2.5%] (−0.81) | −0.193 [−1.9%] (−1.45) |
| Germany | 1.816*** [514.6%] (6.30) | 1.578*** [384.7%] (4.65) | 0.538*** [71.3%] (5.81) | −1.350*** [−12.6%] (−4.61) | −1.266*** [−11.9%] (−3.73) | −0.278*** [−2.7%] (−2.85) |
| Canada | −0.890 [−58.9%] (−1.30) | −0.440 [−35.6%] (−0.66) | 0.267 [30.7%] (1.31) | 1.513* [16.3%] (1.86) | 1.092 [11.5%] (1.47) | 0.247 [2.5%] (1.18) |
| Italy | −0.442 [−35.8%] (−1.23) | −0.473 [−37.7%] (−1.08) | 0.031 [3.1%] (0.23) | 0.670 [6.9%] (1.17) | 0.453 [4.6%] (0.65) | 0.021 [0.2%] (0.12) |

*Note:* This table reports heterogeneity in the association between the CSR committee and sustainability outcomes across sectors and countries. The dependent variables are the logarithms of the environmental score (E), the Emissions Score, and the social score. CSR denotes the committee indicator (equals one if the firm has a CSR committee); % Indep. is the share of independent directors on the CSR committee. Entries show the coefficient $\beta$ with significance stars (***$p < 0.01$, **$p < 0.05$, *$p < 0.10$), the corresponding semi-elastic percentage change in brackets [CSR: $100 \times (e^{\wedge}\beta - 1)$; % Indep.: $100 \times (e^{\wedge}\{0.1\beta\} - 1)$ for a 10-percentage-point increase], and firm-clustered $t$ statistics in parentheses. All regressions control for Board Size (ln directors), % Female Board, % Independent Director, Education (ln upper-secondary attainment), Environmental tax (% GDP), ROA, Size (ln total assets), and Debt ratio. Variables are winsorized at the 1st and 99th percentiles.



26944424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

risks (e.g., Wang et al. 2025), our study extends this perspective by examining how internal governance structures—specifically CSR committee composition—influence firms' exposure to ESG controversies and reputational risks.

From a policy perspective, these results indicate that firms should pay greater attention to the internal design of CSR committees rather than treating them as merely symbolic governance structures. In particular, board independence and gender diversity appear relevant for broader sustainability performance, while committee-level independence strengthens environmental oversight and CFO participation may improve risk management and the quality of non-financial disclosure, thereby helping to reduce controversy exposure. The findings also suggest that ESG rating agencies could improve the predictive power of their methodologies by incorporating information on CSR committee composition, especially committee independence and CFO involvement. In parallel, regulators and governance code setters may consider encouraging more explicit disclosure of board-level ESG oversight arrangements and the assignment of sustainability responsibilities to directors with adequate financial and monitoring expertise.

This study also has limitations that open several avenues for future research. First, although we examine the composition of CSR committees, we do not directly observe the ESG-specific expertise, educational background, or prior sustainability experience of committee members. Future research could investigate whether these qualitative characteristics influence sustainability performance and controversy risk. Second, while our evidence highlights a beneficial association between CFO participation and lower controversy exposure, the mechanisms underlying this result remain only partially observable. Further studies could examine whether this effect operates through stronger internal controls, better non-financial reporting, more conservative risk management, or incentive alignment. Third, the role of CEOs in shaping ESG outcomes may depend on individual traits, incentives, and institutional context, which may help explain why our results differ from parts of the prior literature. Future work could therefore explore whether CEO tenure, education, foreign experience, power, or compensation structures moderate the relationship between executive participation in CSR committees and ESG outcomes. Finally, the multi-country nature of our sample suggests that national governance systems, regulatory pressure, and cultural factors may shape the effectiveness of CSR committees in different ways, making more fine-grained country-level and institutional analyses a promising direction for further research.


### Acknowledgements

Open access publishing facilitated by Universita degli Studi di Bergamo, as part of the Wiley - CRUI-CARE agreement.

### Funding

Project funded under the National Recovery and Resilience Plan (NRRP), Mission 04 Component 2 Investment 1.5—Next Generation EU, Call for tender n. 3277 dated 30/12/2021, Award Number: 0001052 dated 23/06/2022.


### Conflicts of Interest

The authors declare no conflicts of interest.

### Data Availability Statement

The datasets generated and/or analyzed during the current study are not publicly available but are available from the authors on reasonable request.

### Endnotes

[1] As anticipated above, the dummy variable was determined through a manual examination of committee names in BoardEx, distinguishing between those associated with Environmental, Social, and Governance (ESG) matters and those unrelated to ESG. We initially test our main hypothesis by examining committees that exclusively prioritize Environmental, Social, and Governance (ESG) and Corporate Social Responsibility (CSR) issues. Subsequently, we broaden the scope to include committees that address ESG and CSR concerns in a more general sense. Our main findings remain unchanged throughout this expanded analysis (these results are available upon request).

### References


Aboud, A., A. Saleh, and Y. Eliwa. 2024. "Does Mandating ESG Reporting Reduce ESG Decoupling? Evidence From the European Union's Directive 2014/95." *Business Strategy and the Environment* 33, no. 2: 1305–1320. https://doi.org/10.1002/bse.3543.

Agarwala, N., R. Pareek, and T. N. Sahu. 2024. "Do Firm Attributes Impact CSR Participation? Evidence From a Developing Economy." *International Journal of Emerging Markets* 19, no. 12: 4526–4542. https://doi.org/10.1108/IJOEM-05-2022-0876.

Aguilera, R. V., J. A. Aragón-Correa, V. Marano, and P. A. Tashman. 2021. "The Corporate Governance of Environmental Sustainability: A Review and Proposal for More Integrated Research." *Journal of Management* 47, no. 6: 1468–1497. https://doi.org/10.1177/0149206321991212.

Agyei-Boapeah, H., N. Ciftci, J. Kalimilo Malagila, J. Brodmann, and S. Fosu. 2024. "Environmental Performance and Financial Constraints in Emerging Markets." *Accounting Forum* 48, no. 4: 665–697. https://doi.org/10.1080/01559982.2023.2169893.

Ajzen, I. 1991. "The Theory of Planned Behavior." *Organizational Behavior and Human Decision Processes* 50, no. 2: 179–211. https://doi.org/10.1016/0749-5978(91)90020-T.

Ampofo, A. A., and R. Barkhi. 2024. "The Impact of CEO Power and Ethical Corporate Citizenship on Firms' Outcomes." *Research in International Business and Finance* 67: 102076. https://doi.org/10.1016/j.ribaf.2023.102076.

Aouadi, A., and S. Marsat. 2018. "Do ESG Controversies Matter for Firm Value? Evidence From International Data." *Journal of Business Ethics* 151: 1027–1047. https://doi.org/10.1007/s10551-016-3213-8.

Baldini, M., L. D. Maso, G. Liberatore, F. Mazzi, and S. Terzani. 2018. "Role of Country-and Firm-Level Determinants in Environmental, Social, and Governance Disclosure." *Journal of Business Ethics* 150: 79–98. https://doi.org/10.1007/s10551-016-3139-1.

Bear, S., N. Rahman, and C. Post. 2010. "The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation." *Journal of Business Ethics* 97: 207–221. https://doi.org/10.1007/s10551-010-0505-2.

Berrone, P., and L. R. Gomez-Mejia. 2009. "Environmental Performance and Executive Compensation: An Integrated Agency-Institutional Perspective." *Academy of Management Journal* 52, no. 1: 103–126. https://doi.org/10.5465/amj.2009.36461950.





26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Binder, J. 2023. "Leading Wherever They Want? CSR, ESG and Directors' Duties." LSE Legal Studies Working Paper No. 20/2023. https://doi.org/10.2139/ssrn.4492092.

Bolourian, S., L. Alinaghian, and A. Angus. 2023. "Exploring the Role of Board-Level Corporate Social Responsibility Committees in Corporate Social Responsibility Performance: A Configurational Approach." *Journal of Business Research* 169: 114280. https://doi.org/10.1016/j.jbusres.2023.114280.

Bolourian, S., A. Angus, and L. Alinaghian. 2021. "The Impact of Corporate Governance on Corporate Social Responsibility at the Board-Level: A Critical Assessment." *Journal of Cleaner Production* 291: 125752. https://doi.org/10.1016/j.jclepro.2020.125752.

Bongiovanni, A., P. De Vincentiis, A. Guariglia, E. Isaia, and M. Rossi. 2023. "Do Board Gender Quotas Generate Horizontal Spillovers?" *British Journal of Management* 34, no. 4: 1851–1868. https://doi.org/10.1111/1467-8551.12667.

Bromley, P., and W. W. Powell. 2012. "From Smoke and Mirrors to Walking the Talk: Decoupling in the Contemporary World." *Academy of Management Annals* 6, no. 1: 483–530. https://doi.org/10.5465/19416520.2012.684462.

Burke, J. J., R. Hoitash, and U. Hoitash. 2017. "The Heterogeneity of Board-Level Sustainability Committees and Corporate Social Performance." *Journal of Business Ethics* 154: 1161–1186. https://doi.org/10.1007/S10551-017-3453-2.

Chams, N., and J. García-Blandón. 2019. "Sustainable or Not Sustainable? The Role of the Board of Directors." *Journal of Cleaner Production* 226: 1067–1081. https://doi.org/10.1016/j.jclepro.2019.04.118.

Chang, E. H., K. L. Milkman, D. Chugh, and M. Akinola. 2019. "Diversity Thresholds: How Social Norms, Visibility, and Scrutiny Relate to Group Composition." *Academy of Management Journal* 62, no. 1: 144–171. https://doi.org/10.5465/amj.2017.0440.

Chatpibal, M., W. Chaiyasoonthorn, and S. Chaveesuk. 2024. "Driving Financial Results is not the Only Priority! An Exploration of the Future Role of Chief Financial Officer: A Grounded Theory Approach." *Meditari Accountancy Research* 32, no. 3: 857–887.

Cho, C. H., J. R. Phillips, A. M. Hageman, and D. M. Patten. 2009. "Media Richness, User Trust, and Perceptions of Corporate Social Responsibility: An Experimental Investigation of Visual Web Site Disclosures." *Accounting, Auditing & Accountability Journal* 22, no. 6: 933–952. https://doi.org/10.1108/09513570910180481.

Cicchiello, A. F., M. Cotugno, and C. Foroni. 2023. "Does Competition Affect ESG Controversies? Evidence From the Banking Industry." *Finance Research Letters* 55: 103972. https://doi.org/10.1016/j.frl.2023.103972.

Conte, F., D. Sardanelli, A. Vollero, and A. Siano. 2023. "CSR Signaling in Controversial and Noncontroversial Industries: CSR Policies, Governance Structures, and Transparency Tools." *European Management Journal* 41, no. 2: 274–281. https://doi.org/10.1016/j.emj.2021.12.003.

Cordeiro, J. J., G. Profumo, and I. Tutore. 2020. "Board Gender Diversity and Corporate Environmental Performance: The Moderating Role of Family and Dual-Class Majority Ownership Structures." *Business Strategy and the Environment* 29, no. 3: 1127–1144. https://doi.org/10.1002/bse.2421.

Cosma, S., P. Schwizer, L. Nobile, and R. Leopizzi. 2021. "Environmental Attitude in the Board. Who Are the "Green Directors"? Evidences From Italy." *Business Strategy and the Environment* 30, no. 7: 3360–3375. https://doi.org/10.1002/BSE.2807.

Cucari, N., S. Falco, and B. Orlando. 2018. "Diversity of Board of Directors and Environmental Social Governance: Evidence From Italian Listed Companies." *Corporate Social Responsibility and Environmental Management* 25: 250–266. https://doi.org/10.1002/CSR.1452.

Cumming, D., T. Y. Leung, and O. Rui. 2015. "Gender Diversity and Securities Fraud." *Academy of Management Journal* 58, no. 5: 1572–1593. https://doi.org/10.5465/amj.2013.0750.

Danish, and R. Ulucak. 2020. "The Pathway Toward Pollution Mitigation: Does Institutional Quality Make a Difference?" *Business Strategy and the Environment* 29, no. 8: 3571–3583. https://doi.org/10.1002/bse.2597.

DasGupta, R. 2022. "Financial Performance Shortfall, ESG Controversies, and ESG Performance: Evidence From Firms Around the World." *Finance Research Letters* 46: 102487. https://doi.org/10.1016/j.frl.2021.102487.

de Vries, G., B. W. Terwel, N. Ellemers, and D. D. L. Daamen. 2015. "Sustainability or Profitability? How Communicated Motives for Environmental Policy Affect Public Perceptions of Corporate Greenwashing." *Corporate Social Responsibility and Environmental Management* 22, no. 3: 142–154. https://doi.org/10.1002/csr.1327.

Dixon-Fowler, H. R., A. E. Ellstrand, and J. L. Johnson. 2017. "The Role of Board Environmental Committees in Corporate Environmental Performance." *Journal of Business Ethics* 140: 423–438. https://doi.org/10.1007/S10551-015-2664-7.

Du, Y., C.-Y. Chan, C.-Y. Lin, and C.-L. Lu. 2023. "Charitable CEOs and Employee Protection." *Pacific Basin Finance Journal* 82: 102187. https://doi.org/10.1016/j.pacfin.2023.102187.

Eccles, J. 1983. "Expectancies, Values and Academic Behaviors." In *Achievement and achievement motives: Psychological and sociological approaches*, J. T. Spence (Ed.), 75–146. Free man.

Eliwa, Y., A. Aboud, and A. Saleh. 2023. "Board Gender Diversity and ESG Decoupling: Does Religiosity Matter?" *Business Strategy and the Environment* 32: 4046–4067. https://doi.org/10.1002/bse.3353.

Elmaghrabi, M. E. 2021. "CSR Committee Attributes and CSR Performance: UK Evidence." *Corporate Governance: The International Journal of Business in Society* 21, no. 5: 892–919. https://doi.org/10.1108/CG-01-2020-0036.

Fang, M., C. Li, W. Wang, and R. Xu. 2023. "Do Independent Directors' Scientific Achievements Matter? Evidence From Over-Investment of Chinese Listed Firms." *International Review of Economics and Finance* 88: 107–122. https://doi.org/10.1016/j.iref.2023.05.009.

Fishbein, M., and I. Ajzen. 1975. *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Addison-Wesley.

Fishbein, M., and I. Ajzen. 2009. *Predicting and Changing Behavior: The Reasoned Action Approach*. Psychology Press. https://doi.org/10.4324/9780203838020.

Garcia-Blandon, J., J. M. Argilés-Bosch, and D. Ravenda. 2019. "Exploring the Relationship Between CEO Characteristics and Performance." *Journal of Business Economics and Management* 20, no. 6: 1064–1082.

Garcia-Blandon, J., D. Castillo-Merino, J. M. Argilés-Bosch, and D. Ravenda. 2020. "Board-Level Ethics Committees in Large European Firms." *Business Ethics: A European Review* 29, no. 4: 824–841. https://doi.org/10.1111/beer.12305.

García-Sánchez, I. M., N. Hussain, C. Aibar-Guzmán, and B. Aibar-Guzmán. 2025. "ESG Controversies and External Assurance: Examining Their Impact on Firm Value and Image." *British Accounting Review* 58: 101704. https://doi.org/10.1016/j.bar.2025.101704.

Gerged, A. M., A. M. Chijoke-Mgbame, R. Konadu, and C. J. Cowton. 2023. "Does the Presence of an Environmental Committee Strengthen the Impact of Board Gender Diversity on Corporate Environmental Disclosure? Evidence From Sub-Saharan Africa." *Business Strategy and the Environment* 32, no. 4: 2434–2450. https://doi.org/10.1002/bse.3257.

Ghosh, S., R. Pareek, and T. N. Sahu. 2023. "U-Shaped Relationship Between Environmental Performance and Financial Performance



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

of Non-Financial Companies: An Empirical Assessment." *Corporate Social Responsibility and Environmental Management* 30, no. 4: 1805–1815. https://doi.org/10.1002/csr.2456.

Ghosh, S., R. Pareek, and T. N. Sahu. 2024. "Do Carbon Performance and Disclosure Practices Effect Companies' Financial Performance: A Non-Linear Perspective." *Asia-Pacific Financial Markets* 31, no. 3: 733–754. https://doi.org/10.1007/s10690-023-09428-5.

Ghosh, S., and T. N. Sahu. 2026a. *Sustainable Futures: Corporate Governance and Environmental Challenges*. Routledge. https://doi.org/10.4324/9781003631323.

Ghosh, S., and T. N. Sahu. 2026b. "How Governance Structures and CSR Committee Drive Sustainable Outcomes: Evidence From Indian Corporations." *International Journal of Disclosure and Governance*. https://doi.org/10.1057/s41310-025-00347-7.

Giannarakis, G., I. Mallidis, N. Sariannidis, and G. Konteos. 2023. "The Impact of Corporate Governance Attributes on Environmental and Social Performance: The Case of European Region Excluding Companies From the Eurozone." *Business Strategy and the Environment* 32, no. 6: 3489–3512. https://doi.org/10.1002/bse.3312.

Gillan, S. L., A. Koch, and L. T. Starks. 2021. "Firms and Social Responsibility: A Review of ESG and CSR Research in Corporate Finance." *Journal of Corporate Finance* 66: 101889.

Gilligan, C. 1977. "In a Different Voice: Women's Conceptions of Self and of Morality." *Harvard Educational Review* 47, no. 4: 481–517.

Ginesti, G., R. Spanò, D. Campa, and R. Macchioni. 2023. "Board Composition, Audit Committee Characteristics, and R&D Expenditure." *European Management Journal* 43: 115–129. https://doi.org/10.1016/j.emj.2023.10.005.

Guérin, P., and F. Suntheim. 2021. "Firms' Environmental Performance and the COVID-19 Crisis." *Economics Letters* 205: 109956. https://doi.org/10.1016/j.econlet.2021.109956.

Guo, J., S. Kim, Y. Yu, and J. Y. Kim. 2021. "Does CFO Accounting Expertise Matter to Corporate Social Responsibility Disclosure in 10-Ks?" *Journal of Applied Accounting Research* 22, no. 5: 800–822. https://doi.org/10.1108/JAAR-07-2020-0137.

Harjoto, M. A., and F. Rossi. 2019. "Religiosity, Female Directors, and Corporate Social Responsibility for Italian Listed Companies." *Journal of Business Research* 95: 338–346. https://doi.org/10.1016/j.jbusres.2018.08.013.

Harrison, J. S., and J. E. Coombs. 2012. "The Moderating Effects From Corporate Governance Characteristics on the Relationship Between Available Slack and Community-Based Firm Performance." *Journal of Business Ethics* 107: 409–422. https://doi.org/10.1007/s10551-011-1046-z.

Helfaya, A., and T. Moussa. 2017. "Do Board's Corporate Social Responsibility Strategy and Orientation Influence Environmental Sustainability Disclosure? UK Evidence." *Business Strategy and the Environment* 26: 1061–1077. https://doi.org/10.1002/BSE.1960.

Heubeck, T., and A. Ahrens. 2025. "Governing the Responsible Investment of Slack Resources in Environmental, Social, and Governance (ESG) Performance: How Beneficial Are CSR Committees?" *Journal of Business Ethics* 198, no. 2: 365–385. https://doi.org/10.1007/s10551-024-05798-6.

Huang, R., and J. Wei. 2023. "Does Ceos' Green Experience Affect Environmental Corporate Social Responsibility? Evidence From China." *Economic Analysis and Policy* 79: 205–231. https://doi.org/10.1016/j.eap.2023.06.012.

Hussain, N., U. Rigoni, and R. P. Orij. 2016. "Corporate Governance and Sustainability Performance: Analysis of Triple Bottom Line Performance." *Journal of Business Ethics* 149: 411–432. https://doi.org/10.1007/s10551-016-3099-5.

Iannuzzi, A. P., S. Dell'Atti, E. D'Apolito, and S. Galletta. 2023. "Nomination Committee Characteristics and Exposure to Environmental, Social and Governance (ESG) Controversies: Evidence From European Global Systemically Important Banks." *Corporate Governance: The International Journal of Business in Society* 23, no. 6: 1314–1338. https://doi.org/10.1108/CG-03-2022-0119.

International Monetary Fund – IMF. 2023. *Share of Global Gross Domestic Product From G7 and G20 Countries in 2022 and Projections for 2027 [Graph]*. Statista. https://www-statista-com.ezproxy.unicatt.it/statistics/722962/g20-share-of-global-gdp/.

International Monetary Fund. 2024. "G-20 Surveillance Note | G-20 Finance Ministers and Central Bank Governors' Meeting February 28–29, 2024 São Paulo, Brazil." https://www.imf.org/external/np/g20/pdf/2024/022624.pdf.

Javeed, S., R. Latief, X. Cai, T. S. Ong, S. Qian, and A. Haq. 2022. "What Is the Role of the Board Sustainable Committee for Corporate Social Responsibility? The Moderating Effect of Gender Diversity and Ownership Concentration." *Journal of Cleaner Production* 379: 134710. https://doi.org/10.1016/j.jclepro.2022.134710.

Khoo, E. S., Y. Lim, L. Y. Lu, and G. S. Monroe. 2022. "Corporate Social Responsibility Performance and the Reputational Incentives of Independent Directors." *Journal of Business Finance and Accounting* 49, no. 5–6: 841–881. https://doi.org/10.1111/jbfa.12569.

Kim, K., and T.-N. Kim. 2023. "CEO Career Concerns and ESG Investments." *Finance Research Letters* 55: 103819. https://doi.org/10.1016/j.frl.2023.103819.

Kind, F. L., J. Zeppenfeld, and R. Lueg. 2023. "The Impact of Chief Executive Officer Narcissism on Environmental, Social, and Governance Reporting." *Business Strategy and the Environment* 32, no. 7: 4448–4466. https://doi.org/10.1002/bse.3375.

Kuzey, C., M. M. C. Fritz, A. Uyar, and A. S. Karaman. 2022. "Board Gender Diversity, CSR Strategy, and Eco-Friendly Initiatives in the Transportation and Logistics Sector." *International Journal of Production Economics* 247: 108436. https://doi.org/10.1016/j.ijpe.2022.108436.

Lewis, B. W., J. L. Walls, and G. W. S. Dowell. 2014. "Difference in Degrees: CEO Characteristics and Firm Environmental Disclosure." *Strategic Management Journal* 35, no. 5: 712–722.

Li, Z., J. Jia, and L. Chapple. 2023. "The Corporate Sustainability Committee and Its Relation to Corporate Environmental Performance." *Meditari Accountancy Research* 31, no. 5: 1292–1324. https://doi.org/10.1108/MEDAR-06-2021-1341.

Liao, L., L. Luo, and Q. Tang. 2015. "Gender Diversity, Board Independence, Environmental Committee and Greenhouse Gas Disclosure." *British Accounting Review* 47, no. 4: 409–424. https://doi.org/10.1016/J.BAR.2014.01.002.

Liu, X., J. Cifuentes-Faura, S. Zhao, and L. Wang. 2024. "The Impact of Government Environmental Attention on Firms' ESG Performance: Evidence From China." *Research in International Business and Finance* 67: 102124. https://doi.org/10.1016/j.ribaf.2023.102124.

Liu, Y., F. Zhang, and H. Zhang. 2023. "CEO Foreign Experience and Corporate Environmental, Social, and Governance (ESG) Performance." *Business Strategy and the Environment* 33, no. 4: 3331–3355. https://doi.org/10.1002/bse.3647.

Ludwig, P., and R. Sassen. 2022. "Which Internal Corporate Governance Mechanisms Drive Corporate Sustainability?" *Journal of Environmental Management* 301: 113780. https://doi.org/10.1016/j.jenvman.2021.113780.

Luo, L., and Q. Tang. 2020. "Corporate Governance and Carbon Performance: Role of Carbon Strategy and Awareness of Climate Risk." *Accounting and Finance* 61, no. 2: 2891–2934. https://doi.org/10.1111/acfi.12687.

Mallin, C. A., and G. Michelon. 2011. "Board Reputation Attributes and Corporate Social Performance: An Empirical Investigation of the US



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Best Corporate Citizens." *Accounting and Business Research* 41, no. 2: 119–144.

Mallin, C., G. Michelon, and D. Raggi. 2013. "Monitoring Intensity and Stakeholders' Orientation: How Does Governance Affect Social and Environmental Disclosure?" *Journal of Business Ethics* 114: 29–43. https://doi.org/10.1007/s10551-012-1324-4.

Marchini, P. L., V. Tibiletti, T. Mazza, and G. Gabrielli. 2021. "Gender Quotas and the Environment: Environmental Performance and Enforcement." *Corporate Social Responsibility and Environmental Management* 29, no. 1: 256–272. https://doi.org/10.1002/csr.2200.

Martín, C. J. G., and B. Herrero. 2019. "Do Board Characteristics Affect Environmental Performance? A Study of EU Firms." *Corporate Social Responsibility and Environmental Management* 27, no. 1: 74–94. https://doi.org/10.1002/CSR.1775.

Matsa, D. A., and A. R. Miller. 2013. "A Female Style in Corporate Leadership? Evidence From Quotas." *American Economic Journal: Applied Economics* 5, no. 3: 136–169. https://doi.org/10.1257/app.5.3.136.

McGuinness, P. B., J. P. Vieito, and M. Wang. 2017. "The Role of Board Gender and Foreign Ownership in the CSR Performance of Chinese Listed Firms." *Journal of Corporate Finance* 42: 75–99. https://doi.org/10.1016/j.jcorpfin.2016.11.001.

Michelon, G., and A. Parbonetti. 2012. "The Effect of Corporate Governance on Sustainability Disclosure." *Journal of Management & Governance* 16: 477–509. https://doi.org/10.1007/s10997-010-9160-3.

Mishra, S. 2023. "Do Independent Directors Improve Firm Performance? Evidence From India." *Global Business Review* 24, no. 5: 1092–1110. https://doi.org/10.1177/0972150920917310.

Moussa, T., A. Allam, S. Elbanna, and A. Bani-Mustafa. 2019. "Can Board Environmental Orientation Improve U.S. Firms' Carbon Performance? The Mediating Role of Carbon Strategy." *Business Strategy and the Environment* 29, no. 1: 72–86. https://doi.org/10.1002/BSE.2351.

Muhammad, H., and S. Migliori. 2022. "Effects of Board Gender Diversity and Sustainability Committees on Environmental Performance: A Quantile Regression Approach." *Journal of Management & Organization* 29, no. 6: 1051–1076. https://doi.org/10.1017/jmo.2022.8.

Nandi, A., N. Agarwala, and T. N. Sahu. 2023. "Towards a Sustainable Future: The Interaction of Corporate Governance and Sustainable Policies With Corporate Social Responsibility." *Indian Journal of Corporate Governance* 16, no. 2: 149–176. https://doi.org/10.1177/09746862231205652.

Nandi, A., N. Agarwala, and T. N. Sahu. 2025. "Can Corporate Governance and Sustainability Policies Drive CSR Performance? An Empirical Study." *Asia-Pacific Financial Markets* 32, no. 1: 77–102. https://doi.org/10.1007/s10690-024-09446-x.

Naveed, K., F. Khalid, C. L. Voinea, N. Roijakkers, and C. Fratostiteanu. 2023. "Board Gender Diversity and Corporate Environmental Commitment: A Subnational Perspective." *Business Strategy and the Environment* 32, no. 7: 4970–4990. https://doi.org/10.1002/bse.3403.

Nguyen, T. N. H., M. H. Elmagrhi, C. Ntim, and Y. Wu. 2021. "Environmental Performance, Sustainability, Governance and Financial Performance: Evidence From Heavily Polluting Industries in China." *Business Strategy and the Environment* 30, no. 5: 2313–2331. https://doi.org/10.1002/BSE.2748.

Nuber, C., and P. Velte. 2021. "Board Gender Diversity and Carbon Emissions: European Evidence on Curvilinear Relationships and Critical Mass." *Business Strategy and the Environment* 30, no. 4: 1958–1992. https://doi.org/10.1002/BSE.2727.

Orazalin, N. 2020. "Do Board Sustainability Committees Contribute to Corporate Environmental and Social Performance? The Mediating Role of Corporate Social Responsibility Strategy." *Business Strategy and the Environment* 29, no. 1: 140–153. https://doi.org/10.1002/bse.2354.

Orazalin, N. S., and M. Mahmood. 2021. "Toward Sustainable Development: Board Characteristics, Country Governance Quality, and Environmental Performance." *Business Strategy and the Environment* 30, no. 8: 3569–3588. https://doi.org/10.1002/BSE.2820.

Pacelli, V., F. Pampurini, and A. G. Quaranta. 2023. "Environmental, Social and Governance Investing: Does Rating Matter?" *Business Strategy and the Environment* 32, no. 1: 30–41. https://doi.org/10.1002/bse.3116.

Pareek, R., S. Mondal, K. D. Pandey, and T. N. Sahu. 2025. "Do Business Group Affiliation and Corporate Social Responsibility Help or Hurt Firm Performance? An Empirical Investigation." *Asia-Pacific Financial Markets* 33: 909–933. https://doi.org/10.1007/s10690-025-09527-5.

Pasko, O., T. Kharchenko, O. Kovalenko, V. Tkachenko, and O. Kuts. 2024. "Is Corporate Governance a Significant Factor in Corporate Social Responsibility Disclosure? Insights From China." *Investment Management and Financial Innovations* 21, no. 1: 63–75. https://doi.org/10.21511/imfi.21(1).2024.06.

Post, C., N. Rahman, and C. McQuillen. 2015. "From Board Composition to Corporate Environmental Performance Through Sustainability-Themed Alliances." *Journal of Business Ethics* 130: 423–435. https://doi.org/10.1007/s10551-014-2231-7.

Rath, C., A. Tripathy, and S. K. Mangla. 2025. "How the Social Dimension of ESG Influences CEO Compensation: Role of CEO and Board Characteristics." *Business Strategy and the Environment* 34, no. 1: 762–777. https://doi.org/10.1002/bse.4008.

Richardson, G., G. Taylor, and R. Lanis. 2016. "Women on the Board of Directors and Corporate Tax Aggressiveness in Australia: An Empirical Analysis." *Accounting Research Journal* 29, no. 3: 313–331. https://doi.org/10.1108/ARJ-09-2014-0079.

Rodrigo, P., C. Aqueveque, and I. J. Duran. 2019. "Do Employees Value Strategic CSR? A Tale of Affective Organizational Commitment and Its Underlying Mechanisms." *Business Ethics: A European Review* 28, no. 4: 459–475. https://doi.org/10.1111/beer.12227.

Sandberg, H., A. Alnoor, and V. Tiberius. 2023. "Environmental, Social, and Governance Ratings and Financial Performance: Evidence From the European Food Industry." *Business Strategy and the Environment* 32, no. 4: 2471–2489. https://doi.org/10.1002/bse.3259.

Seckin-Halac, D., E. Erdener-Acar, and Y. Zengin-Karaibrahimoglu. 2021. "Ownership and Corporate Social Responsibility: "The Power of the Female Touch"." *European Management Journal* 39, no. 6: 695–709. https://doi.org/10.1016/j.emj.2021.01.008.

Shaukat, A., Y. Qiu, and G. Trojanowski. 2016. "Board Attributes, Corporate Social Responsibility Strategy, and Corporate Environmental and Social Performance." *Journal of Business Ethics* 135: 569–585. https://doi.org/10.1007/S10551-014-2460-9.

Sierra-Morán, J., L. Cabeza-García, and N. González-Álvarez. 2024. "Independent Directors and Firm Innovation: The Moderating Role of Gender and Nationality Diversity." *European Journal of Innovation Management* 27, no. 2: 373–402. https://doi.org/10.1108/EJIM-12-2021-0621.

Thun, T. W., and H. Zülch. 2023. "The Effect of Chief Sustainability Officers on Sustainability Reporting—A Management Perspective." *Business Strategy and the Environment* 32, no. 4: 2093–2110. https://doi.org/10.1002/bse.3238.

Tingbani, I., L. Chithambo, V. Tauringana, and N. I. Papanikolaou. 2020. "Board Gender Diversity, Environmental Committee and Greenhouse Gas Voluntary Disclosures." *Business Strategy and the Environment* 29, no. 6: 2194–2210. https://doi.org/10.1002/bse.2495.

Torelli, R., F. Balluchi, and A. Lazzini. 2020. "Greenwashing and Environmental Communication: Effects on Stakeholders' Perceptions."



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

*Business Strategy and the Environment* 29, no. 2: 407–421. https://doi.org/10.1002/bse.2373.

Toukabri, M., and F. Jilani. 2023. "The Power of Critical Mass to Make a Difference: How Gender Diversity in Board Affect US Corporate Carbon Performance." *Society and Business Review* 18, no. 4: 592–617. https://doi.org/10.1108/SBR-11-2021-0224.

Treepongkaruna, S., K. Kyaw, and P. Jiraporn. 2024. "ESG Controversies and Corporate Governance: Evidence From Board Size." *Business Strategy and the Environment* 33, no. 5: 4218–4232. https://doi.org/10.1002/bse.3697.

UNEP. 2023. *Distribution of Historic Contributions to Global Warming Worldwide From 1850 to 2021, by Country or Region [Graph]*. Statista. https://www-statista-com.ezproxy.unicatt.it/statistics/1440280/historic-contributions-to-global-warming-worldwide-by-country/.

Velte, P. 2020. "Does CEO Power Moderate the Link Between ESG Performance and Financial Performance? A Focus on the German Two-Tier System." *Management Research Review* 43, no. 5: 497–520. https://doi.org/10.1108/MRR-04-2019-0182.

Velte, P. 2023a. "Determinants and Consequences of Corporate Social Responsibility Decoupling—Status Quo and Limitations of Recent Empirical Quantitative Research." *Corporate Social Responsibility and Environmental Management* 30, no. 6: 2695–2717. https://doi.org/10.1002/csr.2538.

Velte, P. 2023b. "Determinants and Financial Consequences of Environmental Performance and Reporting: A Literature Review of European Archival Research." *Journal of Environmental Management* 340: 117916. https://doi.org/10.1016/j.jenvman.2023.117916.

Velte, P. 2023c. "Sustainable Board Governance and Environmental Performance: European Evidence." *Business Strategy and the Environment* 33, no. 4: 3397–3421. https://doi.org/10.1002/bse.3654.

Velte, P. 2025. "Do Audit Committees Impact Corporate Social Responsibility? A Review of Empirical Quantitative Research and Research Opportunities." *Corporate Governance: The International Journal of Business in Society* 25, no. 8: 1–20. https://doi.org/10.1108/CG-04-2024-0227.

Velte, P., and M. Stawinoga. 2020. "Do Chief Sustainability Officers and CSR Committees Influence CSR-Related Outcomes? A Structured Literature Review Based on Empirical-Quantitative Research Findings." *Journal of Management Control* 31, no. 4: 333–377. https://doi.org/10.1007/s00187-020-00308-x.

Villalba-Ríos, P., C. Barroso-Castro, J. D. Vecino-Gravel, and M. D. M. Villegas-Periñan. 2023. "Boards of Directors and Environmental Sustainability: Finding the Synergies That Yield Results." *Business Strategy and the Environment* 32, no. 6: 3861–3886. https://doi.org/10.1002/bse.3342.

Wang, O., H. Wu, and C. Li. 2025. "Corporate Social Responsibility Performance and Litigation Risk." *Finance Research Letters* 72: 106584. https://doi.org/10.1016/j.frl.2024.106584.

Wang, T., Y. Fu, O. Rui, and J. De Castro. 2023. "Catch Up With the Good and Stay Away From the Bad: CEO Decisions on the Appointment of Chief Sustainability Officers." *Journal of Management Studies* 61: 1295–1326. https://doi.org/10.1111/joms.12926.

Wijethilake, C., and T. Lama. 2019. "Sustainability Core Values and Sustainability Risk Management: Moderating Effects of Top Management Commitment and Stakeholder Pressure." *Business Strategy and the Environment* 28, no. 1: 143–154. https://doi.org/10.1002/bse.2245.

Wu, Q., F. Furuoka, and S. C. Lau. 2021. "Corporate Social Responsibility and Board Gender Diversity: A Meta-Analysis." *Management Research Review* 45, no. 7: 956–983. https://doi.org/10.1108/mrr-03-2021-0236.

Zhang, Q., Y. Zhang, Q. Liao, and X. Guo. 2023. "Effect of Green Taxation on Pollution Emissions Under ESG Concept." *Environmental Science and Pollution Research* 30, no. 21: 60196–60211. https://doi.org/10.1007/s11356-023-26699-7.

Zhong, X., L. Ren, and G. Ren. 2023. "Does Performance Persistence Below Aspirations Affect Firms' Accounting Information Disclosure Strategies? An Empirical Study Based on Reliability and Comparability." *Business Ethics, the Environment & Responsibility* 32, no. 3: 1060–1077. https://doi.org/10.1111/beer.12533.



26946424, 0, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/beer.70139 by Riccardo Torelli - University Degli Studi Di Parma Stampa Universitaria Parmense , Wiley Online Library on [19/10/2026]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License