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ESG disclosure and financial performance of multinational enterprises: The moderating effect of board standing committees

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Abstract

The study examines the impact of board committee indexes on the relationship between Environmental, Social, and Governance (ESG) disclosure, and accounting- and market-based performance measures of multinational enterprises (MNEs). Using quantile regression analysis and a large balanced panel data of 500 multinational companies operating in 40 countries from 2009 to 2019 (i.e., 5500 firm-year observations), we uncovered the following significant associations: (i) a positive relationship between ESG disclosure and accounting performance indicators for large-sized MNEs, but this relationship is counteracted by the negative influence of the audit and sustainability committee indexes; (ii) the association between market-based performance outcomes and ESG disclosure is positively affected by the compensation, nomination, and sustainability committee indexes, while it is negatively influenced by the audit committee index; (iii) the combined board committee index has varying impacts on the connection between the components of ESG disclosure, and accounting and market-relevant performance metrics for different sizes of MNEs; and (iv) while the audit and sustainability committee indexes exert negative effects on the relationship between the components of ESG disclosure and performance measures, these effects are countered by the positive moderating impacts of the compensation and nomination committee indexes. The study concludes by discussing the policy implications of these results.

KEYWORDS

audit committee, compensation committee, corporate financial performance, ESG disclosure, multinational enterprises, nomination committee, sustainability committee

1 | INTRODUCTION

The environmental and social responsibility of multinational enterprises (MNEs) is primarily influenced by their governance practices at the firm level, which involve the composition and duties of directors and board standing committees (Dam et al., 2007). These board subcommittees make critical business decisions that significantly impact corporate financial performance and shareholders' value, such as setting executive pay, engaging external auditors, and hiring CEOs (Kolev et al., 2019; Puni, 2015). Therefore, board committees serve as essential internal governance mechanisms for aligning executives' motives with shareholders' interests (Alhossini et al., 2021; Elmghaamez & Ntim, 2016; Hermalin & Weisbach, 2003). As a result, large sized

MNEs are expected to maintain optimal board committee arrangements, leading to higher and better-quality financial outcomes. Specifically, efforts to enhance the functioning of board committees generally involve policies that ensure: (i) a greater number of integrated board committees; (ii) a higher proportion of outside directors; (iii) longer board membership tenure; and (iv) a larger quantity and quality of publicly released information (Chen & Wu, 2016; Ntim, 2013).

Most previous studies have focused solely on the relationship between publicly released environmental, social, and governance (ESG) information and a single form of board committee. However, the governance practices of the audit and sustainability committees have recently garnered notable attention. For instance, some studies have reported a significant positive association between the audit committee and ESG disclosure (Achim & Borlea, 2015; Arif et al., 2021; Buallay & Al-Ajmi, 2019; Dwekat et al., 2020; Garas & ElMassah, 2018; Raimo et al., 2021), while others have observed a negative link (Suttipun, 2021; Xie et al., 2018). Similarly, contradictory associations between sustainability committees and ESG disclosure have been reported (Baraibar-Diez & Odriozola, 2019; Eberhardt-Toth, 2017; Elmaghrabi, 2021; Saeed et al., 2021).

As a potential solution to this ambiguity, Fatemi et al. (2018) recommended, including firm governance mechanisms, such as board committees, as moderating variables in empirical studies. This recognition suggests that such arrangements could mitigate the negative consequences associated with the additional costs of ESG reporting. Furthermore, Samans and Nelson (2022) highlighted that companies with high ESG rating scores are better able to align their mission strategies with ESG-related risks. Consequently, recent studies have incorporated corporate governance standards as moderating variables in the association between ESG disclosure and financial performance. Notably, researchers have examined the effects of various factors, including board of directors' characteristics (Albitar et al., 2020; Al-Hiyari et al., 2023; Duque-Grisales et al., 2020; Rossi et al., 2021; Velte, 2019; Zahid et al., 2022), employee board representation (Nekhili et al., 2021), CEO's power (Velte, 2021), size and industry sensitivity (Zaiane & Ellouze, 2022), market competition (Vural-Yavaş, 2021), board sustainability committee (Orazalin et al., 2023), and external institution governance mechanisms (Nguyen et al., 2021), among others, on the ESG disclosure–financial performance nexus.

More specifically, Samans and Nelson (2022) examined how the effectiveness of audit committee functions guarantees that ESG standards are accurately reflected in a company's published reports. The implication of this is that equity investors and other stakeholders have a true picture of the company's ESG credentials, which can have an associated impact on financial outcomes. Furthermore, Tumwebaze et al. (2021) emphasised the connection between financial performance and audit committee monitoring characteristics to ensure that companies comply with ESG regulations. Al-Shaer and Zaman (2019) investigated how compensation committees' governance systems for setting management pay incentivised executives to prioritize the achievement of stated ESG initiatives, leading to improvements in financial performance indicators. Similarly, Martínez-Ferrero et al. (2021) investigated the indirect role of sustainability committee characteristics as the mediating variable in the relation between board diversity and selected ESG performance indicators. Additionally, Uyar et al. (2021) employed sustainability committee characteristics as moderating variables in the association between CEO duality and sustainable growth outcomes. Furthermore, studies by Friede et al. (2015), Sarhan et al. (2019), Baraibar-Diez and Odriozola (2019), Duque-Grisales and Aguilera-Caracuel (2021), Mughal et al. (2020), and Velte and Stawinoga (2020) incorporated the intermediating role of international diversification of business operations and the number and interconnectedness of board committees existing in an enterprise.

Therefore, it is essential to ascertain the robustness of the relationship between ESG disclosures and financial performance by examining multinational firms listed on the major international financial markets. Such a study should validate the interaction effect of optimal board standing committees and the generalizability of the findings. However, most of the existing ESG literature has neglected the attenuating effect of optimal board committee structures when considering the responsiveness of financial performance outcomes to ESG disclosures. Hence, the aim of the current study is to examine the sensitivity of the relationship between ESG and financial performance of listed MNEs to the moderating impact of both individual and combination of the following four board committees: (i) audit; (ii) compensation; (iii) nomination; and (iv) sustainability committees. The hypothesis is that the presence of these board standing committees, as well as their aggregation, acts as an effective moderating factor that significantly alters the strength and direction of the relationship between ESG disclosure and corporate financial performance.

To sum up, this study investigates the impact of board committee indexes on the relationship between ESG disclosure, and accounting and market-based performance measures of MNEs. The study utilises quantile regression methods to control for the disparity in ESG disclosure scores and financial performance indicators among the selected MNEs. The results indicate that the combined

board committee index has a significantly positive impact on the relationship between ESG disclosure and accounting measures for large-sized MNEs. However, the audit and sustainability committee indexes negatively affect the relationship between ESG disclosure and accounting performance indicators. On the other hand, the functions of the compensation and nomination committees positively influence the relationships between ESG disclosure and market-based performance metrics, while the quality of audit committee governance has an adverse effect. The combined board committee index also has varying effects on the relationship between individual ESG disclosures (ENVD, SOCD, and GOVD), and accounting and market-related measures, depending on the size of the MNEs. The compensation committee index positively influences the relationship between ESG disclosure components and accounting performance measures for large-sized MNEs, while the nomination committee index positively affects the relationship between ESG disclosure components and market-related performance outcomes. Overall, the findings highlight the significant impacts of individual board committees and their integration on the relationship between ESG disclosure and financial performance of MNEs, emphasising the importance of considering the role of board committees in promoting transparency and enhancing accountability in ESG reporting.

Therefore, this paper contributes to the literature on the association between ESG disclosure and financial performance in three main ways. First, it expands on previous studies by including four board committees (audit, compensation, nomination, and sustainability committees) that are recognised as important drivers of ESG standards and risk in MNEs by international stock market regulators. Second, the sample used in the study comprises the largest multinational corporations continuously listed on major global stock markets over an 11-year period, providing reliable evidence of the benefits of utilising optimal interconnected board standing committees to reduce the costs of ESG information disclosure across different markets. Finally, the study employs individual board committee indexes and their aggregation as moderating variables in a quantile regression model, considering the individual weights of governance mechanisms and using a more robust index compared to previous studies.

The remainder of the paper is organised as follows: Section 2 discusses the theoretical concepts underlying the study. Section 3 reviews the empirical literature on the moderating effect of the four board standing committees on the ESG–financial performance relationship. Section 4 outlines the research methodology, including data sources, sample distribution, model specification, and estimation techniques. Section 5 presents descriptive statistics and empirical results. Finally, Section 6 concludes with a brief discussion of policy recommendations, limitations, and areas for future research.

2 | THEORETICAL FRAMEWORK

The literature on the relationship between ESG disclosure and firm performance often draws on three theoretical perspectives: agency theory; stakeholder theory; and resource-based theory. In this section, we will discuss each of these theories and apply them to develop our hypotheses and interpret the empirical findings.

2.1 | Agency theory

Agency theory, popularised by Jensen and Meckling (1976), suggests that management tends to prioritize short-term earnings over long-term sustainable outcomes due to a misalignment of goals between management (agent) and shareholders (principal). To bridge this gap, firms disclose financial and non-financial information to shareholders, minimising the agency costs (Albitar et al., 2020; Alsayegh et al., 2020; Romano et al., 2020).

Drawing on agency theory, influential board committees play a crucial role in enhancing the link between ESG disclosure and firm performance. These committees should consider the expertise, independence from management, and activities of their members (Abidin et al., 2009; Alhossini et al., 2021). Additionally, Ntim (2015) found a positive association between board ethnic diversity and stock market valuation, while Ntim (2013) reported that board monitoring committees, such as audit, nomination, and remuneration committees, have a positive impact on firm value. This is because these committees consist of independent and expert members who can monitor executive directors' activities, thus enhancing the financial performance of firms. Furthermore, Muchemwa et al. (2016) observed that larger board committees with diverse and independent directors can significantly reduce agency costs by providing better access to external resources. Previous studies by Carter et al. (2010) also noted that board committees with diverse and independent members possess better information to advise management and exhibit a high level of ESG disclosure. Consequently, studies by Khan and Rehman (2020) and Hu et al. (2020) emphasised that the presence of board committees is essential for controlling management behaviour, improving transparency, and mitigating the principal-agent problem. The contributions of such governance structures should ultimately lead to better financial outcomes. Therefore, agency theory provides a

foundation for our hypotheses regarding the impact of board committees on the relationship between ESG disclosure and firm performance.

2.2 | Stakeholder theory

Stakeholder theory posits that firms disclose their financial and non-financial information to meet the requirements of various stakeholders (Ahmad et al., 2021; Albitar et al., 2020; Atan et al., 2018). Singh et al. (2018) argue that firms should establish a network of board standing committees to ensure that their executives focus on strategic issues and protect the interests of stakeholders beyond their majority shareholders. Hamman et al. (2010) support this argument by stating that companies can cultivate positive relationships with different stakeholder groups through social and governance activities. These activities can lead to indirect benefits, such as improved public relations, a stronger corporate brand, and access to a larger pool of capital, ultimately resulting in higher financial returns. Therefore, Hamid and Ibrahim (2020) recommend the establishment of a separate sustainability committee to oversee strategic environmental and governance practices.

Luoma and Goodstein (1999) suggest that the legal system and firm size create variations in board representation of stakeholders. However, these variations do not affect stakeholder representation on standing board committees. According to stakeholder theory, board directors should consider the interests of all stakeholders, rather than solely focusing on maximising shareholder value. This can be achieved by modifying corporate governance structures and legislation to engage diverse stakeholders in equity, economic, and political decisions (Freeman & Reed, 1983). Therefore, corporate governance mechanisms should include sustainability committees to enhance board effectiveness and maximise value for all stakeholders (Money & Schepers, 2007). To be influential, the arrangements of board committees should encompass two categories: monitoring committees (audit, compensation, and nomination committees) and advisory/productivity committees (finance, investment, and strategic committees, including corporate social responsibility) (Klein, 1998). By integrating these subcommittees into the board structure, firms can develop their governance systems to satisfy the interests of multiple stakeholders (Ayuso et al., 2014). According to the stakeholder philosophy, firms with effective monitoring and strategic committees are more likely to monitor managers' decisions to ensure alignment with the interests of diverse stakeholders (Sarhan & Al-Najjar, 2022).

2.3 | Resource-based theory

Resource dependence theory can provide insights into how board committees can moderate the relationship between ESG disclosure and financial performance by mitigating resource dependencies. According to this theory, organisations rely on external resources to survive and thrive, and their ability to access and manage these resources is crucial for their performance (Ntim & Soobaroyen, 2013; Pfeffer & Salancik, 1978).

By applying resource dependence theory to the context of ESG disclosure, board committees can be seen as mechanisms that help organisations manage their relationships with external stakeholders and access necessary resources. These committees can enhance transparency, accountability, and stakeholder engagement, which are essential for managing ESG-related risks and opportunities (Mallin & Michelon, 2017; Wu, 2018).

Furthermore, board committees can influence the allocation and utilisation of resources within organisations, including financial, human, and social capital, which are important for implementing ESG initiatives effectively (Wang et al., 2020). For example, the compensation committee can design incentive systems that align executives' behaviours with ESG goals, encouraging the allocation of resources towards sustainable practices (Cheng et al., 2021). The audit committee can provide oversight on ESG-related reporting and ensure the accuracy and reliability of disclosed information, thereby enhancing organisations' credibility and reputation with stakeholders (Hooghiemstra et al., 2019).

The nomination committee can play a role in board composition by selecting directors with relevant expertise and diverse perspectives on ESG matters, enabling organisations to access valuable knowledge and networks to support their ESG initiatives (Frynas et al., 2018). Finally, the sustainability committee, when present, can have a specific focus on managing ESG issues and integrating them into strategic decision-making processes (Michelon et al., 2019). Hence, these board committees, through their roles and functions, can moderate the relationship between ESG disclosure and financial performance by facilitating effective resource management, stakeholder engagement, and strategic alignment with ESG goals.

Resource-based theory, introduced by Barney (1991), examines how firms' resources are linked to their competitive advantage. Recent studies by Branco and Rodrigues (2006), Ahmad et al. (2021), and Abdi et al. (2022) have recognised the relevance of resource-based theory in explaining the competitive financial benefits experienced by large firms that actively engage in ESG issues. According to these studies, it is argued that large MNEs are more likely to integrate ESG evaluation into

their board governance practices. This governance structure can enhance their global competitive advantage and reduce the cost of equity capital (Mohammad & Wasiuzzaman, 2021). Resource-based theorists propose that companies with high-quality internal resources, including skilled and knowledgeable board committee members, are more likely to achieve positive environmental and social performance outcomes (Abdi et al., 2022; Ahmad et al., 2021).

Consequently, optimising the number of board committees with members possessing relevant expertise is expected to enhance ESG disclosure and contribute to improvements in corporate financial performance. This suggests that firms that effectively leverage their internal resources through the composition and functioning of board committees can achieve a competitive edge in terms of ESG and financial performance outcomes.

3 | EMPIRICAL LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

3.1 | The moderating effect of audit committees on the ESG-corporate financial performance nexus

The moderating effect of audit committees on the relationship between ESG and corporate financial performance can be understood from the perspective of agency theory. According to this theory, the presence of an audit committee is crucial in reducing information asymmetry and resolving conflicts of interest between managers and shareholders (Pozzoli et al., 2022). Since managers are responsible for decision-making, including those related to ESG issues, establishing effective monitoring mechanisms, such as an audit committee, can help control managerial opportunistic behaviour (Bacha et al., 2020; Watts & Zimmerman, 1986). Consequently, the existence of an audit committee is essential for promoting ESG activities, which can lead to positive financial outcomes (Habbash & Alghamdi, 2017; Zahid et al., 2022).

Furthermore, drawing from resource dependence theory, companies with larger audit committees have access to a wealth of experience and expertise, enabling them to effectively monitor managerial disclosure behaviour (Albitar, 2015; Haj Salem et al., 2019). Therefore, having a larger audit committee size should facilitate investments in environmental and social activities (Allegrini & Greco, 2011). However, it is worth noting that a larger audit committee size may also lead to delays in decision-making due to conflicting opinions (Albitar et al., 2022).

The literature on the impact of audit committee attributes on corporate financial and non-financial performance outcomes is mixed. For instance, studies by Achim and Borlea (2015) and Suttipun (2021) reported a negative correlation between audit committee attributes and ESG disclosure scores for Romanian and Thai companies, respectively. Similarly, Xie et al. (2018) found a significant negative association between audit committee meetings and financial performance in a sample of publicly listed companies from 74 countries.

However, other studies (Arif et al., 2021; Bravo & Reguera-Alvarado, 2019; Buallay & Al-Ajmi, 2019; Dwekat et al., 2020; Garas & ElMassah, 2018; Raimo et al., 2021) have demonstrated a positive relationship between audit committee qualities and various ESG and financial performance outcomes. For example, Bravo and Reguera-Alvarado (2019) observed a positive correlation between female representation on audit committees and the quality of ESG disclosures. Likewise, Buallay and Al-Ajmi (2019) concluded that audit committee size, independence, and meetings have a positive influence on ESG reporting in GCC countries. Dwekat et al. (2020) and Albitar et al. (2022) found that audit committee size and independence enhance the quality of CSR information and ESG disclosure levels. Based on these findings, this study proposes the following hypothesis:

> **Hypothesis 1.** Audit committee positively moderates the relationship between ESG and CFP of MNEs.

3.2 | The moderating effect of compensation committees on the ESG-financial performance nexus

The moderating effect of compensation committees on the relationship between ESG and financial performance can be explained within the framework of agency theory. According to this perspective, an effective compensation system is essential for overseeing the functions of the board of directors and their standing committees (Nguyen et al., 2020). By aligning compensation with the needs of both management and shareholders, principal-agent problems can be reduced (Jensen & Meckling, 1976; De Andres & Vallelado, 2008). Consequently, remuneration schemes that consider ESG and financial outcomes, such as stock prices, can incentivise management to pursue sustainable initiatives that maximise shareholder wealth (Batae et al., 2021). This implies that the potential additional costs associated with implementing ESG activities can be offset by higher and more stable financial returns (Velte, 2016).

Several studies have provided evidence supporting the positive relationship between compensation committees and ESG performance (Achim & Borlea, 2015; Baraibar-Diez & Odriozola, 2019; Suttipun, 2021; Tamimi & Sebastianelli, 2017; Velte, 2016). For instance, Velte (2016) found a positive association between management compensation plans and ESG performance in a sample of 170 German companies listed on the Frankfurt Stock Exchange. Similarly, Suttipun (2021) identified a positive link between ESG disclosure and compensation committee characteristics in Thai-listed firms. Achim and Borlea (2015) documented a positive impact of remuneration committees on ESG disclosure scores using a sample of 65 companies listed on the Bucharest Stock Exchange. Baraibar-Diez and Odriozola (2019) revealed that firms with high-quality compensation committees demonstrated better ESG performance metrics when supported by a CSR committee. Tamimi and Sebastianelli (2017) discovered a positive relationship between higher ESG disclosure scores and executive compensation among a sample of S&P 500 companies. Additionally, Ammari et al. (2016) suggested that compensation committee qualities can facilitate the relationship between board composition and firm performance. However, previous research has often overlooked the moderating effect of standing committees. Therefore, this study argues that compensation committees can influence the strength and direction of the relationship between ESG and the financial performance of MNEs. Based on this argument, we propose the following hypothesis:

> **Hypothesis 2.** Compensation committee positively moderates the relationship between ESG and CFP of MNEs.

3.3 | The moderating effect of nomination committees on the ESG-financial performance nexus

The moderating effect of nomination committees on the relationship between ESG and financial performance can be understood from the perspective of agency theory. According to this theory, the conflict of interests between shareholders and management can be effectively resolved by establishing a nomination committee with the attributes to monitor the opportunistic behaviour of managers. A high-quality nomination committee ensures that the interests of shareholders and managers are aligned by appointing individuals with similar goals and expertise to achieve the company's performance outcomes (Jensen & Meckling, 1976). This governance structure should ensure that management appraisal and reward schemes are closely linked to the company's ESG and financial performance measures, motivating managers to prioritize shareholder wealth maximisation (Batae et al., 2021). Furthermore, a high-quality nomination committee ensures diverse board composition that represents various stakeholders, including employees, customers, and suppliers, allowing the company to adopt a broader perspective on ethical issues and improve its ESG standards (Ammari et al., 2016).

Stakeholder theory also provides another perspective on the moderating effect of nomination committees. According to this theory, diverse and independent nomination committees ensure that the board of directors considers the interests of all stakeholders in a firm's decision-making process, leading to improved ESG governance and related financial performance outcomes (Campbell, 2007; Lantos, 2001; Liu et al., 2018).

Empirical studies on the impact of nomination committees on ESG disclosure have yielded mixed findings. For example, Achim and Borlea (2015) and Suttipun (2021) found that nomination committee governance in Romanian and Thai listed companies was associated with lower ESG scores, while Lam and Lee (2012) reported a significant positive correlation between nomination committees and firm performance in Hong Kong listed companies. Similarly, Agyemang-Mintah (2015) uncovered a positive link between nomination committee attributes and financial performance of UK financial institutions, although Ruigrok et al. (2006) observed that the relationship is strengthened when nomination committees have more independent and female directors.

Several studies have also examined corporate governance characteristics as moderators in the ESG-CFP relationship. For example, Ahmad et al. (2021) found a significant moderating effect of firm size on the association between ESG disclosure and financial performance in UK firms, while Duque-Grisales and Aguilera-Caracuel (2021) revealed that financial slack and international geographic diversification significantly influenced the connection between ESG disclosure and company performance in Latin American multinational firms. Additionally, Velte (2019) reported CEO power as an effective moderator in the association between ESG disclosure and financial performance, and Nekhili et al. (2021) observed that employee representation on corporate boards reinforces this result. Furthermore, Elmghaamez and Gan (2023) emphasised the importance of considering the role of regulatory authorities in different countries when examining the intermediating impact of corporate governance on the ESG-CFP relationship across international markets. Based on these findings, we propose the following research hypothesis:

> **Hypothesis 3.** Nomination committees positively moderate the relationship between ESG and CFP of MNEs.

3.4 | The moderating effect of sustainability committees on the ESG-financial performance nexus

The moderating effect of sustainability committees on the relationship between ESG and financial performance can be explained through various theories, including agency, stakeholder, institutional, and resource dependence theories. According to agency theory, sustainability committees encourage directors to prioritize ESG matters, leading to a better principal-agent relationship and alignment of stakeholder interests (Baraibar-Diez & Odriozola, 2019). Stakeholder theory views the creation of sustainability committees as a corporate strategy to engage with all stakeholders and establish processes and procedures accordingly (Baraibar-Diez & Odriozola, 2019). Institutional theorists argue that sustainability committees reflect a firm's acceptance of societal norms and help achieve legitimacy (DiMaggio & Powell, 1983; Lopez-Arceiz et al., 2022). Moreover, resource dependence theory suggests that sustainability committees legitimise a firm's ESG activities, enhance its public image, and facilitate access to external resources, such as expertise, capital, and relationships with other organisations (Pfeffer & Salancik, 1978; Russo & Fouts, 1997; Zhou et al., 2022). Having a larger number of independent and diverse directors on sustainability committees enables better sharing of resources and leads to improved decision-making and financial performance (Minciullo et al., 2022).

Previous research on the impact of CSR committee functions on ESG performance has produced mixed results. While Uyar et al. (2021) found no significant relationship between CSR committee governance and CSR performance in healthcare companies, most studies have reported a positive correlation between these variables (Baraibar-Diez & Odriozola, 2019; Birindelli et al., 2018; Cucari et al., 2018; Eberhardt-Toth, 2017; Elmaghrabi, 2021; Martínez-Ferrero et al., 2021; Saeed et al., 2021; Suttipun, 2021; Velte & Stawinoga, 2020). For example, Eberhardt-Toth (2017) found that firms with a CSR committee experienced better ESG performance, and Birindelli et al. (2018) observed a positive association between CSR committee activities and ESG performance in the banking sector. Saeed et al. (2021) reported a positive impact of CSR committee existence on ESG performance in the energy sector, and Martínez-Ferrero et al. (2021) found a mediating effect of board diversity on the relationship between CSR committees and ESG performance. While some studies have found insignificant associations between sustainability committees and ESG performance (Velte, 2016), the overall evidence supports a positive relationship. Therefore, this study proposes the following hypothesis:

> **Hypothesis 4.** Sustainability committees positively moderate the relationship between ESG and CFP of MNEs.

4 | RESEARCH METHODOLOGY

4.1 | Sample and data authentication

The sample used in this study consisted of the top 500 MNEs from 40 countries that were consistently listed on major global stock exchanges between 2009 and 2019. Data for the study was collected from the Bloomberg database, which is widely recognised as a reliable source of information on board committee attributes, ESG disclosure, financial characteristics, and other relevant factors of MNEs. The dataset included financial metrics such as financial leverage, operating cash flow, liquidity, profitability, activity, and market ratios. To account for country-specific characteristics, the study also incorporated macroeconomic variables obtained from the World Bank website, specifically the international trade-to-GDP ratio and taxes on international trade as a percentage of revenue. By including the top 500 MNEs, this study aims to provide a comprehensive understanding of the moderating effect of board committees on the relationship between ESG disclosure and financial performance in MNEs.

The sample encompassed 13 industries, including electronics and home appliances, food, clothing and footwear, financial services, pharmaceuticals, retailing, telecommunications, oil and gas, automotive, airlines, manufacturing, services, and conglomerates. This diverse representation of industries allows for capturing the impact of board committees across different business sectors and facilitates generalisations of the findings regarding the enhancement of ESG disclosure and financial performance through board committees.

The selected sample period of 2009 onwards was chosen to mitigate the influence of the 2007–2008 financial crisis on the empirical analysis of the ESG disclosure–financial performance relationship. It is important to note that the financial crisis had a significant impact on MNEs with global operations. By starting the sample period in 2009, the study aims to provide a more representative and stable estimation of the relationship between ESG disclosure, board committees, and financial performance (see Table 1).

TABLE 1 Frequency distribution of multinational enterprises (MNEs) classified by sector.

Codes	Sectors	Freq.	Percent	Cum.
1	Electronics industry	71	14.2%	31.4
2	Food industry	55	11%	53.6
3	Clothing and footwear	23	4.6%	17.2
4	Financial services	41	8.2%	42.6
5	Pharmaceutical	41	8.2%	72.6
6	Retailing	46	9.2%	81.2
7	Telecommunications	39	7.8%	89
8	Oil and gas	15	3%	64.4
9	Automotive industry	48	9.6%	12.6
10	Airline's sector	15	3%	3
11	Manufacturing industry	39	7.8%	61.4
12	Service industries	52	10.4%	100
13	Conglomerate	15	3%	34.4
	Total	500	100	

4.2 | Variable selection

4.2.1 | Dependent variables

This study aims to achieve two objectives. First, to examine the relationship between ESG disclosure (ESG) and corporate financial performance (CFP) in MNEs. Second, to assess the moderating impact of individual and aggregated board subcommittees on the ESG–CFP relationship. The dependent variables used in the regression models consist of four accounting and market-based measures of corporate financial performance. The accounting-based performance measures include return on equity (ROE), return on assets (ROA), return on capital (ROC), and return on invested capital (ROI). The market-based measures include Tobin Q (TOBQ), sustainable growth rate, earnings per share (EPS), and dividends per share (DPS). These selected accounting and market-based performance variables encompass widely used financial performance indicators in the literature (Ahmad et al., 2021; Almeyda & Darmansya, 2019; Buallay, 2019; Dalal & Thaker, 2019; Elmghaamez & Olarewaju, 2022). By incorporating a range of accounting and market-based performance indicators, this study aims to demonstrate the robustness of the findings across different definitions of CFP employed in the literature.

4.2.2 | Moderating variables

Previous studies have investigated various moderating factors to assess the strength of the relationship between ESG disclosure and corporate financial performance. These factors include audit quality (Zahid et al., 2022), CEO's power (Velte, 2021), board characteristics (Rossi et al., 2021), international diversification and financial slack (Duque-Grisales & Aguilera-Caracuel, 2021), size and industry sensitivity (Zaiane & Ellouze, 2022), board skills (Al-Hiyari et al., 2023), market competition (Vural-Yavaş, 2021), type of employee board representation (Nekhili et al., 2021), and governance mechanisms (Nguyen et al., 2021). In this study, we focus on examining the moderating effect of four board standing committees (audit, compensation, nomination, and sustainability), as well as their aggregation, on the relationship between ESG disclosure and the financial performance of MNEs. To the best of our knowledge, no previous research has explored the role of board standing committees in facilitating the relationship between ESG disclosure and financial performance in MNEs that have maintained continuous listing on the 40 major stock markets worldwide over a 10-year period following the Enron global financial crisis in 2007–2008.

4.2.3 | Explanatory variables of interest

Consistent with prior studies (e.g., Ahmad et al., 2021; Almeyda & Darmansya, 2019; Buallay, 2019; Dalal & Thaker, 2019; Velte, 2017; Weber, 2014; Xie et al., 2018), this study measures the quality of ESG reporting by MNEs using both the aggregate ESG score and its components – ESG metrics. The scores are calculated by the Bloomberg Terminal and will help determine the sensitivity of MNEs' financial performance to the interdependence of these responsibilities. Additionally, the study investigates the influence of four individual board standing committee indexes (audit, compensation, nomination, and sustainability) as well as their combination on the ESG–financial performance nexus of MNEs. In accordance with prior research, the selection of board committee attributes is based on the characteristics prescribed in the Sarbanes-Oxley Act of 2002 (Hundal, 2013). Overall, these attributes are directly linked to the board independence, activity, knowledge, skills, and experience (Elmghaamez & Ntim, 2016).

Similarly, following from previous studies (Elmagrhi et al., 2020; Hassan, 2012; Samaha et al., 2015; Sharma & Singh, 2009; Shrivastav & Kalsie, 2017; Vander-Bauwhede & Willekens, 2008), this study investigates the moderating effect of the combined board committee index on the relationship between ESG and financial performance to capture the joint impact of audit, compensation, nomination, and sustainability board standing committees. As shown in Table 2, the aggregated index is composed of 28 attributes drawn from all four individual board sub-committees.

TABLE 2 Summary definition and measurements of variables included in this study.

Variables	Definitions and measurements	Sources
Financial performance		Bloomberg 2020
ROE	Return on equity = Net income/shareholders' equity	
ROA	Return on assets = Net income/total assets	
ROC	Return on capital = (Net income − dividends)/(debt + equity)	
ROI	Return on invested capital = Net operating profit after tax/invested capital	
TOBQ	Tobin's Q ratio = Total market value of a firm/total asset value of a firm	
SGR	Sustainable growth rate	
EPS	Earnings per share = (Net income – preferred dividends)/weighted average shares	
DPS	Dividends per share is the number of declared dividends issued by a company for every share.	
ESG disclosure scores		Bloomberg 2020
ESG	Aggregate Environmental, Social, and Governance Disclosure Score	
ENVD	Individual Environmental Disclosure Score	
SOCD	Individual Social Disclosure Score	
GOVD	Individual Governance Disclosure Score	
AUDIT COMT		Bloomberg 2020
SIOACMT	Size of Audit Committee	
NIDACMT	Number of Independent Directors on Audit Committee	
PIDACMT	Percentage of Independent Directors on Audit Committee	
IACMTCP	Independent Audit Committee Chairperson	
NNEDCMT	Number of Non-executive Directors on audit Committee	
ACMTMEN	Audit Committee Meetings	
ACMTMEP	Audit Committee Meeting Attendance Percentage	
YRSAUDE	Years Auditor Employed	
COMP COMT		Bloomberg 2020
SIOCCMT	Size of Compensation Committee	
NIDCCMT	Number of Independent Directors on Compensation Committee	
PIDCCMT	Percentage of Independent Directors on Compensation Committee	
ICCMTCP	Independent Compensation Committee Chairperson	
NEDCCMT	Number of Non-executive Directors on Compensation Committee	
CCMTMEN	Number of Compensation Committee Meetings	
CCMTMEP	Compensation Committee Meeting Attendance %	
OUTCADV	Outside Compensation Advisors Appointed	
NOMI COMT		Bloomberg 2020
SIONCMT	Size of Nomination Committee	
NIDNCMT	Number of Independent Directors on Nomination Committee	
PIDNCMT	Percentage of Independent Directors on Nomination Committee	
INCMTCP	Independent Nomination Committee Chairperson	
NEDNCMT	Number of Non-executive Directors on Nomination Committee	
NCMTMEN	Number of Nomination Committee Meetings	
NCMTMEP	Nomination Committee Meeting Attendance Percentage	
SUST COMT		Bloomberg 2020
SUSTCMT	Sustainability Committee	
NEXDSUS	Non-Executive Director with Responsibility for Sustainability	
EXDIRSUS	Executive Director with Responsibility for Sustainability	

(Continues)

TABLE 2 (Continued)

Variables	Definitions and measurements	Sources
EXCOESG	Executive Compensation Linked to ESG	
ESGCOFB	ESG Linked Compensation for Board	
BCMTIND	The aggregate board committee indexes	
AUDCIND	Individual audit committee index	
COMCIND	Individual compensation committee index	
NOMCIND	Individual nomination committee index	
SUSCIND	Individual sustainability committee index	
CONTROL VAR		Bloomberg 2020
FINLEVG	Financial leverage = Total company debt/shareholder's equity	
SATOTAS	Asset turnover ratio = Net sales/average total assets	
FCFLOWY	Free cash flow yield	
TRADGDP	The trade-to-GDP ratio is an indicator of the international trade in a country.	
TAXINTR	Taxes on international trade include import duties, export duties, and exchange taxes.	
FINSEDU	Financial sector dummy	
SERSEDU	Service sector dummy	
LEODEOH	Level of development of headquartered country	
WBGOCH	The aggregate world bank reported country governance characteristics	

The combined and individual indexes were created using a percentage coding method. The aggregate index (BCMTIND) was calculated by averaging the 28 individual attributes for each company each year, after dividing by their highest value to convert them to decimals. The four individual board committee indexes were also calculated using the same method, with a score of 100% indicating the highest number of board committee characteristics disclosed. Thus, the score for each year ranges from 0 to 100%, providing a more accurate representation of the board committee attributes of MNEs compared to binary coding methods. This approach is consistent with the creation of corporate governance indexes used in a few prior studies (Aggarwal et al., 2011; Aggarwal et al., 2019).

4.2.4 | Control variables

This study builds on previous research (Abdi et al., 2022; Ahmad et al., 2021; Shakil et al., 2019) and incorporates their suggested control variables. These control variables include sales to total assets, free cash flow yield, international trade to GDP ratio, and taxes on international trade as a percentage of revenue (Bajic & Yurtoglu, 2018; Davis et al., 2016; Yu et al., 2018). Moreover, this study employs the financial leverage ratio to account for the firms' capital structure, aligning with the trade-off theory. The trade-off theory suggests that companies with low growth, stable cash flows, and tangible assets tend to have a higher debt ratio in their capital structure (Abdi et al., 2022). Additionally, we controlled for variations in industry and country-level governance characteristics using dummy variables for the financial and service sectors, as well as the level of development of the country where the MNE is headquartered. Furthermore, we incorporated the World Bank-reported country governance characteristics as part of our analysis.

4.3 | Model specification

To examine the impact of board committee presence on the relationship between ESG and financial performance, this study utilises balanced panel data of the top 500 largest MNEs operating in multiple countries. The final sample was selected based on three criteria: (i) availability of aggregate and individual ESG scores from 2009 to 2019, (ii) availability of data on accounting and market-based performance measures from 2009 to 2019, and (iii) continuous stock market listing for the 11-year period under investigation. The study employs quantile regression models (Models 1 to 4) to investigate the moderating effect of board committee presence on the relationship between aggregate and individual ESG disclosure and financial performance of MNEs.

Model 1

$$\mathrm{CFP}_{it} = \alpha_0 + \beta_1 \mathrm{ESG}_{it} + \beta_2 \mathrm{BCMTIND}_{it} + \sum_{i=1}^{5} \beta_i \mathrm{Controls}_{it} + \varepsilon_{it} \quad (1)$$

Model 2

$$\mathrm{CFP}_{it} = \alpha_0 + \beta_1 \mathrm{ESG}_{it} + \beta_2 \mathrm{BCMTIND}_{it} + \beta_3 \mathrm{ESG}_{it}\mathrm{BCMTIND}_{it} + \sum_{i=1}^{5} \beta_i \mathrm{Controls}_{it} + \varepsilon_{it} \quad (2)$$

Model 3

$$\mathrm{CFP}_{it} = \alpha_0 + \beta_1 \mathrm{ESG}_{it} + \beta_2 \mathrm{AUDCIND}_{it} + \beta_3 \mathrm{COMCINDEX}_{it} + \beta_4 \mathrm{NOMCINDEX}_{it} + \beta_5 \mathrm{SUSCIND}_{it} + \sum_{i=1}^{5} \beta_i \mathrm{Controls}_{it} + \varepsilon_{it} \quad (3)$$

Model 4

$$\mathrm{CFP}_{it} = \alpha_0 + \beta_1 \mathrm{ESG}_{it} + \beta_2 \mathrm{AUDCIND}_{it} + \beta_3 \mathrm{COMCINDEX}_{it} + \beta_4 \mathrm{NOMCINDEX}_{it} + \beta_5 \mathrm{SUSCIND}_{it} + \beta_6 \mathrm{ESG}_{it}\,\mathrm{AUDCIND}_{it} + \beta_5 \mathrm{ESG}_{it}\,\mathrm{COMCINDEX}_{it} + \beta_5 \mathrm{ESG}_{it}\,\mathrm{NOMCINDEX}_{it} + \beta_5 \mathrm{ESG}_{it}\,\mathrm{SUSCIND}_{it} + \sum_{i=1}^{5} \beta_i \mathrm{Controls}_{it} + \varepsilon_{it} \quad (4)$$

Where ESGD_{it} refers to the environmental, social and governance disclosure scores for an MNE i and in a certain year t, CFP_{it} relates to the corporate financial performance of MNEs, which includes the accounting- and market-based performance indicators, $\mathrm{BCMTINDEX}_{it}$ stands for board committee indexes, $\mathrm{AUDCINDEX}_{it}$ for the audit committee indexes, $\mathrm{COMCINDEX}_{it}$ for the compensation committee indexes, $\mathrm{NOMCINDEX}_{it}$ for the nomination committee indexes, $\mathrm{SUSCINDEX}_{it}$ for the sustainability committee indexes and $\mathrm{Controls}_{it}$ refers to the control variables, ε_{it} is the error term.

5 | EMPIRICAL ANALYSIS

5.1 | Descriptive statistics

Table 3 presents descriptive statistics for the dependent, independent, and control variables in this study, based on a sample of 500 MNEs from 2009 to 2019. The results reveal significant variation in the distribution of board committee attributes among the global enterprises in the sample.

For instance, the average (median) size of the audit committee is 3.2 (4.0) members, with a range of 2 to 10 members. These findings are consistent with prior research conducted by Soliman and Ragab (2014), Ofoeda et al. (2020), and Samoei and Rono (2016). The data also indicate that the average (median) number of independent directors on the audit committee is 2.8 (3.0), ranging from 1 to 15. These statistics align with previous studies that have found a positive correlation between a higher proportion of independent directors and improved corporate transparency (e.g., Crespí-Cladera & Pascual-Fuster, 2014; Elmghaamez & Akintoye, 2021). Furthermore, the number of non-executive directors on the audit committee ranges from 1 to 11, with an average of 3.0 and a standard deviation of 2.0, which adheres to the requirement of the UK code for at least three independent non-executive directors.

Regarding the compensation committees, the data indicate an average of 3.2 (median: 4.0) members, with a range of 1 to 12 and a standard deviation of 1.9. Approximately 50% of the MNEs in the sample have 3 members on their compensation committees, consistent with previous research done by Sun et al. (2009). Additionally, the number of independent directors on the compensation committees ranges from 1 to 12, with a mean of 2.6 (median: 3.0) and a standard deviation of 1.9. This suggests that 44% of MNEs have 3 independent directors on their compensation committees. Studies have shown that a higher proportion of independent directors on compensation committees is associated with lower CEO pay and higher CEO turnover (Dou et al., 2015).

Turning to the nomination committees, Table 3 reveals that the mean (median) size of these committees is 3.2 (4.0) members, ranging from 1 to 14. This finding aligns with previous studies by Agyemang-Mintah (2015) and Arranz-Aperte (2015), which suggested that larger nomination committees lead to better financial performance. The average number of independent directors on the nomination committees is 2.6 (median: 3.0), ranging from 1 to 21. This implies that 38% of the MNEs in the sample have at least 3 independent directors on their nomination committees. Research has indicated that a higher number of independent directors on nomination committees results in greater resistance to CEO influence (Ruigrok et al., 2006; Eminet & Guedri, 2010). Additionally, it is noteworthy that the average (median) number of non-

TABLE 3 Summary of descriptive statistics of all dependent, independent and control variables.

	Statistical dispersion						Collinearity	
Variable	**Obs**	**Mean**	***SD***	**Variance**	**Min**	**Max**	**VIF**	**1/VIF**
Outcome variables								
ROE	5500	15.0	29.7	884.8	−221.1	1048.6	1.01	0.98
ROA	5500	5.7	9.2	84.3	−235.2	110.8	3.70	0.27
ROC	5500	9.6	14.7	216.0	−288.2	219.9	5.15	0.19
ROI	5500	9.0	13.4	180.1	−268.3	125.9	3.00	0.33
TOBQ	5500	1.8	1.4	2.0	0.0	33.8	1.39	0.72
EPS	5500	5.8	72.3	5222.8	−370.3	2155.2	13.50	0.07
DPS	5500	2.7	39.8	1587.7	0.0	1761.2	13.34	0.07
Explanatory variables								
ESG	5500	37.7	17.1	292.4	0.0	82.6	486.41	0.00
ENVD	5500	31.5	20.6	425.5	0.0	86.0	197.64	0.01
SOCD	5500	34.9	19.0	361.3	0.0	94.7	38.40	0.03
GOVD	5500	54.2	14.7	215.7	0.0	85.7	23.34	0.04
Moderating variables								
AUDIT COMT								
SIOACMT	5500	3.2	2.0	4.0	2.0	10.0	10.00	0.09
NIDACMT	5500	2.8	2.0	4.0	1.0	15.0	5.17	0.19
PIDACMT	5500	66.9	42.9	1842.0	0.0	100.0	6.02	0.17
IACMTCP	5500	0.7	0.5	0.2	0.0	1.0	4.64	0.22
NNEDCMT	5500	3.0	2.0	4.1	1.0	11.0	10.00	0.08
ACMTMEN	5500	7.1	5.0	24.7	0.0	53.0	1.90	0.53
ACMTMEP	5500	63.4	40.9	1669.0	0.0	100.0	1.07	0.93
YRSAUDE	5500	11.0	19.8	390.1	0.0	131.0	1.26	0.79
COMP COMT								
SIOCCMT	5500	3.2	1.9	3.8	1.0	12.0	4.87	0.21
NIDCCMT	5500	2.6	1.9	3.5	1.0	12.0	7.67	0.13
PIDCCMT	5500	63.8	45.8	1420.1	0.0	100.0	4.08	0.25
ICCMTCP	5500	0.7	0.5	0.2	0.0	1.0	3.60	0.28
NEDCCMT	5500	3.0	2.0	3.8	0.0	12.0	7.03	0.14
CCMTMEN	5500	4.0	3.5	12.2	0.0	28.0	1.91	0.52
CCMTMEP	5500	57.7	43.0	1846.3	0.0	100.0	2.73	0.37
OUTCADV	5500	0.4	0.5	0.2	0.0	1.0	1.84	0.54
NOMI COMT								
SIONCMT	5500	3.2	2.2	4.8	1.0	14.0	4.48	0.22
NIDNCMT	5500	2.6	2.2	4.8	1.0	21.0	5.47	0.18
PIDNCMT	5500	59.0	43.3	1871.4	0.0	100.0	5.77	0.17
INCMTCP	5500	0.6	0.5	0.2	0.0	2.0	3.29	0.30
NEDNCMT	5500	2.9	2.2	4.9	1.0	20.0	6.51	0.15
NCMTMEN	5500	2.9	3.0	8.9	0.0	40.0	1.74	0.57
NCMTMEP	5500	53.2	43.8	1920.8	0.0	100.0	2.57	0.39
SUST COMT								
SUSCMT	5500	0.3	0.4	0.2	0.0	1.0	1.08	0.92
NEXDSUS	5500	0.0	0.0	0.0	0.0	1.0	1.00	1.00
EXDIRSUS	5500	0.0	0.2	0.0	0.0	1.0	1.03	0.97
EXCOESG	5500	0.1	0.4	0.1	0.0	1.0	1.12	0.89
ESGCOFB	5500	0.0	0.1	0.0	0.0	1.0	1.06	0.94

TABLE 3 (Continued)

	Statistical dispersion						Collinearity	
Variable	Obs	Mean	*SD*	Variance	Min	Max	VIF	1/VIF
Control variables								
FINLEVG	5500	5.2	33.7	1136.3	0.0	1813.0	1.00	0.99
SATOTAS	5500	0.8	0.5	0.3	−0.6	3.8	1.01	0.99
FCFLOWY	5500	5.2	70.3	4936.7	−2483.2	3721.6	1.01	0.99
TRADGDP	5500	59.4	53.5	2859.7	22.1	442.6	1.02	0.98
TAXINTR	5500	2.2	3.8	14.2	0.0	34.4	1.01	0.99
FINSEDU	5500	0.08	0.27	0.07	0.0	1.0	1.32	0.75
SERSEDU	5500	0.35	0.47	0.22	0.0	1.0	1.14	0.87
LEODEOH	5500	0.79	0.40	0.16	0.0	1.0	5.72	0.17
WBGOCH	5500	78.7	16.97	288.17	25.61	98.79	5.22	0.19

Note: The explanatory variables include ESG (Aggregate Environmental, Social, and Governance Disclosure Score), ENVD (Individual Environmental Disclosure Score), SOCD (Individual Social Disclosure Score), and GOVD (Individual Governance Disclosure Score). The moderating variables consist of AUDIT COMT (Audit Committee), COMP COMT (Compensation Committee), NOMI COMT (Nomination Committee), and SUST COMT (Sustainability Committee). Control variables encompass FINLEVG (Financial Leverage), SATOTAS (Asset Turnover Ratio), FCFLOWY (Free Cash Flow Yield), TRADGDP (Trade-to-GDP Ratio), TAXINTR (Taxes on International Trade), FINSEDU (Financial Sector Dummy), SERSEDU (Service Sector Dummy), LEODEOH (Level of Development of Headquartered Country), and WBGOCH (World Bank Reported Country Governance Characteristics).
Abbreviations: DPS, dividends per share; EPS, earnings per share; ROA, return on assets; ROC, return on capital; ROE, return on equity; ROI, return on invested capital; TOBQ, Tobin's Q ratio.

executive directors on the nomination committee is 2.9 (3.0), with a range from 1 to 20 non-executive directors on MNEs' nomination committees. Approximately 42% of the MNEs in the sample have at least three non-executive directors on their nomination committees, aligning with the recommendation that non-executive directors should constitute at least one-third of the board of directors (Pass, 2004). This composition provides valuable insights into performance, resources, and director recruitment and appointments.

Table 3 also provides information on the presence of a sustainability committee, represented as a binary variable, with a value of 1 indicating the existence of a sustainability committee and 0 otherwise. According to Baraibar-Diez and Odriozola (2019), companies with sustainability committees tend to demonstrate better ESG performance.

To assess collinearity among the variables included in the multiple regression models, two measures were employed: the variance inflation factor (VIF) and tolerance tests. Hair et al. (2019) suggested that a VIF value above 10 indicates severe multicollinearity, while a value of 10 or below is considered acceptable. The results presented in Table 3 indicate that the chosen variables in Models 1 to 4 exhibit minimal errors associated with multicollinearity, ensuring the validity of the regression models.

5.2 | Findings and discussion

5.2.1 | The effect of board committees in moderating the ESG–financial performance relationship

Table 4 presents the results of the regression analysis conducted to test hypotheses H1 to H4. This study uses quantile regressions to assess the impact of aggregate and individual board committee indexes on the relationship between ESG disclosure and financial performance (using both accounting and market-based measures) of MNEs. Velte and Stawinoga (2020) found that board committees can facilitate the link between governance and ESG performance. This finding is consistent with our results, which show that the aggregate BCMTIND has a negative moderating effect on the relationship between ESG and accounting measures (ROA & ROC) for MNEs with high ESG scores, and a positive moderating effect on the relationship between ESG and accounting measures (ROE & ROI) for MNEs with median and high ESG scores.

Our study examined the relationship between ESG disclosure and four accounting measures (ROA, ROE, ROC, and ROI) for MNEs with median and superior ESG scores. Our initial hypothesis, H1, posited that the AUDCIND would have a positive impact on this relationship,

TABLE 4 Quantile regression results of the interaction between ESG disclosure and aggregate and individual board committee indexes on the accounting-based measures of MNEs.

DVs	ROA				ROE				ROC				ROI			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
ESG	0.001	0.001	−0.004**	−0.013**	0.000	−0.004*	−0.011***	−0.054***	−0.004***	−0.005***	−0.006***	−0.024***	0.000	−0.005***	−0.007***	−0.019***
	(0.551)	(0.574)	(0.024)	(0.023)	(0.894)	(0.055)	(0.004)	(0.000)	(0.003)	(0.000)	(0.007)	(0.000)	(0.894)	(0.000)	(0.000)	(0.003)
BCMTIND	0.001***	0.002***	0.003***	0.004***	0.003***	0.005***	0.008***	0.014***	0.002***	0.004***	0.005***	0.007***	0.002***	0.003***	0.005***	0.007***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.058	0.091	0.103	0.115	0.059	0.059	0.059	0.059	0.093	0.093	0.093	0.093	0.118	0.118	0.118	0.118
ESG	0.001	0.001	−0.001	−0.024***	0.002	−0.002	−0.005	−0.026**	−0.002	−0.006***	−0.005	−0.016***	0.003	−0.004**	−0.002	−0.008
	(0.963)	(0.776)	(0.766)	(0.000)	(0.714)	(0.581)	(0.316)	(0.016)	(0.561)	(0.005)	(0.197)	(0.002)	(0.215)	(0.039)	(0.529)	(0.128)
BCMTIND	0.001	0.003***	0.001	0.012***	0.002	0.004**	0.001	−0.010**	0.001	0.004***	0.003	0.001	−0.001	0.003**	0.001	−0.003
	(0.114)	(0.007)	(0.725)	(0.000)	(0.422)	(0.022)	(0.679)	(0.048)	(0.714)	(0.000)	(0.159)	(0.831)	(0.525)	(0.019)	(0.742)	(0.392)
ESG × BCMTIND	0.001	0.002	0.001	−0.002***	0.001	0.001	0.002**	0.007***	0.001	0.001	0.001	0.002*	0.001**	0.000	0.001**	0.003***
	(0.735)	(0.446)	(0.125)	(0.006)	(0.740)	(0.553)	(0.023)	(0.000)	(0.278)	(0.576)	(0.470)	(0.056)	(0.031)	(0.632)	(0.022)	(0.001)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.115	0.115	0.115	0.115	0.059	0.059	0.059	0.059	0.093	0.093	0.093	0.093	0.118	0.118	0.118	0.118
ESG	0.001	0.001	−0.004**	−0.014***	0.001	−0.004**	−0.011***	−0.059***	−0.004***	−0.005***	−0.006**	−0.024***	0.000	−0.005***	−0.007***	−0.021***
	(0.433)	(0.609)	(0.027)	(0.008)	(0.615)	(0.034)	(0.002)	(0.000)	(0.007)	(0.000)	(0.014)	(0.000)	(0.941)	(0.001)	(0.001)	(0.004)
AUDCIND	0.001	0.001	0.002***	0.007***	0.001	0.004***	0.008***	0.012***	0.001	0.002*	0.002	0.005*	0.001	0.002*	0.003*	0.005*
	(0.445)	(0.126)	(0.006)	(0.000)	(0.440)	(0.001)	(0.000)	(0.005)	(0.484)	(0.055)	(0.114)	(0.065)	(0.215)	(0.051)	(0.060)	(0.060)
COMCIND	0.001	0.001**	0.001	0.004	−0.002	0.001	0.004*	0.011	0.001	0.002***	0.004**	0.006	0.001	0.003***	0.005***	0.006
	(0.720)	(0.023)	(0.335)	(0.181)	(0.229)	(0.303)	(0.069)	(0.319)	(0.523)	(0.009)	(0.042)	(0.300)	(0.277)	(0.002)	(0.001)	(0.147)
NOMCIND	0.001**	0.001*	0.002**	−0.003	0.005***	0.003**	0.001	−0.002	0.002**	0.002*	0.002	−0.001	0.001*	0.002**	0.000	0.001
	(0.018)	(0.076)	(0.024)	(0.456)	(0.001)	(0.023)	(0.731)	(0.836)	(0.050)	(0.075)	(0.437)	(0.830)	(0.092)	(0.021)	(0.876)	(0.810)
SUSCIND	0.001	0.001	0.002*	0.001	0.002	0.003**	0.008***	0.021**	0.002**	0.002*	0.003*	0.006	0.001	0.002	−0.002	0.005
	(0.906)	(0.248)	(0.057)	(0.888)	(0.364)	(0.041)	(0.000)	(0.013)	(0.021)	(0.051)	(0.052)	(0.124)	(0.653)	(0.835)	(0.300)	(0.282)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.115	0.115	0.115	0.115	0.059	0.059	0.059	0.059	0.093	0.093	0.093	0.093	0.117	0.117	0.117	0.117
ESG	0.001	−0.003	−0.001	−0.023***	−0.001	−0.005	−0.010**	−0.014	−0.005**	−0.007***	−0.002	−0.019***	0.002	−0.002	0.001	−0.014*
	(0.759)	(0.132)	(0.819)	(0.000)	(0.886)	(0.216)	(0.029)	(0.236)	(0.039)	(0.005)	(0.510)	(0.001)	(0.387)	(0.367)	(0.966)	(0.056)

TABLE 4 (Continued)

DVs	ROA				ROE				ROC				ROI			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
AUDCIND	0.007**	0.015***	0.012*	0.016	0.019**	0.023***	0.015	0.016	0.012***	0.021***	0.037***	0.059*	0.012***	0.012***	0.012	0.028
	(0.019)	(0.000)	(0.087)	(0.203)	(0.012)	(0.004)	(0.160)	(0.739)	(0.003)	(0.000)	(0.000)	(0.057)	(0.000)	(0.007)	(0.173)	(0.291)
COMCIND	0.004	−0.005*	−0.011	−0.033***	−0.003	−0.017	−0.029**	−0.048	−0.004	−0.010	−0.022	−0.064*	−0.001	0.001	−0.012	−0.061**
	(0.362)	(0.086)	(0.207)	(0.002)	(0.780)	(0.128)	(0.025)	(0.296)	(0.516)	(0.157)	(0.111)	(0.058)	(0.767)	(0.881)	(0.258)	(0.024)
NOMCIND	−0.010**	−0.005	0.001	0.048***	−0.019**	−0.006	0.018**	0.032	−0.013**	−0.007	−0.007	0.011	−0.019***	−0.016***	−0.001	0.036**
	(0.016)	(0.242)	(0.767)	(0.001)	(0.021)	(0.441)	(0.036)	(0.550)	(0.017)	(0.148)	(0.621)	(0.809)	(0.000)	(0.000)	(0.953)	(0.016)
SUSCIND	0.001	0.009	−0.009	−0.040**	0.025	0.038**	0.040**	−0.090**	0.030***	0.017*	−0.013	−0.010	0.022***	0.022**	−0.005	0.006
	(0.944)	(0.244)	(0.388)	(0.011)	(0.184)	(0.030)	(0.011)	(0.018)	(0.001)	(0.093)	(0.429)	(0.589)	(0.006)	(0.030)	(0.784)	(0.822)
ESG × AUDCIND	−0.002**	−0.004***	−0.003	−0.003	0.250**	−0.005**	−0.002	−0.001	−0.003***	−0.005***	−0.010***	−0.015*	−0.003***	−0.003**	−0.003	−0.006
	(0.022)	(0.000)	(0.129)	(0.340)	(0.014)	(0.014)	(0.570)	(0.944)	(0.009)	(0.000)	(0.000)	(0.080)	(0.002)	(0.025)	(0.308)	(0.396)
ESG × COMCIND	−0.001	0.002**	0.003	0.010***	0.001	0.005*	0.009**	0.018	0.001	0.003*	0.007*	0.019**	0.001	0.002	0.005*	0.017**
	(0.409)	(0.029)	(0.161)	(0.001)	(0.894)	(0.097)	(0.014)	(0.172)	(0.430)	(0.074)	(0.056)	(0.030)	(0.669)	(0.842)	(0.094)	(0.021)
ESG × NOMCIND	0.003***	0.002	0.001	−0.014***	0.007***	0.003	−0.005*	−0.010	0.004***	0.003*	0.002	−0.003	0.006***	0.005***	0.001	−0.009**
	(0.008)	(0.162)	(0.852)	(0.000)	(0.003)	(0.231)	(0.065)	(0.494)	(0.006)	(0.063)	(0.547)	(0.801)	(0.000)	(0.000)	(0.958)	(0.037)
ESG × SUSCIND	0.001	−0.002	0.003	0.011***	−0.006	−0.009**	−0.009**	0.027**	−0.007***	−0.004*	0.004	0.004	−0.006***	−0.006**	0.001	−0.001
	(0.946)	(0.293)	(0.331)	(0.007)	(0.209)	(0.041)	(0.040)	(0.023)	(0.002)	(0.098)	(0.331)	(0.430)	(0.004)	(0.028)	(0.895)	(0.892)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.116	0.116	0.116	0.116	0.059	0.059	0.059	0.059	0.094	0.094	0.094	0.094	0.118	0.118	0.118	0.118

Note: The interaction terms include ESG × BCMTIND, ESG × AUDCIND, ESG × COMCIND, ESG × NOMCIND, and ESG × SUSCIND, capturing the interaction effects between ESG and specific committee indexes. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; ESG, aggregate environmental, social, and governance disclosure score; NOMCIND, individual nomination committee index; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

suggesting that a stronger audit committee would enhance the association between ESG disclosure and accounting performance. However, contrary to our hypothesis, our findings revealed a negative impact of the AUDCIND on the relationship between ESG disclosure and the accounting measures. This implies that, for MNEs with median and superior ESG scores, a higher AUDCIND score is associated with lower accounting performance, as measured by four financial indicators (ROA, ROE, ROC, and ROI). This result is in line with the findings reported by prior scholars (Achim & Borlea, 2015; Suttipun, 2021; Xie et al., 2018), who found a negative correlation between audit committee attributes and ESG disclosure.

These results are consistent with the expectation suggested by resource dependence theory, which posits that companies with large audit committees are endowed with a wealth of experience and expertise to effectively monitor managerial disclosure behaviour. Hence, having a large-sized audit committee should facilitate investment in environmental and social activities (Albitar, 2015; Allegrini & Greco, 2011; Haj Salem et al., 2019). However, a large size of audit committees could potentially hinder a firm from making timely decisions due to conflicting opinions (Albitar et al., 2022).

The COMCIND has a positive effect on the relationship between ESG and our three accounting measures (ROA, ROE, and ROC) for MNEs with median and high ESG scores, and this effect is only significant at the upper tail of the distribution for ROI ratio. These findings are consistent with Hypothesis 2. Additionally, these results are in line with prior research that found a positive relationship between compensation committees and ESG performance (Achim & Borlea, 2015; Baraibar-Diez & Odriozola, 2019; Suttipun, 2021; Tamimi & Sebastianelli, 2017; Velte, 2016). Furthermore, these results are consistent with the agency theory perspective, which suggests that compensation systems that are compatible with the needs of both management and shareholders help reduce principal-agent problems. Thus, remuneration schemes should be linked to company ESG and financial performance (Jensen & Meckling, 1976; De Andres & Vallelado, 2008).

The NOMCIND has a positive effect on the relationship between ESG and accounting measures (ROA, ROE, ROC, and ROI) for MNEs with low ESG scores. This is in line with prior research conducted by Lam and Lee (2012) and Agyemang-Mintah (2015), who reported a positive correlation between nomination committees and firm performance. This result is also supported by stakeholder theory, which assumes that effective governance of the nomination committee is crucial to ensure a diverse and representative board composition that includes employees, customers, and suppliers. This diverse composition allows the company to consider a wider range of perspectives on ethical issues, thereby enhancing their ESG performance (Ammari et al., 2016). However, we found a negative impact on the relationship between ESG and our three accounting measures (ROA, ROE, and ROI) for MNEs with ESG scores at the upper tail of the distribution. These results are consistent with the findings stated by previous studies such as Achim and Borlea (2015) and Suttipun (2021), which found that the nomination committee has a negative impact on ESG scores.

Our results indicate that the SUSCIND has a positive effect on the relationship between ESG and our two accounting measures (ROA and ROE) for MNEs with high ESG scores. This finding is in line with previous studies that reported a positive correlation between the presence of CSR committee governance and firm performance (Baraibar-Diez & Odriozola, 2019; Birindelli et al., 2018; Cucari et al., 2018; Eberhardt-Toth, 2017; Elmaghrabi, 2021; Martínez-Ferrero et al., 2021; Saeed et al., 2021; Suttipun, 2021; Velte & Stawinoga, 2020). Collectively, these findings support the resource dependence theory viewpoint, which assumes that organisations are influenced by their external environment. Therefore, the establishment of sustainability committees helps legitimise a firm's ESG activities. A good governance structure plays a crucial role in providing access to diverse resources and fostering connections with other organisations. These resources and connections ultimately contribute to the overall ESG performance and effectiveness of the firm (Pfeffer & Salancik, 1978). Good governance codes often encompass principles and guidelines related to ESG factors. The existence of board committees plays a crucial role in implementing and monitoring the compliance of these codes within companies (Elmghaamez, 2021). However, we found a negative impact on the relationship between ESG and three accounting measures (ROE, ROC, and ROI) for MNEs with median and low ESG scores.

Table 5 presents the results related to market-based measures. The findings reported in Table 5 demonstrate the moderating effect of different board committee indexes on the relationship between ESG disclosure and market-based performance indicators (TOBQ, SGR, EPS, and DPS) for MNEs. These effects are influenced by the level of ESG scores.

Starting with the aggregate committee index (BCMTIND), we observe a negative impact on the relationship between ESG and TOBQ for MNEs with median and low ESG scores. However, the BCMTIND has a

TABLE 5 Quantile regression results of the interaction between ESG disclosure and aggregate and individual board committee indexes on the market-based measures of MNEs.

DVs	TQ				SGR				EPS				DPS			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
ESG	0.092***	0.026**	−0.013	−0.010	0.002	−0.007***	−0.015***	−0.060***	0.001**	0.001	0.001	0.006**	0.050***	0.035***	0.028***	0.112***
	(0.001)	(0.024)	(0.240)	(0.531)	(0.103)	(0.000)	(0.000)	(0.000)	(0.013)	(0.839)	(0.788)	(0.032)	(0.000)	(0.000)	(0.005)	(0.000)
BCMTIND	0.015***	0.019***	0.023***	0.018***	0.001	0.003***	0.005***	0.011***	0.001**	0.002***	0.002**	−0.003***	−0.004***	0.011***	0.019***	−0.015*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.482)	(0.000)	(0.000)	(0.000)	(0.012)	(0.000)	(0.023)	(0.005)	(0.000)	(0.000)	(0.000)	(0.082)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.105	0.105	0.105	0.105	0.059	0.059	0.059	0.059	0.078	0.078	0.078	0.078	0.174	0.174	0.174	0.174
ESG	0.025***	0.001	0.006	−0.038	0.001	−0.007**	−0.020***	−0.040***	0.001***	0.001**	0.002***	0.009***	0.111***	0.155***	0.157***	0.195***
	(0.001)	(0.995)	(0.700)	(0.306)	(0.850)	(0.012)	(0.000)	(0.000)	(0.002)	(0.039)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
BCMTIND	0.096***	0.044***	0.009	0.032*	0.002	0.003**	0.009***	−0.001	0.001*	0.002**	−0.002***	−0.005***	−0.043***	−0.068***	−0.071***	−0.079**
	(0.000)	(0.000)	(0.299)	(0.082)	(0.194)	(0.043)	(0.000)	(0.802)	(0.068)	(0.031)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.013)
ESG × BCMTIND	−0.023***	−0.007***	0.004*	−0.004	−0.001	0.001	−0.001*	0.003**	0.001**	0.001***	0.001***	0.001	0.012***	0.024***	0.026***	0.019**
	(0.000)	(0.003)	(0.088)	(0.460)	(0.138)	(0.761)	(0.055)	(0.041)	(0.015)	(0.000)	(0.000)	(0.316)	(0.000)	(0.000)	(0.000)	(0.044)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.107	0.107	0.107	0.107	0.059	0.059	0.059	0.059	0.079	0.079	0.079	0.079	0.189	0.189	0.189	0.189
ESG	0.099***	0.026**	−0.012	−0.018	0.002	−0.007***	−0.015***	−0.064***	0.001***	0.000	−0.001	0.006***	0.047***	0.032***	0.028***	0.089***
	(0.000)	(0.021)	(0.297)	(0.229)	(0.139)	(0.000)	(0.000)	(0.000)	(0.008)	(0.266)	(0.226)	(0.006)	(0.000)	(0.000)	(0.004)	(0.000)
AUDCIND	0.015***	0.013***	0.008*	0.061***	−0.001	0.002***	0.006***	0.010	0.001	0.002**	0.001***	0.005	0.003	0.004	0.021***	0.102***
	(0.000)	(0.004)	(0.074)	(0.000)	(0.251)	(0.002)	(0.000)	(0.233)	(0.224)	(0.032)	(0.002)	(0.108)	(0.382)	(0.335)	(0.002)	(0.000)
COMCIND	0.013***	0.013***	0.018**	−0.020	−0.002**	−0.001	0.001	0.005	−0.001***	−0.001***	−0.002***	−0.012***	−0.020***	−0.011**	−0.017*	−0.066***
	(0.000)	(0.003)	(0.013)	(0.103)	(0.035)	(0.264)	(0.572)	(0.627)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.014)	(0.051)	(0.001)
NOMCIND	0.003	0.007*	0.009	0.002	0.003***	0.004***	0.003*	0.001	0.001***	0.001***	0.001	0.001	0.001	0.004	0.002	−0.061***
	(0.389)	(0.069)	(0.246)	(0.899)	(0.001)	(0.000)	(0.093)	(0.908)	(0.000)	(0.000)	(0.524)	(0.806)	(0.712)	(0.268)	(0.843)	(0.009)
SUSCIND	−0.011***	0.002	0.018***	0.001	−0.002*	0.001	0.000	0.009	0.001***	0.002***	0.004***	0.006**	0.063***	0.102***	0.089***	0.067***
	(0.000)	(0.683)	(0.004)	(0.917)	(0.068)	(0.511)	(0.837)	(0.206)	(0.000)	(0.000)	(0.000)	(0.038)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.104	0.104	0.104	0.104	0.059	0.059	0.059	0.059	0.082	0.082	0.082	0.082	0.194	0.194	0.194	0.194
ESG	0.021***	0.008	0.001	−0.020	−0.003	−0.012***	−0.022***	−0.053***	0.001	0.001	0.002	0.005	0.114***	0.153***	0.120***	0.145***
	(0.005)	(0.520)	(0.993)	(0.559)	(0.237)	(0.000)	(0.000)	(0.000)	(0.143)	(0.913)	(0.710)	(0.292)	(0.000)	(0.000)	(0.000)	(0.006)

(Continues)

TABLE 5 (Continued)

DVs	TQ				SGR				EPS				DPS			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
AUDCIND	0.223***	0.131***	0.093*	0.138	0.006	0.007	0.009	0.028	0.001	0.001	−0.002	−0.017**	0.057***	0.094***	0.016	0.163
	(0.000)	(0.000)	(0.075)	(0.116)	(0.145)	(0.211)	(0.355)	(0.511)	(0.279)	(0.150)	(0.119)	(0.024)	(0.000)	(0.000)	(0.711)	(0.158)
COMCIND	−0.034	−0.065***	−0.078	−0.178	0.001	0.004	0.000	−0.039*	0.001	0.002	0.002	0.006	−0.040**	−0.090***	−0.008	0.004
	(0.144)	(0.005)	(0.442)	(0.118)	(0.897)	(0.603)	(0.975)	(0.085)	(0.816)	(0.979)	(0.159)	(0.493)	(0.017)	(0.000)	(0.889)	(0.952)
NOMCIND	−0.030**	0.023	0.007	0.158*	−0.009	−0.010	−0.004	0.010	−0.002***	−0.002**	−0.003**	0.006	−0.066***	−0.095***	−0.113***	−0.198
	(0.014)	(0.245)	(0.940)	(0.092)	(0.309)	(0.121)	(0.708)	(0.815)	(0.003)	(0.017)	(0.014)	(0.559)	(0.000)	(0.000)	(0.005)	(0.119)
SUSCIND	0.009	−0.011	−0.017	−0.279***	0.025**	0.036***	0.047**	0.032	0.002	0.003	0.011**	0.005	−0.146***	−0.112**	0.057	−0.323
	(0.776)	(0.823)	(0.788)	(0.002)	(0.025)	(0.007)	(0.017)	(0.578)	(0.292)	(0.237)	(0.044)	(0.787)	(0.001)	(0.035)	(0.543)	(0.169)
ESG × AUDCIND	−0.058***	−0.034***	−0.022	−0.022	−0.002*	−0.001	−0.001	−0.005	0.001	0.002	0.001**	0.006***	−0.016***	−0.024***	0.003	−0.018
	(0.000)	(0.000)	(0.104)	(0.335)	(0.097)	(0.394)	(0.690)	(0.634)	(0.466)	(0.318)	(0.019)	(0.004)	(0.000)	(0.000)	(0.820)	(0.613)
ESG × COMCIND	0.011*	0.022***	0.026	0.042	−0.001	−0.001	0.001	0.013**	0.001	0.001	−0.001**	−0.005**	0.007	0.022***	−0.002	−0.020
	(0.072)	(0.001)	(0.337)	(0.171)	(0.666)	(0.549)	(0.911)	(0.043)	(0.413)	(0.478)	(0.012)	(0.018)	(0.148)	(0.000)	(0.885)	(0.375)
ESG × NOMCIND	0.010***	−0.003	0.001	−0.043*	0.004	0.004**	0.002	−0.003	0.001***	0.001***	0.001**	−0.002	0.020***	0.030***	0.035***	0.041
	(0.004)	(0.532)	(0.990)	(0.088)	(0.154)	(0.043)	(0.529)	(0.803)	(0.000)	(0.002)	(0.011)	(0.557)	(0.000)	(0.000)	(0.008)	(0.292)
ESG × SUSCIND	−0.002	0.004	0.009	0.076***	−0.007**	−0.009***	−0.012**	−0.006	0.001	0.001	−0.002	0.001	0.055***	0.050***	0.001	0.102
	(0.770)	(0.751)	(0.559)	(0.002)	(0.014)	(0.009)	(0.015)	(0.689)	(0.575)	(0.781)	(0.181)	(0.892)	(0.000)	(0.001)	(0.991)	(0.105)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.109	0.109	0.109	0.109	0.060	0.060	0.060	0.060	0.082	0.082	0.082	0.082	0.203	0.203	0.203	0.203

Note: The interaction terms include ESG × BCMTIND, ESG × AUDCIND, ESG × COMCIND, ESG × NOMCIND, and ESG × SUSCIND, representing the interaction effects between ESG and specific committee indexes. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; ESG, aggregate environmental, social, and governance disclosure score; NOMCIND, individual nomination committee index; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

positive effect on the relationship between overall ESG and SGR, EPS, and DPS across MNEs with low, median, and high ESG scores. These findings align with the resource-based theory, which suggests that firms with better access to critical resources and capabilities tend to enhance their financial performance. Furthermore, the relationship between aggregated ESG and TOBQ and SGR is positively influenced by the BCMTIND, but only for MNEs with high ESG scores. This finding supports the stakeholder viewpoint that emphasises firms' responsibilities to their various stakeholders, including investors and society, which can positively impact their financial outcomes (Albitar et al., 2020).

Moving to the audit committee index (AUDCIND), we find a negative impact on the relationship between ESG and TOBQ and DPS for MNEs with median and poor aggregated ESG scores. However, the AUDCIND has a positive effect on the relationship between ESG and EPS. These results highlight the role of compliance with social norms and regulations, as firms' adherence to these standards can positively influence their financial performance.

Regarding the compensation committee index (COMCIND), we observe a positive effect on the relationship between ESG and market-based measures (TOBQ & DPS), but only for MNEs with median overall ESG scores. This finding is consistent with the concept of legitimacy, suggesting that firms' compliance with social norms and regulations can positively impact their financial performance.

Analysing the nomination committee index (NOMCIND), we find a positive effect on the relationship between ESG and TOBQ for MNEs with low ESG scores. However, the NOMCIND negatively affects the relationship between ESG and SGR, but only for MNEs with median ESG scores. Additionally, the NOMCIND has a positive effect on the relationship between ESG and EPS and DPS across MNEs with low, median, and upper tail ESG scores. These findings align with the institutional theorist argument, emphasising the positive impact of firms' compliance with institutional requirements on their financial performance (Campbell, 2007; DiMaggio & Powell, 1983).

Finally, the sustainability committee index (SUSCIND) demonstrates a positive effect on the relationship between ESG and TOBQ for MNEs with high ESG scores. Conversely, the SUSCIND has a negative effect on the relationship between ESG and SGR for MNEs with low, median, and high ESG scores. Furthermore, the SUSCIND has a positive effect on the relationship between ESG and DPS for MNEs with low and median ESG scores. However, the SUSCIND does not significantly moderate the relationship between ESG and EPS at all quantile levels. These findings are in line with previous evidence suggesting that the sustainability committee does not play a significant moderating role in the link between governance practices and sustainability performance.

In summary, the findings presented in Table 5 highlight the complex relationships between ESG disclosure, board committees, and market-based performance indicators for MNEs. The moderating effects vary depending on the specific committee index and the level of ESG scores. These results contribute to our understanding of how governance mechanisms interact with ESG practices to influence financial performance outcomes in MNEs.

5.2.2 | The effect of board committees in moderating the ENVD-financial performance relationship

The effect of board committees on moderating the relationship between environmental disclosure (ENVD) and financial performance is examined in Table 6. The results indicate that the aggregate BCMTIND positively moderates the relationship between ENVD and accounting measures (ROE, ROC, and ROI) for MNEs across all quantile levels. This finding aligns with the results reported by Almeyda and Darmansya (2019), who found a significant positive association between environmental disclosure and corporate financial performance.

However, Table 6 shows that AUDCIND negatively affects the relationship between ENVD and two accounting measures (ROA and ROC), but only for MNEs with median and low ENVD scores. This finding is consistent with previous studies that identified a negative correlation between audit committee attributes and ESG disclosure scores (Achim & Borlea, 2015; Suttipun, 2021; Xie et al., 2018). However, the other two accounting-based measures (ROE and ROI) are positively influenced at low quantile levels. This result is in line with findings from other studies that highlight a positive relationship between audit committee qualities, financial performance, and ESG disclosures (Albitar et al., 2022; Bravo & Reguera-Alvarado, 2019; Buallay & Al-Ajmi, 2019). It is also consistent with the perspective of agency theory, which assumes that the presence of an audit committee is crucial in reducing information asymmetry and conflicts of interest between managers and shareholders (Pozzoli et al., 2022).

The results suggest that the COMCIND positively affects the relationship between ENVD and the three accounting-based measures (ROE, ROC, and ROI), but only for MNEs with high ENVD scores. This finding is consistent with prior studies that found a positive relationship between compensation committees and ESG performance

TABLE 6 Quantile regression results of the interaction between environmental disclosure and aggregate and individual board committee indexes on the accounting-based measures of MNEs.

DVs	ROA				ROE				ROC				ROI			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
ENVD	−0.001	−0.001*	−0.004***	−0.013***	−0.001	−0.004***	−0.007***	−0.013**	−0.003***	−0.004***	−0.007***	−0.017***	0.001	−0.004***	−0.004***	−0.010***
	(0.174)	(0.069)	(0.001)	(0.000)	(0.464)	(0.007)	(0.000)	(0.045)	(0.003)	(0.000)	(0.000)	(0.001)	(0.999)	(0.000)	(0.001)	(0.001)
BCMTIND	0.001***	0.002***	0.003***	0.005***	0.002***	0.005***	0.008***	0.012***	0.002***	0.004***	0.005***	0.007***	0.002***	0.003***	0.005***	0.007***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.116	0.116	0.116	0.116	0.060	0.060	0.060	0.060	0.095	0.095	0.095	0.095	0.119	0.119	0.119	0.119
ENVD	−0.001	−0.001	−0.002	−0.013***	−0.002	−0.001	−0.004**	−0.011**	−0.002*	−0.003***	−0.004***	−0.011***	0.001	−0.002**	−0.002*	−0.006
	(0.279)	(0.100)	(0.108)	(0.006)	(0.360)	(0.664)	(0.023)	(0.017)	(0.083)	(0.007)	(0.003)	(0.000)	(0.616)	(0.042)	(0.058)	(0.102)
BCMTIND	0.001	0.001	0.002	0.004	0.001	0.001	0.001	−0.008***	0.001	0.001**	0.001	0.001	−0.001	0.001	−0.001	0.001
	(0.239)	(0.242)	(0.829)	(0.103)	(0.403)	(0.401)	(0.351)	(0.003)	(0.843)	(0.017)	(0.888)	(0.781)	(0.203)	(0.411)	(0.350)	(0.528)
ENVD × BCMTIND	0.001	0.001***	0.001***	0.002	0.001*	0.001***	0.002***	0.007***	0.001***	0.001***	0.002***	0.003***	0.001***	0.001***	0.002***	0.002***
	(0.110)	(0.001)	(0.000)	(0.875)	(0.053)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.117	0.117	0.117	0.117	0.062	0.062	0.062	0.062	0.099	0.099	0.099	0.099	0.121	0.121	0.121	0.121
ENVD	−0.001	−0.001*	−0.005***	−0.014***	−0.001	−0.004***	−0.008***	−0.015***	−0.003***	−0.005***	−0.007***	−0.018***	0.001	−0.004***	−0.004***	−0.012***
	(0.218)	(0.058)	(0.000)	(0.000)	(0.492)	(0.002)	(0.000)	(0.002)	(0.002)	(0.000)	(0.000)	(0.000)	(0.951)	(0.000)	(0.001)	(0.000)
AUDCIND	0.001	0.001	0.002**	0.007***	0.001	0.003***	0.008***	0.010	0.001	0.001	0.002	0.004	0.001	0.001	0.003*	0.005**
	(0.424)	(0.157)	(0.012)	(0.004)	(0.336)	(0.002)	(0.000)	(0.151)	(0.731)	(0.197)	(0.162)	(0.142)	(0.239)	(0.190)	(0.093)	(0.016)
COMCIND	0.001	0.001**	0.001	0.006	−0.002	0.001	0.002	0.016	0.001	0.002***	0.004**	0.008	0.001	0.003***	0.005***	0.007*
	(0.657)	(0.044)	(0.461)	(0.133)	(0.235)	(0.354)	(0.215)	(0.142)	(0.584)	(0.007)	(0.029)	(0.110)	(0.284)	(0.002)	(0.001)	(0.067)
NOMCIND	0.001**	0.001*	0.002**	−0.004	0.005***	0.004**	0.002	−0.009	0.002*	0.002**	0.002	−0.002	0.001*	0.002**	0.001	0.001
	(0.011)	(0.058)	(0.023)	(0.309)	(0.001)	(0.014)	(0.389)	(0.384)	(0.063)	(0.041)	(0.376)	(0.748)	(0.090)	(0.014)	(0.904	(0.980)
SUSCIND	0.001	0.001	0.002**	0.001	0.002	0.003**	0.009***	0.017**	0.003***	0.002**	0.004**	0.008*	0.001	0.001	0.0002	0.004
	(0.955)	(0.182)	(0.043)	(0.834)	(0.286)	(0.024)	(0.000)	(0.026)	(0.008)	(0.016)	(0.019)	(0.062)	(0.643)	(0.885)	(0.796	(0.268)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.115	0.115	0.115	0.115	0.059	0.059	0.059	0.059	0.094	0.094	0.094	0.094	0.118	0.118	0.118	0.118
ENVD	0.001	−0.002**	−0.002	−0.015***	−0.003	−0.003	−0.006***	−0.011**	−0.003***	−0.004***	−0.004**	−0.013***	0.001	−0.002**	−0.002	−0.008**
	(0.485)	(0.045)	(0.137)	(0.000)	(0.211)	(0.112)	(0.004)	(0.019)	(0.004)	(0.001)	(0.011)	(0.000)	(0.796)	(0.037)	(0.121)	(0.043)

TABLE 6 (Continued)

DVs	ROA				ROE				ROC				ROI			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
AUDCIND	0.003**	0.004**	0.006**	0.005	0.008***	0.007***	0.001	−0.010	0.005***	0.006***	0.008	0.015	0.005***	0.004***	0.001	0.011
	(0.017)	(0.040)	(0.043)	(0.583)	(0.001)	(0.009)	(0.937)	(0.529)	(0.001)	(0.000)	(0.134)	(0.543)	(0.004)	(0.007)	(0.889)	(0.380)
COMCIND	0.002	0.001	−0.004	−0.011	0.002	−0.004	−0.006	−0.018*	0.002	−0.001	−0.004	−0.020	0.001	0.001	0.002	−0.022**
	(0.177)	(0.850)	(0.310)	(0.564)	(0.615)	(0.362)	(0.385)	(0.098)	(0.390)	(0.818)	(0.379)	(0.247)	(0.604)	(0.656)	(0.739)	(0.047)
NOMCIND	−0.004***	−0.003	−0.001	0.023	−0.010***	−0.003	0.008*	0.024**	−0.010***	−0.005	−0.002	0.007	−0.008***	−0.007***	−0.004	0.013*
	(0.003)	(0.130)	(0.763)	(0.277)	(0.006)	(0.386)	(0.056)	(0.013)	(0.000)	(0.160)	(0.661)	(0.844)	(0.008)	(0.004)	(0.413)	(0.054)
SUSCIND	0.001	0.001	−0.001	−0.020	0.011	0.014**	0.016**	−0.008	0.012**	0.008*	0.001	0.001	0.008**	0.009**	−0.001	0.012
	(0.839)	(0.873)	(0.805)	(0.172)	(0.236)	(0.014)	(0.037)	(0.420)	(0.042)	(0.068)	(0.946)	(0.999)	(0.036)	(0.014)	(0.909)	(0.145)
ENVD × AUDCIND	−0.001**	−0.001*	−0.001	0.002	−0.002***	−0.001	0.003	0.007	−0.001***	−0.001***	−0.002	−0.002	−0.001*	−0.001	0.001	−0.001
	(0.040)	(0.082)	(0.189)	(0.971)	(0.006)	(0.152)	(0.155)	(0.112)	(0.009)	(0.007)	(0.278)	(0.716)	(0.056)	(0.143)	(0.417)	(0.765)
ENVD × COMCIND	0.001	0.002	0.001	0.005	−0.001	0.002	0.003	0.011***	0.001	0.001	0.003*	0.008*	0.001	0.001	0.001	0.008**
	(0.346)	(0.604)	(0.159)	(0.325)	(0.460)	(0.206)	(0.134)	(0.001)	(0.767)	(0.320)	(0.073)	(0.078)	(0.824)	(0.606)	(0.435)	(0.018)
ENVD × NOMCIND	0.002***	0.001**	0.001	−0.007	0.004***	0.002*	−0.002	−0.009***	0.003***	0.002**	0.001	−0.003	0.003***	0.003***	0.001	−0.003*
	(0.000)	(0.038)	(0.375)	(0.171)	(0.000)	(0.058)	(0.129)	(0.002)	(0.000)	(0.026)	(0.400)	(0.788)	(0.001)	(0.000)	(0.364)	(0.088)
ENVD × SUSCIND	0.001	0.002	0.001	0.006	−0.003	−0.003**	−0.003	0.006	−0.003*	−0.002*	0.001	0.001	−0.002**	−0.003***	−0.001	−0.002
	(0.907)	(0.966)	(0.635)	(0.165)	(0.259)	(0.032)	(0.209)	(0.126)	(0.080)	(0.097)	(0.727)	(0.510)	(0.020)	(0.009)	(0.718)	(0.320)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.117	0.117	0.117	0.117	0.061	0.061	0.061	0.061	0.097	0.097	0.097	0.097	0.121	0.121	0.121	0.121

Note: The interaction terms include ENVD × BCMTIND, ENVD × AUDCIND, ENVD × COMCIND, ENVD × NOMCIND, and ENVD × SUSCIND, representing the interaction effects between ENVD and specific committee indexes. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; ENVD, individual environmental disclosure score; NOMCIND, individual nomination committee index; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

(Achim & Borlea, 2015; Baraibar-Diez & Odriozola, 2019; Suttipun, 2021; Tamimi & Sebastianelli, 2017; Velte, 2016). However, we found that the moderating effect of COMCIND on the link between ENVD and ROA is insignificant at all quantile levels. Additionally, Table 6 indicates that NOMCIND is positively associated with the relationship between ENVD and the four accounting-based measures (ROA, ROE, ROC, and ROI), but only for MNEs with low and median ENVD scores. On the other hand, NOMCIND negatively affects the relationship between ENVD and ROE and ROI, but only for enterprises with high ENVD scores. Furthermore, the results show that SUSCIND is negatively associated with the relationship between ENVD and the three accounting measures (ROE, ROC, and ROI), but only for MNEs with median ENVD scores. However, the interaction effect of SUSCIND on the relationship between ENVD disclosure and ROA is insignificant at all quantile levels. This result is consistent with the findings reported by Velte (2016), who also found an insignificant link between environmental disclosure and accounting-based performance metrics.

Regarding market-based measures, Table 7 presents the results of the moderation effects of various board committee indices on the relationship between environmental disclosure (ENVD) of multinational corporations (MNEs) and their market-based performance measures, including market value (TOBQ), earnings per share (EPS), dividend per share (DPS), and sustainable growth rate (SGR).

Our results indicate that the aggregate BCMTIND positively affects the relationship between ENVD and market-based measures (EPS, DPS, and TOBQ), but only for MNEs with median to high ENVD scores. However, the aggregate BCMTIND has a negative impact on the relationship between ENVD and Tobin Q for MNEs with low ENVD scores. Furthermore, the results presented in Table 7 show that AUDCIND negatively influences the relationship between ENVD and Tobin Q and DPS, but only for MNEs with median to low ENVD scores. However, the association between ENVD and EPS is positively affected for MNEs with high ENVD scores.

The results demonstrate that the COMCIND positively influences the relationship between ENVD and TOBQ and DPS for MNEs with low to median ENVD scores. However, the relationship between ENVD and EPS is negatively affected, but only for MNEs with high ENVD scores. Table 7 also suggests that the NOMCIND positively influences the relationship between ENVD and market-based measures (SGR, EPS, and DPS), but only for MNEs with low to median ENVD scores. In contrast, NOMCIND is negatively correlated with the relationship between ENVD and TOBQ for MNEs with high ENVD scores, but positively associated with the relationship between ENVD and TOBQ for MNEs with low ENVD scores. Furthermore, from Table 7, it is observed that SUSCIND is positively correlated with the relationship between ENVD and TOBQ for MNEs with median to high ENVD scores. Conversely, SUSCIND negatively impacts the relationship between ENVD and SGR for MNEs with low to high ENVD scores. The results suggest that SUSCIND positively affects the relationship between ENVD and DPS for MNEs with low to median ENVD scores but does not interact with the relationship between ENVD and EPS at any quantile level.

Overall, the results in Table 7 are consistent with the literature that supports the positive relationship between environmental disclosure and corporate financial performance. For example, Almeyda and Darmansya (2019) found a significant positive association between environmental disclosure and selected market-based performance measurements. Similarly, Elmghaamez and Olarewaju (2022) confirmed the positive effects of environmental performance on stock prices and return on capital for product-based firms listed on the London Stock Exchange.

5.2.3 | The effect of board committees in moderating the SOCD-financial performance relationship.

Table 8 provides evidence of the moderation effect of various indexes on the relationship between the disclosure of social and environmental information (SOCD) and accounting performance measures (ROA, ROE, ROC, and ROI) of MNEs.

The results suggest that the aggregate BCMTIND has a positive effect on the relationship between SOCD and ROA at the 0.75 quantile level, but a negative moderation between SOCD and ROE at the 0.95 quantile level. In contrast, the aggregate BCMTIND positively influences the link between SOCD and ROE at the 0.75 and 0.95 quantile levels. The AUDCIND has a negative impact on the relationship between SOCD and the four accounting measures (ROA, ROE, ROC, and ROI), but only for MNEs with low and median SOCD scores. On the other hand, the NOMCIND positively affects the relationship between SOCD and the four accounting-based measures (ROA, ROE, ROC, and ROI), but only for companies at low, median, and 0.75 quartile levels. However, the NOMCIND negatively affects the relationship between SOCD and accounting-based measures (ROE and ROI), but only for MNEs with the upper 0.95 of SOCD scores.

The SUSCIND negatively influences the relationship between SOCD and our four accounting measures (ROA, ROE, ROC, and ROI), but only for MNEs with

TABLE 7 Quantile regression results of the interaction between environmental disclosure and aggregate and individual board committee indexes on the market-based measures of MNEs.

DVs	TQ				SGR				EPS				DPS			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
ENVD	−0.004	−0.002	−0.024***	−0.028***	0.001	−0.005***	−0.009***	−0.023***	0.002***	0.001	0.001	0.005	0.039***	0.036***	0.041***	0.075***
	(0.159)	(0.627)	(0.002)	(0.042)	(0.926)	(0.000)	(0.000)	(0.005)	(0.016)	(0.330)	(0.382)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
BCMTIND	0.014***	0.020***	0.023***	0.021***	0.001	0.002***	0.005***	0.009***	0.001***	0.003***	0.001**	−0.003***	−0.001	0.012***	0.018***	−0.012
	(0.000)	(0.000)	(0.000)	(0.000)	(0.735)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.032)	(0.005)	(0.263)	(0.000)	(0.000)	(0.209)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.104	0.104	0.104	0.104	0.059	0.059	0.059	0.059	0.079	0.079	0.079	0.079	0.178	0.178	0.178	0.178
ENVD	0.002	−0.002	−0.013*	−0.029**	0.001	−0.003***	−0.009***	−0.022***	0.001***	0.002**	0.001***	0.005**	0.041***	0.065***	0.065***	0.071***
	(0.840)	(0.674)	(0.093)	(0.064)	(0.948)	(0.003)	(0.000)	(0.000)	(0.002)	(0.044)	(0.006)	(0.012)	(0.000)	(0.000)	(0.000)	(0.000)
BCMTIND	0.035***	0.017***	0.004	0.021***	0.001	0.001	0.002	−0.006	0.001	0.002	−0.001***	−0.002*	−0.013***	−0.022***	−0.019***	−0.020
	(0.005)	(0.000)	(0.428)	(0.004)	(0.846)	(0.796)	(0.149)	(0.129)	(0.341)	(0.186)	(0.004)	(0.090)	(0.000)	(0.000)	(0.001)	(0.208)
ENVD × BCMTIND	−0.006*	0.001	0.007***	0.001	0.001	0.001***	0.001***	0.005***	0.001***	0.001***	0.001***	0.001	0.004***	0.013***	0.013***	0.003
	(0.073)	(0.356)	(0.000)	(0.763)	(0.980)	(0.000)	(0.007)	(0.000)	(0.008)	(0.000)	(0.000)	(0.321)	(0.000)	(0.000)	(0.000)	(0.498)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.104	0.104	0.104	0.104	0.061	0.061	0.061	0.061	0.080	0.080	0.080	0.080	0.191	0.191	0.191	0.191
ENVD	−0.004	−0.002	−0.025***	−0.027**	0.001	−0.005	−0.009	−0.026	0.001***	0.001	0.001	0.005***	0.033***	0.029***	0.032***	0.059***
	(0.247)	(0.691)	(0.003)	(0.017)	(0.635)	(0.000)	(0.000)	(0.005)	(0.005)	(0.786)	(0.382)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
AUDCIND	0.013***	0.012**	0.008*	0.058***	−0.001	0.002	0.004	0.008	0.001	0.001**	0.001***	0.006**	0.003	0.006*	0.026***	0.110***
	(0.000)	(0.014)	(0.089)	(0.000)	(0.472)	(0.043)	(0.000)	(0.114)	(0.116)	(0.032)	(0.002)	(0.025)	(0.380)	(0.090)	(0.000)	(0.000)
COMCIND	0.010***	0.014***	0.020***	−0.019	−0.002	−0.001	0.000	0.005	−0.001***	−0.001***	−0.002***	−0.012***	−0.019***	−0.013***	−0.018**	−0.059***
	(0.000)	(0.002)	(0.005)	(0.121)	(0.030)	(0.256)	(0.949)	(0.480)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.005)	(0.044)	(0.004)
NOMCIND	0.004	0.009**	0.007	0.002	0.003	0.004	0.004	−0.002	0.001***	0.001***	0.004***	0.001	0.004	0.006	0.003	−0.073***
	(0.214)	(0.015)	(0.352)	(0.902)	(0.000)	(0.000)	(0.007)	(0.803)	(0.000)	(0.000)	(0.000)	(0.937)	(0.249)	(0.148)	(0.746)	(0.001)
SUSCIND	−0.006**	0.002	0.019***	0.006	−0.002	0.002	0.001	0.012	0.001***	0.002***	0.004***	0.004	0.059***	0.099***	0.081***	0.053***
	(0.034)	(0.579)	(0.003)	(0.688)	(0.039)	(0.207)	(0.741)	(0.101)	(0.000)	(0.000)	(0.000)	(0.177)	(0.000)	(0.000)	(0.000)	(0.001)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.103	0.103	0.103	0.103	0.059	0.059	0.059	0.059	0.082	0.082	0.082	0.082	0.196	0.196	0.196	0.196
ENVD	0.022***	0.002	−0.014*	−0.021	−0.001	−0.005***	−0.010***	−0.025***	0.001**	0.001	0.002	0.005**	0.047***	0.071***	0.061***	0.063***
	(0.000)	(0.598)	(0.065)	(0.141)	(0.297)	(0.001)	(0.000)	(0.000)	(0.045)	(0.316)	(0.794)	(0.019)	(0.000)	(0.000)	(0.000)	(0.003)

(Continues)

TABLE 7 (Continued)

DVs	TQ				SGR				EPS				DPS			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
AUDCIND	0.157***	0.049***	0.049***	0.085*	0.006***	0.002	−0.001	0.001	0.001	0.001	0.002	−0.004	0.032***	0.039***	0.018	0.155**
	(0.000)	(0.000)	(0.007)	(0.053)	(0.003)	(0.344)	(0.803)	(0.979)	(0.192)	(0.309)	(0.881)	(0.239)	(0.000)	(0.000)	(0.309)	(0.027)
COMCIND	−0.008	−0.015	−0.010	−0.099*	0.001	0.001	0.001	−0.014	0.002	0.002	0.001	−0.006**	−0.026***	−0.034***	−0.024	−0.015
	(0.361)	(0.167)	(0.635)	(0.078)	(0.964)	(0.606)	(0.786)	(0.209)	(0.820)	(0.674)	(0.661)	(0.037)	(0.000)	(0.000)	(0.223)	(0.608)
NOMCIND	−0.029***	0.007	−0.030*	0.076*	−0.008*	−0.004*	0.001	0.002	0.001*	0.001*	−0.001**	0.004**	−0.021***	−0.028***	−0.026**	−0.156**
	(0.000)	(0.470)	(0.075)	(0.090)	(0.077)	(0.066)	(0.883)	(0.998)	(0.061)	(0.087)	(0.050)	(0.035)	(0.000)	(0.000)	(0.025)	(0.029)
SUSCIND	−0.013	−0.024	−0.029	−0.082**	0.005	0.011**	0.017**	0.029	0.001	0.002**	0.006***	0.010	−0.018	−0.036	0.033	−0.024
	(0.336)	(0.107)	(0.250)	(0.010)	(0.253)	(0.025)	(0.017)	(0.184)	(0.382)	(0.038)	(0.003)	(0.154)	(0.162)	(0.109)	(0.429)	(0.831)
ENVD × AUDCIND	−0.042***	−0.012***	−0.011**	−0.006	−0.002***	0.001	0.002	0.003	0.001	0.001	0.001	0.003**	−0.010***	−0.011***	0.003	−0.013
	(0.000)	(0.001)	(0.025)	(0.626)	(0.002)	(0.785)	(0.196)	(0.707)	(0.578)	(0.847)	(0.127)	(0.042)	(0.000)	(0.000)	(0.573)	(0.576)
ENVD × COMCIND	0.006**	0.009***	0.010*	0.023	−0.001	−0.001	0.001	0.005	0.001	0.002	0.001	−0.003***	0.004*	0.008***	0.002	−0.018
	(0.022)	(0.004)	(0.081)	(0.133)	(0.484)	(0.463)	(0.904)	(0.107)	(0.233)	(0.200)	(0.101)	(0.006)	(0.077)	(0.003)	(0.719)	(0.177)
ENVD × NOMCIND	0.010***	0.001	0.009*	−0.021*	0.003***	0.002***	0.001	0.001	0.001***	0.001***	0.001**	−0.001	0.008***	0.013***	0.012**	0.031
	(0.000)	(0.791)	(0.059)	(0.073)	(0.009)	(0.001)	(0.268)	(0.923)	(0.000)	(0.000)	(0.012)	(0.246)	(0.000)	(0.000)	(0.036)	(0.205)
ENVD × SUSCIND	0.003	0.007*	0.012*	0.024**	−0.002*	−0.003**	−0.005***	−0.007	0.001	0.003	−0.001	−0.001	0.025***	0.034***	0.006	0.027
	(0.434)	(0.093)	(0.086)	(0.007)	(0.068)	(0.029)	(0.007)	(0.240)	(0.808)	(0.513)	(0.203)	(0.509)	(0.000)	(0.000)	(0.563)	(0.353)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.105	0.105	0.105	0.105	0.062	0.062	0.062	0.062	0.082	0.082	0.082	0.082	0.206	0.206	0.206	0.206

Note: The interaction terms include ENVD × BCMTIND, ENVD × AUDCIND, ENVD × COMCIND, ENVD × NOMCIND, and ENVD × SUSCIND, representing the interaction effects between ENVD and specific committee indexes. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; ENVD, individual environmental disclosure score; NOMCIND, individual nomination committee index; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

TABLE 8 Quantile regression results of the interaction effect between social disclosure and aggregate and individual board committee indexes on the accounting-based measures of MNEs.

DVs	ROA				ROE				ROC				ROI			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
SOCD	0.001	0.002	−0.003**	−0.015**	−0.001	−0.003*	−0.006***	−0.036***	−0.003***	−0.004***	−0.005***	−0.022***	−0.001	−0.003***	−0.004**	−0.015***
	(0.892)	(0.676)	(0.080)	(0.011)	(0.621)	(0.051)	(0.009)	(0.000)	(0.008)	(0.000)	(0.002)	(0.000)	(0.707)	(0.001)	(0.020)	(0.000)
BCMTIND	0.001***	0.002***	0.003***	0.004***	0.003***	0.005***	0.008***	0.013***	0.002***	0.004***	0.005***	0.007***	0.002***	0.004***	0.004***	0.007***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.115	0.115	0.115	0.115	0.059	0.059	0.059	0.059	0.094	0.094	0.094	0.094	0.118	0.118	0.118	0.118
SOCD	0.001	0.002	−0.002	−0.024***	−0.001	−0.002	−0.005*	−0.023***	−0.001	−0.003***	−0.004	−0.017**	0.001	−0.002	−0.001	−0.011
	(0.956)	(0.637)	(0.293)	(0.000)	(0.736)	(0.303)	(0.051)	(0.002)	(0.435)	(0.005)	(0.127)	(0.013)	(0.637)	(0.135)	(0.417)	(0.125)
BCMTIND	0.001**	0.002***	0.001	0.011***	0.002	0.004***	0.003	−0.008**	0.001	0.003***	0.003*	0.003	0.001	0.002**	0.001	0.003
	(0.045)	(0.004)	(0.291)	(0.000)	(0.189)	(0.001)	(0.112)	(0.049)	(0.844)	(0.000)	(0.073)	(0.433)	(0.773)	(0.038)	(0.917)	(0.439)
SOCD × BCMTIND	0.001	0.001	0.001*	−0.002***	0.001	0.002	0.002***	0.007***	0.001**	0.001	0.001	0.001	0.001***	0.001**	0.001***	0.001
	(0.847)	(0.958)	(0.051)	(0.003)	(0.540)	(0.260)	(0.003)	(0.000)	(0.021)	(0.200)	(0.243)	(0.304)	(0.007)	(0.036)	(0.000)	(0.394)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.115	0.115	0.115	0.115	0.059	0.059	0.059	0.059	0.094	0.094	0.094	0.094	0.118	0.118	0.118	0.118
SOCD	0.001	0.002	−0.003*	−0.013***	−0.001	−0.004**	−0.007***	−0.036***	−0.003**	−0.004***	−0.005***	−0.023***	−0.001	−0.003***	−0.004**	−0.017***
	(0.989)	(0.784)	(0.062)	(0.000)	(0.654)	(0.021)	(0.003)	(0.000)	(0.015)	(0.000)	(0.003)	(0.000)	(0.718)	(0.002)	(0.021)	(0.000)
AUDCIND	0.001	0.001	0.002**	0.007***	0.001	0.003***	0.007***	0.009**	0.001	0.002*	0.003*	0.005**	0.001	0.002*	0.003*	0.006**
	(0.310)	(0.136)	(0.012)	(0.000)	(0.372)	(0.001)	(0.000)	(0.036)	(0.594)	(0.097)	(0.086)	(0.050)	(0.264)	(0.073)	(0.097)	(0.010)
COMCIND	0.001	0.001**	0.001	0.004	−0.002	0.002	0.003	0.008	0.001	0.003***	0.004**	0.004	0.001	0.003***	0.006***	0.004
	(0.779)	(0.021)	(0.368)	(0.111)	(0.279)	(0.263)	(0.205)	(0.366)	(0.650)	(0.005)	(0.041)	(0.276)	(0.242)	(0.001)	(0.000)	(0.188)
NOMCIND	0.001**	0.001*	0.002**	−0.003	0.005***	0.003**	0.002	0.001	0.002**	0.002*	0.001	0.001	0.001*	0.002**	0.001	0.002
	(0.018)	(0.095)	(0.027)	(0.321)	(0.001)	(0.019)	(0.377)	(0.968)	(0.038)	(0.075)	(0.491)	(0.880)	(0.099)	(0.023)	(0.876)	(0.571)
SUSCIND	0.001	0.001	0.002**	0.001	0.002	0.003**	0.009***	0.023**	0.003**	0.002*	0.003**	0.008**	0.001	0.001	−0.001	0.005
	(0.942)	(0.232)	(0.044)	(0.872)	(0.307)	(0.026)	(0.000)	(0.010)	(0.015)	(0.052)	(0.045)	(0.016)	(0.515)	(0.865)	(0.524)	(0.147)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.115	0.115	0.115	0.115	0.059	0.059	0.059	0.059	0.093	0.093	0.093	0.093	0.117	0.117	0.117	0.117
SOCD	0.001	−0.001	−0.001	−0.021***	−0.003	−0.005**	−0.012***	−0.020**	−0.003**	−0.005***	−0.002	−0.018***	0.001	−0.002	−0.001	−0.013*
	(0.854)	(0.282)	(0.607)	(0.000)	(0.216)	(0.016)	(0.003)	(0.012)	(0.026)	(0.001)	(0.417)	(0.000)	(0.649)	(0.127)	(0.634)	(0.076)

(Continues)

TABLE 8 (Continued)

DVs	ROA				ROE				ROC				ROI			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
AUDCIND	0.004***	0.007**	0.004	−0.003	0.009***	0.012***	0.005	−0.033**	0.007***	0.007**	0.016***	0.021	0.009***	0.008**	0.005	0.019
	(0.009)	(0.015)	(0.270)	(0.833)	(0.003)	(0.005)	(0.409)	(0.021)	(0.001)	(0.014)	(0.002)	(0.153)	(0.000)	(0.014)	(0.326)	(0.422)
COMCIND	0.002	0.002	0.004	0.004	0.002	−0.003	−0.009	−0.005	0.001	0.003	−0.004	−0.011	0.002	0.005	0.003	−0.008
	(0.234)	(0.587)	(0.312)	(0.445)	(0.589)	(0.534)	(0.198)	(0.642)	(0.755)	(0.503)	(0.340)	(0.257)	(0.425)	(0.103)	(0.656)	(0.787)
NOMCIND	−0.005***	−0.007***	−0.006***	0.027*	−0.013***	−0.009**	0.008*	0.029***	−0.014***	−0.009***	−0.007*	0.005	−0.015***	−0.014***	−0.009**	−0.004
	(0.001)	(0.002)	(0.009)	(0.089)	(0.003)	(0.032)	(0.082)	(0.000)	(0.000)	(0.008)	(0.077)	(0.695)	(0.000)	(0.000)	(0.045)	(0.927)
SUSCIND	0.002	0.009**	−0.007	−0.041***	0.029***	0.038***	0.046***	−0.024	0.028***	0.017***	−0.001	−0.034*	0.013**	0.011*	0.000	0.001
	(0.589)	(0.038)	(0.244)	(0.000)	(0.007)	(0.000)	(0.003)	(0.334)	(0.000)	(0.007)	(0.927)	(0.064)	(0.018)	(0.097)	(0.971)	(0.960)
SOCD × AUDCIND	−0.001**	−0.002**	−0.001	0.002	−0.002***	−0.002**	0.001	0.011***	−0.002***	−0.002**	−0.004***	−0.004	−0.002***	−0.002**	−0.001	−0.003
	(0.016)	(0.024)	(0.521)	(0.545)	(0.007)	(0.033)	(0.592)	(0.002)	(0.006)	(0.032)	(0.003)	(0.272)	(0.000)	(0.046)	(0.580)	(0.572)
SOCD × COMCIND	−0.001	0.001	−0.001	0.002	−0.001	0.001	0.004*	0.005	0.001	0.002	0.003**	0.005	0.001	−0.001	0.001	0.004
	(0.282)	(0.885)	(0.438)	(0.813)	(0.370)	(0.318)	(0.071)	(0.248)	(0.961)	(0.975)	(0.048)	(0.153)	(0.702)	(0.359)	(0.627)	(0.674)
SOCD × NOMCIND	0.002***	0.002***	0.002***	−0.008**	0.005***	0.004***	−0.002	−0.008**	0.004***	0.003***	0.002*	−0.002	0.005***	0.004***	0.003*	0.002
	(0.000)	(0.000)	(0.001)	(0.041)	(0.000)	(0.002)	(0.195)	(0.012)	(0.000)	(0.001)	(0.057)	(0.623)	(0.000)	(0.000)	(0.056)	(0.885)
SOCD × SUSCIND	−0.001	−0.002*	0.002	0.011***	−0.007**	−0.010***	−0.011**	0.012	−0.007***	−0.004**	0.001	0.011**	−0.004**	−0.003*	0.001	0.001
	(0.559)	(0.053)	(0.166)	(0.000)	(0.010)	(0.000)	(0.011)	(0.107)	(0.001)	(0.016)	(0.688)	(0.025)	(0.013)	(0.083)	(0.828)	(0.886)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.116	0.116	0.116	0.116	0.060	0.060	0.060	0.060	0.094	0.094	0.094	0.094	0.119	0.119	0.119	0.119

Note: The interaction terms include SOCD × BCMTIND, SOCD × AUDCIND, SOCD × COMCIND, SOCD × NOMCIND, and SOCD × SUSCIND, representing the interaction effects between SOCD and specific committee indexes. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; NOMCIND, individual nomination committee index; SOCD, individual social disclosure score; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

median and low levels of SOCD scores. In contrast, the SUSCIND positively affects the relationship between SOCD and accounting-based measures (ROA and ROC), but only at the 0.95 quantile level. These findings are broadly in line with the results reported by previous authors, including Javalgi et al. (2009), who investigated the relationship between social disclosure and corporate performance. The corporate governance theories that align with these results are the agency and stakeholder models. According to the traditional agency theory by Jensen and Meckling (1976), greater disclosure of information on social matters helps enhance managerial accountability, thus reducing the information asymmetry between managers and investors. Additionally, the original stakeholder theory by Freeman (1984) suggests that organisations have multiple stakeholders with different interests. Therefore, social disclosures by firms should be relevant to diverse stakeholders.

Table 9 reports that the aggregate BCMTIND has a negative moderating effect on the relationship between SOCD of MNEs and market-based measures (TOBQ) at the low, median, and upper 0.75 quantile levels of SOCD scores. This result is consistent with the theory of institutional distance, which proposes that companies in countries with weak institutions and low levels of governance quality will benefit more from increased SOCD. However, the aggregate BCMTIND has a positive impact on the relationship between SOCD of MNEs and two market-based measures (EPS and DPS) at the median and upper 0.75 quantile levels of SOCD. This finding supports the agency theory, which implies that increased SOCD can improve corporate transparency, hence lessening the information asymmetry between management and stakeholders, resulting in increased financial outcomes (Jensen & Meckling, 1976).

The AUDCIND has a negative effect on the relationship between SOCD of MNEs and market-based measures (0TOBQ and DPS), but only for MNEs with low and median SOCD scores. On the other hand, it positively affects the relationship between SOCD and EPS of MNEs at the median and upper 0.95 quantile levels. This result is consistent with the political cost theory, which suggests that companies operating in countries with political instability and high levels of corruption may face penalties for increased SOCD (Bebchuk & Fried, 2003).

The COMPIND positively influences the relationship between SOCD of MNEs and two market-derived measures (TOBQ and DPS) only for companies with low and median SOCD scores. However, the association between SOCD and EPS is negatively affected at the upper 0.75 and 0.95 quantile levels. The COMPIND also has an adverse effect on the relationship between SOCD of MNEs and the SGR ratio, but only for MNEs with low and median SOCD scores. These results align with the resource-based perspective that companies with limited resources face difficulties in implementing SOCD practices, leading to lower financial performance outcomes (Wernerfelt, 1984).

The NOMCIND is positively correlated with the relationship between SOCD of MNEs and the following market-related measures (SGR, EPS, and DPS), although this observation is only significant for companies with low, median, and upper 0.75 quartile levels of SOCD scores. Additionally, the NOMCIND positively affects the relationship between the SOCD and TOBQ of MNEs, but only for MNEs with low and 0.75 quantile levels of SOCD scores. These results are in line with the stakeholder hypothesis that increased SOCD can improve stakeholders' confidence in the company and lead to better financial performance (Freeman, 1984).

The SUSCIND positively affects the relationship between SOCD of MNEs and TOBQ, but only for MNEs with the upper 0.95 quartile level of SOCD scores. On the other hand, a negative moderation effect is reported for SUSCIND and the relationship between SOCD and two market-related measures (SGR and EPS) for MNEs with low, median, and upper 0.75 quartile levels of SOCD scores. The SUSCIND has insignificant effects on the relationship between SOCD and DPS ratio for MNEs at all quantile levels of SOCD scores.

5.2.4 | The effect of board committees in moderating the GOVD-financial performance relationship.

The effect of board committees in moderating the GOVD-financial performance relationship is examined in Table 10. The results shed light on the impact of different board standing committee indices on the relationship between governance disclosure (GOVD) of MNEs and various accounting measures, (ROA, ROE, ROC, and ROI). Overall, our findings support the agency perspective, emphasising the crucial role of a firm's governance structure in aligning the interests of managers and shareholders, thereby enhancing financial performance.

Specifically, the results reveal that the aggregate BCMTIND has a negative effect on the relationship between GOVD and ROA, particularly at the 0.50 and 0.95 quartile levels of GOVD scores. However, it has a positive impact on the relationship between GOVD and ROE, but only at the 0.25 quantile level. These findings suggest that a high-quality corporate board system, as measured by BCMTIND, can contribute to improved accounting returns for MNEs (Fich & Shivdasani, 2006).

TABLE 9 Quantile regression results of the interaction effect between social disclosure and aggregate and individual board committee indexes on the market-based measures of MNEs.

DVs	TQ				SGR				EPS				DPS			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
SOCD	0.015**	0.008	0.002	−0.012	0.001	−0.007***	−0.012***	−0.042***	0.001	0.002	0.001	0.005**	0.035***	0.039***	0.035***	0.089***
	(0.014)	(0.103)	(0.816)	(0.376)	(0.832)	(0.000)	(0.000)	(0.000)	(0.257)	(0.936)	(0.684)	(0.037)	(0.000)	(0.000)	(0.000)	(0.000)
BCMTIND	0.014***	0.020***	0.022***	0.018***	0.001	0.003***	0.005***	0.009***	0.001***	0.001***	0.002**	−0.003***	−0.001	0.011***	0.018***	−0.010
	(0.000)	(0.000)	(0.000)	(0.000)	(0.652)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.026)	(0.002)	(0.221)	(0.000)	(0.000)	(0.192)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.104	0.104	0.104	0.104	0.060	0.060	0.060	0.060	0.078	0.078	0.078	0.078	0.176	0.176	0.176	0.176
SOCD	0.040***	0.001	0.009	−0.039	−0.001	−0.006***	−0.012***	−0.038***	0.001*	0.001	0.001**	0.004**	0.045***	0.067***	0.072***	0.095*
	(0.000)	(0.896)	(0.309)	(0.112)	(0.586)	(0.000)	(0.000)	(0.000)	(0.077)	(0.264)	(0.024)	(0.029)	(0.000)	(0.000)	(0.000)	(0.056)
BCMTIND	0.084***	0.030***	0.010*	0.033**	0.001	0.002***	0.006***	−0.002	0.001	0.002	0.003	−0.002	−0.015***	−0.021***	−0.023***	−0.013
	(0.000)	(0.000)	(0.085)	(0.010)	(0.187)	(0.008)	(0.000)	(0.656)	(0.750)	(0.844)	(0.304)	(0.160)	(0.000)	(0.000)	(0.000)	(0.645)
SOCD × BCMTIND	−0.020***	−0.003**	0.004**	−0.005	0.001*	0.002	0.001	0.003**	0.001	0.002**	0.001**	−0.001	−0.013***	0.011***	0.013***	0.001
	(0.000)	(0.037)	(0.025)	(0.191)	(0.095)	(0.786)	(0.638)	(0.026)	(0.334)	(0.011)	(0.024)	(0.102)	(0.000)	(0.000)	(0.000)	(0.921)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.105	0.105	0.105	0.105	0.060	0.060	0.060	0.060	0.079	0.079	0.079	0.079	0.183	0.183	0.183	0.183
SOCD	0.017***	0.009*	−0.002	−0.019	0.001	−0.007***	−0.012***	−0.044***	0.001	0.002	0.002	0.007***	0.027***	0.032***	0.032***	0.077***
	(0.008)	(0.086)	(0.821)	(0.135)	(0.697)	(0.000)	(0.000)	(0.000)	(0.118)	(0.327)	(0.740)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
AUDCIND	0.013***	0.013***	0.008*	0.059***	−0.001	0.002***	0.005***	0.004	0.001*	0.001**	0.001***	0.005***	0.005	0.004	0.022***	0.103***
	(0.000)	(0.003)	(0.051)	(0.000)	(0.439)	(0.004)	(0.000)	(0.457)	(0.069)	(0.031)	(0.003)	(0.008)	(0.118)	(0.276)	(0.001)	(0.000)
COMCIND	0.010***	0.013***	0.017**	−0.020*	−0.002**	−0.001	0.001	0.009**	−0.001***	−0.001***	−0.002***	−0.013***	−0.022***	−0.013***	−0.016*	−0.076***
	(0.000)	(0.003)	(0.018)	(0.095)	(0.021)	(0.408)	(0.691)	(0.017)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.005)	(0.054)	(0.001)
NOMCIND	0.004	0.008**	0.008	0.003	0.003***	0.003***	0.003*	0.001	0.001***	0.001***	0.003	0.001	0.004	0.006	0.002	−0.052**
	(0.150)	(0.050)	(0.308)	(0.809)	(0.000)	(0.001)	(0.053)	(0.912)	(0.000)	(0.000)	(0.384)	(0.528)	(0.257)	(0.133)	(0.810)	(0.034)
SUSCIND	−0.008***	0.002	0.019***	0.003	−0.002**	0.001	0.000	0.008	0.001***	0.002***	0.004***	0.006**	0.060***	0.101***	0.085***	0.067***
	(0.003)	(0.619)	(0.002)	(0.835)	(0.038)	(0.359)	(0.754)	(0.168)	(0.000)	(0.000)	(0.000)	(0.036)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.103	0.103	0.103	0.103	0.060	0.060	0.060	0.060	0.082	0.082	0.082	0.082	0.195	0.195	0.195	0.195
SOCD	0.039***	0.008	0.013	−0.015	−0.005**	−0.011***	−0.018***	−0.043***	0.001	−0.002***	−0.002	0.001	0.037***	0.063***	0.066***	0.056
	(0.000)	(0.271)	(0.120)	(0.703)	(0.010)	(0.000)	(0.000)	(0.000)	(0.200)	(0.001)	(0.190)	(0.968)	(0.000)	(0.000)	(0.000)	(0.163)

TABLE 9 (Continued)

DVs	TQ				SGR				EPS				DPS			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
AUDCIND	0.185***	0.072***	0.018	0.008	0.007***	0.002	0.000	−0.033**	0.001**	0.001**	0.001	−0.001	0.048***	0.056***	0.042**	0.184***
	(0.000)	(0.000)	(0.220)	(0.945)	(0.009)	(0.548)	(0.970)	(0.012)	(0.047)	(0.015)	(0.771)	(0.853)	(0.000)	(0.000)	(0.014)	(0.001)
COMCIND	−0.023*	−0.014	0.031	−0.004	0.005	0.007**	0.010	0.008	0.002	0.001	0.002	−0.007**	−0.037***	−0.038***	−0.036**	−0.081
	(0.070)	(0.301)	(0.134)	(0.980)	(0.277)	(0.013)	(0.494)	(0.516)	(0.680)	(0.365)	(0.818)	(0.023)	(0.000)	(0.000)	(0.046)	(0.256)
NOMCIND	−0.024***	−0.004	−0.036**	0.105	−0.012**	−0.009***	−0.006	0.022**	−0.001***	−0.001***	−0.002***	0.001	−0.036***	−0.049***	−0.050***	−0.115
	(0.006)	(0.727)	(0.035)	(0.197)	(0.021)	(0.003)	(0.298)	(0.010)	(0.000)	(0.008)	(0.009)	(0.617)	(0.000)	(0.000)	(0.000)	(0.232)
SUSCIND	0.002	0.045*	−0.029	−0.246**	0.018***	0.034***	0.044***	0.017	0.005***	0.012***	0.013**	0.032*	0.053**	0.046	0.087	0.054
	(0.912)	(0.098)	(0.424)	(0.024)	(0.009)	(0.000)	(0.003)	(0.622)	(0.000)	(0.000)	(0.022)	(0.072)	(0.044)	(0.213)	(0.199)	(0.792)
SOCD × AUDCIND	−0.047***	−0.017***	−0.002	0.013	−0.002***	0.001	0.002	0.010***	0.001	0.002*	0.001	0.002**	−0.014***	−0.015***	−0.004	−0.028
	(0.000)	(0.000)	(0.561)	(0.664)	(0.006)	(0.836)	(0.628)	(0.005)	(0.142)	(0.083)	(0.183)	(0.044)	(0.000)	(0.000)	(0.401)	(0.140)
SOCD × COMCIND	0.007**	0.007*	−0.003	−0.006	−0.002*	−0.002***	−0.003	0.001	0.001	0.002	−0.001**	−0.002**	0.005*	0.009***	0.006	0.005
	(0.029)	(0.059)	(0.568)	(0.878)	(0.085)	(0.008)	(0.508)	(0.941)	(0.625)	(0.321)	(0.018)	(0.025)	(0.070)	(0.006)	(0.350)	(0.816)
SOCD × NOMCIND	0.008***	0.004	0.012**	−0.026	0.004***	0.004***	0.003	−0.005**	0.001***	0.002***	0.001***	−0.001	0.013***	0.017***	0.016***	0.018
	(0.001)	(0.216)	(0.017)	(0.214)	(0.002)	(0.000)	(0.128)	(0.030)	(0.000)	(0.000)	(0.001)	(0.399)	(0.000)	(0.000)	(0.002)	(0.546)
SOCD × SUSCIND	−0.001	−0.011	0.012	0.068**	−0.006***	−0.009***	−0.012***	−0.003	−0.001***	−0.002***	−0.003*	−0.007	0.0020	0.011	−0.005	0.005
	(0.753)	(0.116)	(0.192)	(0.018)	(0.003)	(0.000)	(0.002)	(0.783)	(0.000)	(0.000)	(0.085)	(0.162)	(0.793)	(0.282)	(0.770)	(0.929)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.107	0.107	0.107	0.107	0.064	0.064	0.064	0.064	0.083	0.083	0.083	0.083	0.199	0.199	0.199	0.199

Note: The interaction terms include SOCD × BCMTIND, SOCD × AUDCIND, SOCD × COMCIND, SOCD × NOMCIND, and SOCD × SUSCIND, representing the interaction effects between SOCD and specific committee indexes. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; NOMCIND, individual nomination committee index; SOCD, individual social disclosure score; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

TABLE 10 Quantile regression results of the interaction effect between governance disclosure and aggregate and individual board committee indexes on the accounting-based measures of MNEs.

DVs	ROA				ROE				ROC				ROI			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
GOVD	0.002*	0.004***	0.002	−0.003	0.003	−0.001	−0.003	−0.055***	−0.004**	−0.001	−0.001	−0.010	0.001	−0.001	−0.003*	−0.013*
	(0.085)	(0.007)	(0.284)	(0.264)	(0.258)	(0.513)	(0.185)	(0.000)	(0.010)	(0.295)	(0.749)	(0.240)	(0.903)	(0.502)	(0.070)	(0.085)
BCMTIND	0.001***	0.002***	0.003***	0.003***	0.002***	0.005***	0.008***	0.014***	0.002***	0.004***	0.005***	0.005***	0.002***	0.003***	0.004***	0.006***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.116	0.116	0.116	0.116	0.059	0.059	0.059	0.059	0.092	0.092	0.092	0.092	0.117	0.117	0.117	0.117
GOVD	−0.002	−0.007	−0.003	−0.028***	0.002	−0.008**	0.002	0.001	−0.008**	−0.010*	−0.012	−0.010	0.004	−0.005	−0.003	−0.001
	(0.307)	(0.333)	(0.394)	(0.000)	(0.844)	(0.044)	(0.638)	(0.996)	(0.043)	(0.060)	(0.125)	(0.115)	(0.477)	(0.235)	(0.560)	(0.685)
BCMTIND	0.003***	0.009**	0.007***	0.020***	0.003	0.009***	0.004	−0.022***	0.004**	0.009***	0.013***	0.004	0.001	0.006**	0.004	−0.004
	(0.007)	(0.021)	(0.008)	(0.000)	(0.634)	(0.000)	(0.169)	(0.000)	(0.045)	(0.003)	(0.009)	(0.412)	(0.885)	(0.017)	(0.264)	(0.150)
GOVD × BCMTIND	0.001*	−0.002*	−0.001	−0.004***	0.001	−0.001*	0.001	0.009***	−0.001	−0.001*	−0.002*	0.001	0.001	−0.001	0.001	0.002***
	(0.062)	(0.060)	(0.121)	(0.000)	(0.891)	(0.081)	(0.277)	(0.000)	(0.341)	(0.069)	(0.098)	(0.833)	(0.492)	(0.253)	(0.988)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.118	0.118	0.118	0.118	0.059	0.059	0.059	0.059	0.092	0.092	0.092	0.092	0.117	0.117	0.117	0.117
GOVD	0.002*	0.004***	0.002	−0.004*	0.004	−0.001	−0.003	−0.060***	−0.003*	−0.001	0.001	−0.010	0.001	−0.001	−0.004**	−0.013*
	(0.072)	(0.006)	(0.434)	(0.067)	(0.153)	(0.483)	(0.265)	(0.000)	(0.097)	(0.338)	(0.865)	(0.293)	(0.899)	(0.531)	(0.048)	(0.080)
AUDCIND	0.001	0.001	0.002***	0.007***	0.001	0.004***	0.008***	0.011	0.001	0.002*	0.002	0.005*	0.001	0.002*	0.003	0.004
	(0.534)	(0.138)	(0.009)	(0.001)	(0.624)	(0.001)	(0.000)	(0.117)	(0.623)	(0.067)	(0.204)	(0.051)	(0.303)	(0.053)	(0.104)	(0.191)
COMCIND	0.001	0.001**	0.001	0.001	−0.002	0.001	0.004*	0.017	0.001	0.002**	0.004**	0.003	0.001	0.002***	0.006***	0.004
	(0.717)	(0.036)	(0.299)	(0.517)	(0.237)	(0.350)	(0.065)	(0.201)	(0.393)	(0.011)	(0.038)	(0.550)	(0.250)	(0.004)	(0.000)	(0.182)
NOMCIND	0.001**	0.001	0.002**	−0.001	0.005***	0.003**	0.000	−0.007	0.002*	0.001	0.001	0.001	0.001*	0.002**	−0.001	0.002
	(0.018)	(0.111)	(0.035)	(0.662)	(0.001)	(0.039)	(0.942)	(0.635)	(0.056)	(0.170)	(0.529)	(0.811)	(0.087)	(0.045)	(0.702)	(0.578)
SUSCIND	0.001	0.001	0.002	−0.001	0.002	0.003**	0.008***	0.012	0.002**	0.002**	0.004**	0.005	0.001	0.001	−0.001	0.002
	(0.840)	(0.343)	(0.155)	(0.700)	(0.326)	(0.036)	(0.000)	(0.195)	(0.033)	(0.042)	(0.032)	(0.165)	(0.578)	(0.877)	(0.367)	(0.637)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.116	0.116	0.116	0.116	0.058	0.058	0.058	0.058	0.092	0.092	0.092	0.092	0.116	0.116	0.116	0.116

TABLE 10 (Continued)

DVs	ROA				ROE				ROC				ROI			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
GOVD	0.001	−0.008	−0.005	−0.010	0.001	−0.007	−0.005	0.017	−0.004	−0.009	−0.011**	−0.009	−0.001	−0.001	0.002	0.004
	(0.989)	(0.151)	(0.357)	(0.190)	(0.762)	(0.336)	(0.741)	(0.724)	(0.268)	(0.195)	(0.032)	(0.445)	(0.821)	(0.795)	(0.587)	(0.764)
AUDCIND	0.005	0.018*	0.002	−0.030	0.021	0.022	0.003	0.052	0.016	0.030***	0.033***	0.023	0.001	0.014**	0.010	−0.012
	(0.175)	(0.055)	(0.773)	(0.610)	(0.638)	(0.366)	(0.930)	(0.766)	(0.519)	(0.007)	(0.005)	(0.713)	(0.963)	(0.018)	(0.660)	(0.830)
COMCIND	0.005	−0.002	0.008	0.017	−0.005	−0.015	−0.006	−0.074	−0.008	−0.017	−0.016	−0.042	0.015	0.003	−0.010	−0.005
	(0.768)	(0.811)	(0.278)	(0.810)	(0.936)	(0.645)	(0.868)	(0.739)	(0.802)	(0.120)	(0.688)	(0.786)	(0.307)	(0.684)	(0.734)	(0.933)
NOMCIND	−0.007	−0.006	0.003	0.054***	−0.013	0.009	0.020	−0.002	−0.010	−0.003	0.006	0.031	−0.023***	−0.024***	0.006	0.016
	(0.657)	(0.624)	(0.657)	(0.002)	(0.626)	(0.551)	(0.118)	(0.995)	(0.513)	(0.717)	(0.893)	(0.884)	(0.007)	(0.000)	(0.523)	(0.806)
SUSCIND	−0.001	0.019	0.005	−0.074***	−0.002	−0.004	0.009	−0.105	0.018	0.019	−0.017	−0.017	0.033***	0.048*	−0.021	−0.035
	(0.969)	(0.397)	(0.743)	(0.000)	(0.979)	(0.906)	(0.883)	(0.322)	(0.573)	(0.219)	(0.246)	(0.734)	(0.002)	(0.069)	(0.425)	(0.237)
GOVD × AUDCIND	−0.001	−0.004*	0.001	0.009	−0.005	−0.005	0.001	−0.011	−0.004	−0.007**	−0.008***	−0.005	0.001	−0.003**	−0.002	0.004
	(0.197)	(0.062)	(0.948)	(0.554)	(0.642)	(0.452)	(0.862)	(0.810)	(0.523)	(0.011)	(0.008)	(0.759)	(0.965)	(0.036)	(0.736)	(0.764)
GOVD × COMCIND	−0.001	0.001	−0.002	−0.004	0.001	0.004	0.003	0.023	0.002	0.005	0.005	0.012	−0.004	0.001	0.004	0.002
	(0.778)	(0.680)	(0.337)	(0.828)	(0.963)	(0.620)	(0.770)	(0.680)	(0.785)	(0.102)	(0.604)	(0.764)	(0.329)	(0.936)	(0.583)	(0.887)
GOVD × NOMCIND	0.002	0.002	0.001	−0.013***	0.004	−0.001	−0.005	−0.001	0.003	0.001	−0.001	−0.008	0.006***	0.006***	−0.002	−0.004
	(0.603)	(0.558)	(0.884)	(0.002)	(0.480)	(0.705)	(0.120)	(0.989)	(0.410)	(0.608)	(0.916)	(0.879)	(0.004)	(0.000)	(0.478)	(0.827)
GOVD × SUSCIND	0.001	−0.004	−0.001	0.018***	0.001	0.002	0.000	0.028	−0.004	−0.004	0.005	0.005	−0.008***	−0.012*	0.005	0.009
	(0.963)	(0.440)	(0.847)	(0.000)	(0.951)	(0.819)	(0.984)	(0.290)	(0.627)	(0.296)	(0.130)	(0.668)	(0.002)	(0.069)	(0.466)	(0.233)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.117	0.117	0.117	0.117	0.058	0.058	0.058	0.058	0.092	0.092	0.092	0.092	0.116	0.116	0.116	0.116

Note: The interaction terms include GOVD × BCMTIND, GOVD × AUDCIND, GOVD × COMCIND, GOVD × NOMCIND, and GOVD × SUSCIND, representing the interaction effects between GOVD and specific committee indexes. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; GOVD, individual governance disclosure score; NOMCIND, individual nomination committee index; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Furthermore, the AUDCIND negatively affects the relationship between GOVD and three accounting measures (ROA, ROC, and ROI) for MNEs with median GOVD scores. This result supports the argument that robust auditor committee arrangements play a crucial role in ensuring the reliability of ethical disclosures and their connection with financial outcomes (Bartov et al., 2002). On the other hand, the COMCIND has an insignificant effect on the relationship between GOVD and the selected accounting measures at all quantile levels of GOVD scores. This could be attributed to the limited variation in the COMCIND within our MNE sample, which may have failed to capture the complex interplay between governance disclosures and financial outcomes.

Finally, the SUSCIND positively influences the relationship between GOVD and the ROA ratio, but this effect is only significant for MNEs with the upper 0.95 level of GOVD scores. Conversely, the SUSCIND negatively affects the relationship between GOVD and the ROI ratio at the 0.25 and 0.50 quartile levels of GOVD scores. These findings highlight the importance of considering the responsibilities of stakeholder engagement managers in shaping the financial performance of MNEs (Waddock & Graves, 1997).

The results presented in Table 11 explore the interaction effects of different sub-committee indices on the relationship between governance disclosure (GOVD) of MNEs and their financial performance, as measured by the market-based measures (TOBQ, EPS, DPS, and SGR).

Notably, the aggregate BCMTIND has an adverse effect on the relationship between GOVD and TOBQ at the low and median quantile levels of GOVD scores. This finding aligns with prior research findings (Almeyda & Darmansya, 2019; Uyar et al., 2021). Conversely, BCMTIND positively impacts the relationship between GOVD and the market-based measures (EPS and DPS), specifically at the median and upper 0.75 quantile levels. This result supports previous empirical studies (Barney, 1991).

The AUDCIND has a negative effect on the relationship between GOVD and two market-based measures (TOBQ and DPS) for MNEs with low and median GOVD scores, consistent with previous research (Abdi et al., 2022; Ahmad et al., 2021). However, we found that AUDCIND has an insignificant moderating effect on the relationship between GOVD and two market-based measures (SGR and EPS) at all quantile levels. The COMPIND positively mediates the relationship between GOVD and the market-based measures (TOBQ and DPS) ratios for companies with median and 0.75 quantile levels of GOVD scores, in line with some prior studies (Barney, 1991). However, COMPIND has an insignificant mediating effect on the relationship between GOVD and two market-based measures (SGR and EPS) at all quantile levels of GOVD scores.

The NOMCIND positively mediates the relationship between GOVD and DPS ratio at the median and upper 0.75 quantile levels of GOVD scores, consistent with prior research (Almeyda & Darmansya, 2019; Uyar et al., 2021). On the other hand, NOMCIND negatively affects the relationship between GOVD and TOBQ at the median quantile level, in line with previous studies (Abdi et al., 2022; Ahmad et al., 2021). However, we found insignificant effects of NOMCIND on the relationship between GOVD and two market-based measures (SGR and EPS) at all quantile levels.

The SUSCIND has a positive effect on the relationship between GOVD reporting scores and two market-related measures (EPS and DPS) for low and median quantile levels. However, SUSCIND does not significantly impact the relationship between GOVD and TOBQ at all quantile levels. This finding aligns with the research by Uyar et al. (2021) and Almeyda and Darmansya (2019). These results support both the resource-based and stakeholders' hypotheses, suggesting that companies with better access to critical resources tend to adopt higher environmental and social standards, resulting in associated financial outcomes (Abdi et al., 2022; Ahmad et al., 2021; Barney, 1991).

5.3 | Robustness analysis

Robustness analysis is a crucial aspect of an empirical research as it helps to ensure that the results obtained are reliable and unchanging to different estimation assumptions, conditions, and methods. In the context of this study, robustness analysis was conducted to test the validity of the results obtained from the conventional quantile regression models to the endogenous and unobserved variable problem. Consequently, we re-estimated models 1 to 4 at first difference with lagged dependent and explanatory variables comprising our selected accounting and market-based performance indicators and board committees as instruments to control for endogeneity. Desender and Epure (2021) and Sarhan and Al-Najjar (2022) have used similar internal instrument approach in their research. Additionally, using lagged financial performance variables as instruments is in line with the evidence that prior financial outcomes affect future ESG disclosure scores (Chang & Lee, 2022). In addition, the decision to consider our four board committees as instruments is supported by the finding that firms with effective board committees and strong financial performance are more likely to engage in ESG activities,

TABLE 11 Quantile regression results of the interaction effect between governance disclosure and aggregate and individual board committee indexes on the market-based measures of MNEs.

DVs	TQ				SGR				EPS				DPS			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
GOVD	0.191***	0.080	0.021	−0.004	0.003***	−0.004*	−0.008***	−0.052***	0.001***	0.001	−0.001*	0.001	0.035***	−0.001	−0.007	0.082***
	(0.000)	(0.135)	(0.144)	(0.802)	(0.006)	(0.076)	(0.000)	(0.000)	(0.007)	(0.200)	(0.063)	(0.708)	(0.000)	(0.915)	(0.444)	(0.001)
BCMTIND	0.010***	0.018***	0.021***	0.018***	0.001	0.003***	0.005***	0.010**	0.001**	0.001***	0.002**	−0.003***	−0.004***	0.013***	0.021***	−0.010
	(0.000)	(0.000)	(0.000)	(0.000)	(0.200)	(0.000)	(0.000)	(0.000)	(0.016)	(0.000)	(0.014)	(0.006)	(0.001)	(0.000)	(0.000)	(0.231)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.111	0.111	0.111	0.111	0.058	0.058	0.058	0.058	0.079	0.079	0.079	0.079	0.173	0.173	0.173	0.173
GOVD	−0.024	−0.032**	0.002	−0.112	0.002	−0.010**	−0.019*	−0.049	0.001	0.001	0.001	0.002	0.188***	0.180**	0.138***	0.079
	(0.199)	(0.020)	(0.905)	(0.371)	(0.575)	(0.043)	(0.072)	(0.432)	(0.154)	(0.165)	(0.228)	(0.760)	(0.000)	(0.024)	(0.000)	(0.222)
BCMTIND	0.134***	0.145***	0.039***	0.084	0.001	0.007**	0.011*	0.009	0.001	−0.001	−0.001	−0.004	−0.099***	−0.099**	−0.075***	−0.007
	(0.000)	(0.000)	(0.008)	(0.245)	(0.777)	(0.024)	(0.066)	(0.800)	(0.462)	(0.173)	(0.132)	(0.464)	(0.001)	(0.030)	(0.000)	(0.879)
GOVD × BCMTIND	−0.030***	−0.032***	−0.004	−0.016	0.001	−0.001	−0.002	0.002	0.002	0.001**	0.003**	0.001	0.024***	0.028**	0.024***	−0.001
	(0.000)	(0.000)	(0.240)	(0.351)	(0.588)	(0.147)	(0.280)	(0.971)	(0.336)	(0.032)	(0.043)	(0.868)	(0.001)	(0.013)	(0.000)	(0.901)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.121	0.121	0.121	0.121	0.058	0.058	0.058	0.058	0.079	0.079	0.079	0.079	0.177	0.177	0.177	0.177
GOVD	0.190***	0.080	0.021	−0.013	0.003**	−0.003*	−0.009***	−0.054***	0.001***	0.002	−0.001**	0.003	0.030***	0.004	0.004	0.073***
	(0.000)	(0.146)	(0.158)	(0.378)	(0.013)	(0.099)	(0.000)	(0.000)	(0.002)	(0.235)	(0.037)	(0.421)	(0.000)	(0.465)	(0.585)	(0.001)
AUDCIND	0.004	0.012***	0.009**	0.058***	−0.001	0.002***	0.005***	0.009*	0.001	0.002**	0.001***	0.006	0.003	0.005	0.024***	0.095***
	(0.110)	(0.008)	(0.037)	(0.000)	(0.208)	(0.003)	(0.000)	(0.089)	(0.344)	(0.027)	(0.002)	(0.111)	(0.312)	(0.192)	(0.000)	(0.000)
COMCIND	0.011***	0.010**	0.016**	−0.021*	−0.002**	−0.001	0.001	0.006	−0.001***	−0.001***	−0.002***	−0.011***	−0.023***	−0.009**	−0.016*	−0.069***
	(0.000)	(0.022)	(0.039)	(0.099)	(0.024)	(0.192)	(0.634)	(0.232)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.046)	(0.057)	(0.001)
NOMCIND	0.004	0.009	0.007	0.003	0.003***	0.004***	0.003*	0.001	0.001***	0.001***	0.002	−0.002	0.003	0.003	0.000	−0.054**
	(0.228)	(0.427)	(0.427)	(0.833)	(0.001)	(0.000)	(0.052)	(0.987)	(0.000)	(0.000)	(0.515)	(0.472)	(0.358)	(0.372)	(0.961)	(0.030)
SUSCIND	−0.011***	0.001	0.019***	0.003	−0.002*	0.001	−0.001	0.011	0.001***	0.002***	0.004***	0.007**	0.066***	0.103***	0.086***	0.070***
	(0.000)	(0.768)	(0.003)	(0.853)	(0.079)	(0.844)	(0.391)	(0.326)	(0.000)	(0.000)	(0.000)	(0.024)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.110	0.110	0.110	0.110	0.058	0.058	0.058	0.058	0.082	0.082	0.082	0.082	0.193	0.193	0.193	0.193

(Continues)

TABLE 11 (Continued)

DVs	TQ				SGR				EPS				DPS			
Quantile	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95	0.25	0.5	0.75	0.95
INDVs	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
GOVD	0.005	−0.014	−0.036	−0.065	−0.002	−0.006	−0.022**	−0.064	0.003**	0.001	−0.004	−0.006	0.207***	0.172***	0.073***	−0.109
	(0.766)	(0.468)	(0.192)	(0.678)	(0.611)	(0.601)	(0.015)	(0.375)	(0.030)	(0.123)	(0.520)	(0.706)	(0.000)	(0.000)	(0.001)	(0.546)
AUDCIND	0.258***	0.239***	−0.021	−0.270	0.007	0.021	0.017	0.036	0.001	0.005	0.004	0.002	0.054**	0.044	0.090***	0.334
	(0.000)	(0.000)	(0.716)	(0.674)	(0.181)	(0.109)	(0.415)	(0.656)	(0.269)	(0.134)	(0.620)	(0.978)	(0.020)	(0.112)	(0.000)	(0.325)
COMCIND	−0.045	−0.092***	0.109	0.232	−0.006	−0.009	−0.018	0.043	0.001	−0.001	−0.001	−0.007	−0.045*	−0.008	−0.066***	0.126
	(0.577)	(0.001)	(0.454)	(0.374)	(0.828)	(0.522)	(0.455)	(0.868)	(0.906)	(0.580)	(0.895)	(0.417)	(0.064)	(0.847)	(0.005)	(0.526)
NOMCIND	−0.028	0.090*	−0.013	0.108	−0.006	−0.007	0.013	−0.059	−0.001	−0.004	−0.004	−0.004	−0.038	−0.079**	−0.109***	−0.388
	(0.800)	(0.051)	(0.920)	(0.880)	(0.840)	(0.575)	(0.165)	(0.818)	(0.441)	(0.264)	(0.667)	(0.955)	(0.258)	(0.036)	(0.000)	(0.309)
SUSCIND	−0.005	−0.034	0.128*	0.220	0.038***	0.005	0.051	0.004	−0.011*	−0.006	0.013	0.052	−0.691***	−0.489***	0.086	0.193
	(0.939)	(0.753)	(0.079)	(0.713)	(0.006)	(0.776)	(0.197)	(0.960)	(0.089)	(0.173)	(0.517)	(0.478)	(0.000)	(0.008)	(0.392)	(0.752)
GOVD × AUDCIND	−0.063***	−0.058***	0.008	0.079	−0.002	−0.005	−0.003	−0.007	0.001	−0.001	−0.001	0.001	−0.013**	−0.010	−0.016**	−0.059
	(0.000)	(0.000)	(0.607)	(0.609)	(0.125)	(0.149)	(0.582)	(0.745)	(0.318)	(0.156)	(0.745)	(0.936)	(0.027)	(0.165)	(0.016)	(0.494)
GOVD × COMCIND	0.014	0.026***	−0.023	−0.063	0.001	0.002	0.005	−0.008	0.002	0.002	0.001	−0.001	0.006	0.001	0.012*	−0.052
	(0.498)	(0.000)	(0.522)	(0.320)	(0.885)	(0.563)	(0.437)	(0.896)	(0.862)	(0.948)	(0.745)	(0.543)	(0.333)	(0.981)	(0.066)	(0.288)
GOVD × NOMCIND	0.009	−0.020*	0.005	−0.024	0.002	0.003	−0.003	0.014	0.001	0.001	0.001	0.001	0.011	0.021**	0.028***	0.088
	(0.754)	(0.082)	(0.874)	(0.891)	(0.757)	(0.402)	(0.287)	(0.822)	(0.283)	(0.204)	(0.641)	(0.974)	(0.215)	(0.026)	(0.000)	(0.369)
GOVD × SUSCIND	0.001	0.010	−0.025	−0.053	−0.010***	−0.001	−0.012	0.002	0.003*	0.002*	−0.002	−0.011	0.183***	0.141***	−0.003	−0.025
	(0.957)	(0.700)	(0.136)	(0.718)	(0.003)	(0.805)	(0.181)	(0.924)	(0.065)	(0.064)	(0.651)	(0.542)	(0.000)	(0.002)	(0.907)	(0.865)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.123	0.123	0.123	0.123	0.058	0.058	0.058	0.058	0.082	0.082	0.082	0.082	0.195	0.195	0.195	0.195

Note: The interaction terms include GOVD × BCMTIND, GOVD × AUDCIND, GOVD × COMCIND, GOVD × NOMCIND, and GOVD × SUSCIND, representing the interaction effects between GOVD and specific committee indexes. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; GOVD, individual governance disclosure score; NOMCIND, individual nomination committee index; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

TABLE 12 The results of the first difference with lagged variables for the interaction between ESG disclosure and aggregate and individual board committees on accounting-based measures of MNEs.

DVs	ROA				ROE				ROC				ROI			
Quantile INDVs	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.
ESG	−0.010	−0.004	−0.004	−0.015	0.056	0.040	0.019	0.052	−0.006	0.008	−0.014	−0.014	−0.014	0.002	−0.009	−0.034
	(0.557)	(0.770)	(0.730)	(0.289)	(0.480)	(0.531)	(0.742)	(0.448)	(0.868)	(0.781)	(0.597)	(0.651)	(0.653)	(0.924)	(0.702)	(0.214)
BCMTIND	−5.457***	−5.579***	−5.557***	−5.127***	−2.633	−2.123	−1.994	−3.366	−6.829**	−7.009**	−6.723**	−6.481**	−5.399*	−5.660**	−5.503**	−4.548
	(0.000)	(0.000)	(0.000)	(0.001)	(0.706)	(0.758)	(0.773)	(0.640)	(0.030)	(0.024)	(0.031)	(0.045)	(0.053)	(0.040)	(0.046)	(0.114)
DLAGDEPV	−0.173***	−0.173***	−0.173***	−0.174***	−0.362***	−0.362***	−0.362***	−0.362***	−0.311***	−0.311***	−0.311***	−0.311***	−0.297***	−0.297***	−0.297***	−0.297***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.051	0.051	0.051	0.051	0.095	0.095	0.095	0.002	0.111	0.111	0.111	0.111	0.102	0.102	0.102	0.102
Hausman test	0.20	0.23	0.22	0.13	1.04	1.13	1.17	1.17	0.02	0.02	0.03	0.05	0.72	0.70	0.79	0.91
	(0.651)	(0.630)	(0.639)	(0.723)	(0.308)	(0.287)	(0.279)	(0.280)	(0.877)	(0.880)	(0.853)	(0.825)	(0.394)	(0.402)	(0.374)	(0.341)
ESG	−0.025	−0.017	−0.014	−0.021	−0.005	0.006	−0.002	−0.035	−0.035	−0.018	−0.033	−0.018	−0.002	0.005	0.003	−0.029
	(0.185)	(0.248)	(0.321)	(0.225)	(0.957)	(0.935)	(0.976)	(0.666)	(0.394)	(0.560)	(0.255)	(0.633)	(0.956)	(0.859)	(0.900)	(0.396)
BCMTIND	−6.755***	−6.909***	−6.616***	−5.532***	−7.829	−5.618	−4.411	−9.854	−9.250***	−9.681***	−8.901***	−6.742*	−1.302	−1.124	−1.307	−1.345
	(0.000)	(0.000)	(0.000)	(0.001)	(0.316)	(0.450)	(0.560)	(0.211)	(0.009)	(0.004)	(0.009)	(0.058)	(0.692)	(0.719)	(0.681)	(0.685)
ESG × BCMTIND	0.236*	0.326**	0.181	0.052	0.944	0.856	0.413	0.838**	0.440	0.655**	0.373	0.034	0.022	−0.027	0.010	0.097
	(0.080)	(0.025)	(0.104)	(0.555)	(0.138)	(0.213)	(0.431)	(0.044)	(0.125)	(0.034)	(0.115)	(0.858)	(0.935)	(0.926)	(0.964)	(0.579)
DLAGDEPV	−0.173***	−0.174***	−0.174***	−0.173***	−0.362***	−0.362***	−0.362***	−0.362***	−0.310***	−0.311***	−0.311***	−0.311***	0.705***	0.705***	0.705***	0.704***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.052	0.052	0.052	0.052	0.096	0.096	0.096	0.096	0.112	0.112	0.112	0.112	0.079	0.079	0.079	0.079
Hausman test	0.33	0.29	0.39	0.20	0.97	1.09	1.11	1.20	0.01	0.01	0.01	0.02	0.33	0.31	0.23	0.19
	(0.564)	(0.592)	(0.534)	(0.657)	(0.325)	(0.296)	(0.291)	(0.273)	(0.977)	(0.925)	(0.977)	(0.884)	(0.568)	(0.574)	(0.631)	(0.661)
ESG	−0.010	−0.004	−0.004	−0.015	0.059	0.043	0.020	0.053	−0.006	0.008	−0.014	−0.014	−0.014	0.003	−0.009	−0.033
	(0.566)	(0.783)	(0.724)	(0.298)	(0.459)	(0.504)	(0.735)	(0.439)	(0.869)	(0.776)	(0.595)	(0.648)	(0.667)	(0.916)	(0.699)	(0.235)
AUDCIND	−1.455	−1.496	−1.491	−1.303	−0.913	−0.710	−0.675	−1.315	−1.335	−1.385	−1.318	−1.178	−2.849	−2.926	−2.889	−2.485
	(0.214)	(0.200)	(0.202)	(0.271)	(0.869)	(0.897)	(0.903)	(0.814)	(0.591)	(0.577)	(0.595)	(0.639)	(0.197)	(0.184)	(0.190)	(0.265)
COMCIND	−3.333**	−3.365**	−3.366**	−3.272**	1.636	1.736	1.862	1.552	−3.996	−4.066	−3.970	−3.923	−1.694	−1.778	−1.729	−1.526
	(0.012)	(0.011)	(0.011)	(0.014)	(0.793)	(0.781)	(0.765)	(0.804)	(0.156)	(0.148)	(0.158)	(0.164)	(0.498)	(0.476)	(0.488)	(0.542)

(Continues)

TABLE 12 (Continued)

DVs	ROA				ROE				ROC				ROI			
Quantile INDVs	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.
NOMCIND	0.374	0.354	0.373	0.418	1.587	1.706	1.622	1.481	−0.220	−0.231	−0.175	−0.173	0.404	0.377	0.414	0.513
	(0.797)	(0.807)	(0.798)	(0.774)	(0.817)	(0.803)	(0.813)	(0.829)	(0.943)	(0.940)	(0.955)	(0.955)	(0.883)	(0.890)	(0.880)	(0.852)
SUSCIND	0.227	0.199	0.199	0.279	−14.799**	−14.712**	−14.602**	−14.868**	0.058	−0.004	0.082	0.120	−0.740	−0.814	−0.770	−0.596
	(0.870)	(0.886)	(0.886)	(0.841)	(0.024)	(0.025)	(0.026)	(0.024)	(0.984)	(0.989)	(0.978)	(0.968)	(0.778)	(0.757)	(0.769)	(0.821)
DLAGDEPV	−0.173***	−0.173***	−0.173***	−0.173***	−0.362***	−0.362***	−0.362***	−0.362***	−0.310***	−0.311***	−0.310***	−0.3110***	−0.296***	−0.296***	−0.296***	−0.296***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.052	0.052	0.052	0.052	0.097	0.097	0.097	0.097	0.112	0.112	0.112	0.112	0.102	0.102	0.102	0.102
Hausman test	0.26	0.28	0.27	0.18	0.17	1.26	1.28	1.29	0.01	0.01	0.02	0.02	0.76	0.74	0.82	0.82
	(0.612)	(0.593)	(0.605)	(0.668)	(0.676)	(0.262)	(0.257)	(0.255)	(0.917)	(0.922)	(0.894)	(0.880)	(0.383)	(0.389)	(0.365)	(0.366)
ESG	−0.025	−0.015	−0.013	−0.026	0.018	0.017	0.007	−0.013	−0.035	−0.016	−0.032	−0.022	0.001	0.004	0.002	−0.010
	(0.194)	(0.309)	(0.345)	(0.143)	(0.844)	(0.815)	(0.918)	(0.876)	(0.403)	(0.622)	(0.272)	(0.548)	(0.977)	(0.892)	(0.993)	(0.770)
AUDCIND	−2.087	−2.117*	−1.869	−1.828	−2.546	−2.347	−0.822	−3.535	−2.440	−2.499	−1.987	−1.906	−2.303	−2.514	−2.706	−2.269
	(0.103)	(0.090)	(0.135)	(0.153)	(0.673)	(0.690)	(0.889)	(0.557)	(0.369)	(0.345)	(0.454)	(0.483)	(0.340)	(0.285)	(0.251)	(0.346)
COMCIND	−3.224**	−3.521**	−3.756**	−2.953**	1.119	1.721	1.338	0.762	−4.693	−4.852	−4.848	−3.786	−1.258	−1.690	−1.622	−1.044
	(0.026)	(0.012)	(0.012)	(0.029)	(0.869)	(0.794)	(0.849)	(0.905)	(0.126)	(0.103)	(0.126)	(0.187)	(0.644)	(0.522)	(0.564)	(0.681)
NOMCIND	−0.308	−0.130	0.158	0.137	−0.657	0.406	0.185	−1.150	−0.564	−0.728	−0.523	0.141	0.323	0.101	0.646	0.966
	(0.843)	(0.931)	(0.919)	(0.928)	(0.928)	(0.954)	(0.980)	(0.872)	(0.864)	(0.819)	(0.874)	(0.965)	(0.912)	(0.971)	(0.825)	(0.735)
SUSCIND	0.255	0.264	0.145	0.131	−14.110**	−14.481**	−14.502**	−13.161*	0.004	−0.009	−0.084	−0.016	−0.594	−0.856	−0.589	−0.072
	(0.857)	(0.851)	(0.917)	(0.927)	(0.034)	(0.029)	(0.028)	(0.052)	(0.999)	(0.998)	(0.978)	(0.996)	(0.824)	(0.747)	(0.823)	(0.979)
ESG × AUDCIND	0.082	0.109	0.054	0.140	0.101	0.302	−0.110	0.076	0.165	0.208	0.094	0.181	−0.101	−0.127	−0.017	0.053
	(0.515)	(0.380)	(0.594)	(0.177)	(0.866)	(0.606)	(0.819)	(0.876)	(0.540)	(0.430)	(0.662)	(0.411)	(0.672)	(0.588)	(0.930)	(0.786)
ESG × COMCIND	−0.083	0.012	0.070	−0.246*	0.023	−0.103	0.065	0.120	0.177	0.226	0.158	−0.106	−0.127	−0.058	−0.003	−0.156
	(0.675)	(0.943)	(0.630)	(0.074)	(0.980)	(0.900)	(0.925)	(0.853)	(0.672)	(0.539)	(0.610)	(0.717)	(0.732)	(0.860)	(0.990)	(0.546)
ESG × NOMCIND	0.225	0.195	0.049	0.142	0.768	0.549	0.537	0.584	0.008	0.128	0.072	−0.093	0.106	0.168	−0.048	−0.029
	(0.343)	(0.336)	(0.791)	(0.334)	(0.492)	(0.564)	(0.537)	(0.397)	(0.987)	(0.765)	(0.855)	(0.765)	(0.812)	(0.660)	(0.890)	(0.917)
ESG × SUSCIND	0.003	−0.059	−0.039	0.150	−0.582	−0.182	−0.443	−0.711	0.067	−0.010	−0.009	0.141	−0.136	0.001	−0.176	−0.319
	(0.989)	(0.734)	(0.793)	(0.445)	(0.555)	(0.824)	(0.523)	(0.444)	(0.880)	(0.979)	(0.977)	(0.735)	(0.730)	(0.990)	(0.526)	(0.390)
DLAGDEPV	−0.173***	−0.174***	−0.173***	−0.173***	−0.362***	−0.362***	−0.362***	−0.363***	−0.310***	−0.311***	−0.311***	−0.310***	−0.296***	−0.296***	−0.296***	−0.296***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)

TABLE 12 (Continued)

DVs	ROA				ROE				ROC				ROI			
Quantile INDVs	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.052	0.052	0.052	0.052	0.094	0.094	0.094	0.094	0.112	0.112	0.112	0.112	0.099	0.099	0.099	0.099
Hausman test	0.39	0.33	0.47	0.17	0.94	1.14	1.02	1.27	0.01	0.01	0.01	0.01	0.57	0.66	0.56	0.90
	(0.532)	(0.563)	(0.494)	(0.677)	(0.333)	(0.285)	(0.311)	(0.259)	(0.962)	(0.972)	(0.954)	(0.906)	(0.449)	(0.417)	(0.453)	(0.342)

Note: The interaction terms include ESG × BCMTIND, ESG × AUDCIND, ESG × COMCIND, ESG × NOMCIND, and ESG × SUSCIND, representing the interaction effects between ESG and specific committee indexes. DLAGDEPV are the lagged dependent variables. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; ESG, aggregate environmental, social, and governance disclosure score; NOMCIND, individual nomination committee index; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

TABLE 13 The results of the first difference with lagged variables for the interaction between ESG disclosure and aggregate and individual board committees on market-based measures of MNEs.

DVs	TQ				SGR				EPS				DPS			
Quantile INDVs	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.
ESG	0.001	−0.001	0.001	0.008***	−1.310***	−0.492	−0.893**	−1.635***	0.018	0.015	−0.001	−0.001	0.004	0.004	−0.019	0.001
	(0.501)	(0.454)	(0.784)	(0.000)	(0.006)	(0.199)	(0.011)	(0.000)	(0.444)	(0.408)	(0.962)	(0.984)	(0.879)	(0.874)	(0.514)	(0.501)
BCMTIND	0.719***	0.752***	0.746***	0.495***	−35.778	−52.160	−44.108	−5.310	−2.339	−2.206	−2.015	−1.181	−1.234	−1.249	−0.592	0.719***
	(0.000)	(0.000)	(0.000)	(0.004)	(0.392)	(0.206)	(0.287)	(0.902)	(0.252)	(0.274)	(0.339)	(0.687)	(0.670)	(0.667)	(0.845)	(0.000)
DLAGDEPV	−0.050***	−0.050***	−0.050***	−0.051***	−0.215***	−0.215***	−0.215***	−0.215***	0.206***	0.206***	0.206***	0.705***	0.705***	0.705***	0.705***	−0.050***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.026	0.026	0.026	0.031	0.048	0.048	0.048	0.048	0.062	0.062	0.062	0.062	0.079	0.079	0.079	0.079
Hausman test	1.64	1.98	1.24	1.29	0.96	0.81	0.80	1.25	0.63	0.59	0.58	0.58	0.42	0.36	0.40	0.23
	(0.117)	(0.108)	(0.112)	(0.112)	(0.326)	(0.367)	(0.371)	(0.263)	(0.426)	(0.444)	(0.446)	(0.445)	(0.519)	(0.548)	(0.525)	(0.632)

(Continues)

TABLE 13 (Continued)

DVs	TQ				SGR				EPS				DPS			
Quantile INDVs	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.
ESG	0.001	0.001	0.001	0.004*	−1.030*	−0.341	−0.631	−1.529***	0.018	0.016	0.011	−0.002	0.005	0.003	−0.029	0.001
	(0.803)	(0.829)	(0.749)	(0.052)	(0.056)	(0.415)	(0.102)	(0.002)	(0.498)	(0.439)	(0.552)	(0.956)	(0.859)	(0.900)	(0.396)	(0.803)
BCMTIND	0.655***	0.833***	0.848***	0.206	−12.032	−36.744	−14.196	2.557	−2.341	−2.175	−2.345	−1.302	−1.124	−1.307	−1.345	0.655***
	(0.001)	(0.000)	(0.000)	(0.280)	(0.797)	(0.410)	(0.754)	(0.957)	(0.306)	(0.318)	(0.289)	(0.692)	(0.719)	(0.681)	(0.685)	(0.001)
ESG × BCMTIND	0.012	−0.020	−0.017	0.037***	−4.316	−3.776	−5.114	−1.016	0.001	−0.008	0.020	0.022	−0.027	0.010	0.097	0.012
	(0.449)	(0.234)	(0.174)	(0.000)	(0.2580	(0.360)	(0.104)	(0.684)	(0.989)	(0.970)	(0.895)	(0.935)	(0.926)	(0.964)	(0.579)	(0.449)
DLAGDEPV	−0.051***	−0.050***	−0.050***	−0.052***	−0.215***	−0.215***	−0.215***	−0.215***	0.206***	0.206***	0.206***	0.705***	0.705***	0.705***	0.704***	−0.051***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.033	0.033	0.033	0.033	0.048	0.048	0.048	0.048	0.062	0.062	0.062	0.062	0.079	0.079	0.079	0.079
Hausman test	1.40	1.79	1.35	1.10	0.83	0.77	0.71	1.07	0.52	0.52	0.38	0.32	0.33	0.31	0.23	0.19
	(0.106)	(0.105)	(0.102)	(0.142)	(0.363)	(0.379)	(0.399)	(0.300)	(0.469)	(0.468)	(0.536)	(0.570)	(0.568)	(0.574)	(0.631)	(0.661)
ESG	0.001	−0.001	0.002	0.008***	−1.283***	−0.484	−0.897**	−1.568***	0.017	0.014	0.012	−0.002	−0.001	0.004	0.004	−0.019
	(0.498)	(0.473)	(0.788)	(0.000)	(0.007)	(0.207)	(0.010)	(0.000)	(0.480)	(0.455)	(0.470)	(0.933)	(0.981)	(0.879)	(0.871)	(0.502)
AUDCIND	0.313**	0.322**	0.321**	0.219	−81.433**	−86.897***	−85.016**	−67.303**	−0.858	−0.807	−0.815	−0.751	0.165	0.151	0.148	0.419
	(0.020)	(0.016)	(0.016)	(0.106)	(0.014)	(0.008)	(0.010)	(0.044)	(0.595)	(0.616)	(0.613)	(0.645)	(0.943)	(0.948)	(0.949)	(0.858)
COMCIND	0.085	0.097	0.093	0.035	−7.192	−11.496	−10.208	−2.387	3.760**	3.778**	3.795**	3.858**	0.322	0.298	0.302	0.460
	(0.577)	(0.523)	(0.539)	(0.815)	(0.848)	(0.759)	(0.785)	(0.949)	(0.040)	(0.039)	(0.038)	(0.035)	(0.902)	(0.909)	(0.908)	(0.861)
NOMCIND	0.223	0.225	0.227	0.194	63.739	61.206	64.901	67.738	−5.772***	−5.739***	−5.790***	−5.733***	−1.219	−1.221	−1.237	−1.140
	(0.181)	(0.176)	(0.173)	(0.244)	(0.120)	(0.136)	(0.114)	(0.100)	(0.004)	(0.004)	(0.004)	(0.004)	(0.672)	(0.672)	(0.668)	(0.692)
SUSCIND	−0.001	0.009	0.006	−0.043	12.118	8.342	9.519	16.191	0.244	0.260	0.274	0.330	−1.398	−1.419	−1.416	−1.279
	(0.994)	(0.953)	(0.970)	(0.785)	(0.758)	(0.832)	(0.809)	(0.681)	(0.899)	(0.892)	(0.886)	(0.864)	(0.613)	(0.607)	(0.608)	(0.644)
DLAGDEPV	−0.051***	−0.050***	−0.050***	−0.052***	−0.214***	−0.214***	−0.215***	−0.214***	0.207***	0.207***	0.207***	0.207***	0.705***	0.705***	0.705***	0.705***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.023	0.023	0.023	0.023	0.050	0.050	0.050	0.050	0.063	0.063	0.063	0.063	0.079	0.079	0.079	0.079
Hausman test	1.47	1.58	1.59	1.58	1.23	1.09	1.21	1.49	0.93	0.89	0.89	0.64	0.66	0.60	0.66	0.44
	(0.119)	(0.110)	(0.134)	(0.158)	(0.266)	(0.296)	(0.271)	(0.222)	(0.334)	(0.345)	(0.346)	(0.423)	(0.417)	(0.437)	(0.418)	(0.506)

TABLE 13 (Continued)

DVs	TQ				SGR				EPS				DPS			
Quantile INDVs	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.	ESG Coef.	ENVD Coef.	SOCD Coef.	GOVD Coef.
ESG	0.001	0.000	0.001	0.004**	−1.131**	−0.415	−0.867**	0.016	0.013	0.012	−0.006	−0.001	0.005	0.005	−0.029	0.001
	(0.629)	(0.905)	(0.716)	(0.033)	(0.038)	(0.331)	(0.025)	(0.553)	(0.534)	(0.519)	(0.794)	(0.970)	(0.861)	(0.867)	(0.398)	(0.629)
AUDCIND	0.303**	0.360**	0.361**	0.147	20.369	−40.474	−5.939	−0.932	−1.030	−1.026	−0.729	0.104	0.217	−0.044	0.086	0.303**
	(0.039)	(0.012)	(0.012)	(0.312)	(0.569)	(0.250)	(0.865)	(0.597)	(0.549)	(0.552)	(0.679)	(0.967)	(0.930)	(0.986)	(0.973)	(0.039)
COMCIND	0.123	0.121	0.128	0.038	20.665	−5.463	24.616	4.541**	4.886**	3.952*	3.604*	0.494	0.562	0.374	0.331	0.123
	(0.457)	(0.449)	(0.453)	(0.802)	(0.609)	(0.890)	(0.556)	(0.023)	(0.011)	(0.055)	(0.053)	(0.863)	(0.839)	(0.899)	(0.901)	(0.457)
NOMCIND	0.136	0.235	0.237	−0.016	−33.722	29.410	−20.363	−6.549***	−6.626***	−5.873***	−5.826***	−1.378	−1.413	−1.174	−1.249	0.136
	(0.443)	(0.172)	(0.184)	(0.928)	(0.438)	(0.487)	(0.639)	(0.002)	(0.001)	(0.006)	(0.005)	(0.654)	(0.635)	(0.703)	(0.677)	(0.443)
SUSCIND	0.024	0.017	0.018	0.020	3.762	2.682	5.359	0.320	0.322	0.320	0.313	−1.386	−1.407	−1.375	−1.341	0.024
	(0.883)	(0.914)	(0.911)	(0.905)	(0.924)	(0.946)	(0.891)	(0.870)	(0.868)	(0.868)	(0.875)	(0.621)	(0.614)	(0.620)	(0.638)	(0.883)
ESG × AUDCIND	−0.004	−0.008	−0.007	0.000	−28.575***	−14.523***	−24.040***	−0.004	0.031	0.042	−0.052	0.010	−0.022	0.049	0.036	−0.004
	(0.800)	(0.572)	(0.549)	(0.981)	(0.000)	(0.000)	(0.000)	(0.980)	(0.856)	(0.766)	(0.715)	(0.968)	(0.929)	(0.809)	(0.862)	(0.800)
ESG × COMCIND	−0.016	−0.007	−0.006	−0.023	−14.127**	−5.223	−10.658***	−0.286	−0.458*	−0.029	0.125	−0.063	−0.108	−0.008	0.028	−0.016
	(0.466)	(0.714)	(0.709)	(0.144)	(0.010)	(0.286)	(0.009)	(0.292)	(0.056)	(0.886)	(0.508)	(0.872)	(0.754)	(0.978)	(0.918)	(0.466)
ESG × NOMCIND	0.037	0.001	0.001	0.065***	46.622***	18.955***	36.261***	0.343	0.484*	0.013	−0.026	0.067	0.114	−0.036	−0.005	0.037
	(0.178)	(0.988)	(0.984)	(0.000)	(0.000)	(0.001)	(0.000)	(0.294)	(0.082)	(0.958)	(0.898)	(0.887)	(0.775)	(0.921)	(0.986)	(0.178)
ESG × SUSCIND	−0.021	−0.007	−0.007	−0.023	−1.260	0.469	−0.268	−0.038	−0.019	−0.044	0.004	−0.001	−0.009	−0.031	0.067	−0.021
	(0.376)	(0.712)	(0.678)	(0.305)	(0.830)	(0.924)	(0.948)	(0.895)	(0.937)	(0.829)	(0.990)	(0.998)	(0.980)	(0.915)	(0.865)	(0.376)
DLAGDEPV	−0.051***	−0.050***	−0.050***	−0.053***	−0.215***	−0.214***	−0.215***	0.207***	0.207***	0.207***	0.207***	0.705***	0.705***	0.705***	0.705***	−0.051***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Includes all controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj R-squared	0.024	0.024	0.024	0.024	0.050	0.050	0.050	0.002	0.060	0.060	0.060	0.060	0.076	0.076	0.076	0.008
Hausman test	1.87	1.20	1.87	1.89	1.32	1.10	1.22	1.66	0.90	0.86	0.68	0.80	0.64	0.59	0.46	0.60
	(0.108)	(0.107)	(0.112)	(0.148)	(0.250)	(0.294)	(0.270)	(0.197)	(0.343)	(0.355)	(0.411)	(0.371)	(0.424)	(0.444)	(0.499)	(0.440)

Note: The interaction terms include ESG × BCMTIND, ESG × AUDCIND, ESG × COMCIND, ESG × NOMCIND, and ESG × SUSCIND, representing the interaction effects between ESG and specific committee indexes. DLAGDEPV are the lagged dependent variables. The *p* values are in parentheses.

Abbreviations: AUDCIND, individual audit committee index; BCMTIND, aggregate board committee indexes; COMCIND, individual compensation committee index; ESG, aggregate environmental, social, and governance disclosure score; NOMCIND, individual nomination committee index; SUSCIND, individual sustainability committee index.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

which enhances their sustainable competitive advantage (Chang & Lee, 2022).

The results of Hausman tests of the validity of the regression models at first difference with lagged internal variables as instruments indicate that the *p*-values for all models are greater than the significance level of 0.05. Hence, we may infer that errors associated with endogeneity and heterogeneity are minimised in the first difference instrumental quantile regression models. Nonetheless, we observed that the results of the re-estimated first difference instrumental quantile regressions are comparable to the results reported for the respective conventional quantile regression models. Such consistency indicates that our original results are robust to the potential endogeneity and heterogeneity biases arising from correlated and omitted explanatory variables respectively. This offers confidence in the estimated regression results with their associated policy recommendations (see Tables 12 and 13).

6 | CONCLUSION

This study examines the role of combined and individual board committee indexes in moderating the relationship between ESG disclosure and the financial performance of MNEs listed on major stock markets in 40 countries from 2009 to 2019 (i.e., 5500 firm-year observations). The study employs four accounting-based measures, namely return on equity (ROA), return on assets (ROE), return on capital (ROC), and return on invested capital (ROI), in addition to four market-based measures: Tobin Q (TOBQ), earnings per share (EPS), dividends per share (DPS), and sustainable growth rate (SGR). These performance measures are used as dependent variables, while the aggregated ESG disclosure score and its three components serve as explanatory variables.

In summary, the study revealed that the combined board committee index has a positive impact on the relationship between ESG disclosure and accounting measures for large MNEs. The compensation and nomination committee indexes strengthen this relationship, while the audit and sustainability committee indexes weaken the association. The combined index has a negative effect on the relationship between ESG disclosure and TOBQ and SGR, but a positive effect on EPS and DPS. The audit committee index negatively influences the correlation between aggregate ESG and market-based performance indicators, while the compensation and nomination committee indexes have positive effects. The sustainability committee index reinforces the relationship between aggregate ESG disclosure and market outcomes, except for the SGR ratio. Additionally, the combined board committee index positively affects the relationship between ENVD and accounting-based performance measures for large MNEs, with the audit and sustainability committee indexes negatively impacting this relationship. The compensation committee index positively affects ENVD for large MNEs, while the nomination committee index has a positive influence for small and medium MNEs. Also, the combined index positively influences the relationship between ENVD and market-related measures, by contrast to the negative impact of audit committee on EPS. The compensation committee index has a positive impact, and the sustainability committee index has a positive effect, except for the SGR ratio.

Additionally, our study found that combined board committee has positive impact on SOCD-accounting relationship in large MNEs. Audit committee has an adverse effect, sustainability committee varies with MNE size. Compensation committee influences accounting–SOCD link positively for large MNEs, nomination committee shows positive impact across quantiles. Combined board committee favours the association between SOCD–market measures in large MNEs, negatively affects the same in small MNEs. Audit committee hampers market–SOCD link, while compensation committee has favourable impact. Nomination committee influences certain market-based measures positively, while sustainability committee has mixed effects. Compensation committee reinforces the connection with market-based measures. Nomination and sustainability committees have mixed effects on market–SOCD nexus, depending on MNE size and choice of performance metric. We found that combined board committee moderates GOVD–accounting relationship differently for MNE sizes. Audit and sustainability committees negatively impact GOVD–accounting link, compensation committee has no significant impact. Nomination committee index weakens the correlation with accounting-GOVD in large MNEs. Combined board committee aids links between GOVD–market measures, hampers TOBQ for small MNEs. Audit committee negatively affects the link between GOVD governance and the market-based measures (TOBQ and DPS).

The findings of this study have important implications for policy makers, society, and academia. Policy makers should consider incorporating ESG disclosure requirements into regulatory frameworks, as the study highlights its significance in driving financial performance for MNEs. Moreover, the study emphasises the importance of combining the activities of board committees, particularly compensation and nomination committees, in fostering the positive relationship between ESG disclosure and performance outcomes. For society, the results indicate that companies with strong ESG standards tend to outperform financially,

providing valuable insights for investors interested in ethical and sustainable investment opportunities. From an academic standpoint, the research sheds light on the role of board committees in shaping the link between ESG disclosure and financial performance, offering new theoretical perspectives, and contributing to the understanding of corporate governance dynamics in the context of ESG practices. Finally, MNEs should prioritize strengthening their combined board committee index, as it has a positive impact on the ESG-performance relationship compared with its individual components. This can be achieved by ensuring that board committees members have the necessary expertise, knowledge, and experience to integrate ESG practices into decision-making processes.

To further advance the understanding of the role of board committee indexes in moderating the ESG-corporate performance relationship, future research can explore several avenues. First, conducting a longitudinal analysis beyond the study period would provide insights into the evolving nature of this relationship in the post-Covid pandemic era. Understanding how the moderating effects of board committee indexes may change in response to shifting market dynamics and evolving ESG standards should guide MNEs in adapting their governance strategies. Second, industry-specific studies can delve into the unique ESG challenges and opportunities faced by different sectors. This would allow for tailored recommendations and best practices unique to each industry. Additionally, cross-country analysis can help uncover the influence of the quality of external institutions and regulations on the moderating effects of board committee indexes. Comparing MNEs operating in diverse countries would provide valuable insights for shaping governance practices globally. Finally, qualitative exploration through interviews and case studies can provide a deeper understanding of the channels through which board committee indexes influence the ESG-corporate performance relationship. This qualitative approach can uncover additional factors and dynamics that quantitative analyses may not capture, enhancing the richness of future research in this area. Additionally, the study only considered a limited number of board committees (audit, compensation, nomination, and sustainability), and future research could explore the potential impact of other board advisory and monitoring committees, such as risk, compliance, strategy, and human resources committees, if data becomes available. Moreover, expanding the sample size to include a broader range of MNEs, encompassing both public and private companies, would enhance the generalizability of the findings. By addressing these research gaps, future studies can further enrich our understanding of the complex interplay between ESG disclosure, board committees, and financial performance outcomes in multinational contexts.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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REFERENCES

Abdi, Y., Li, X., & Càmara-Turull, X. (2022). Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance (FP) in airline industry: The moderating role of size and age. *Environment, Development and Sustainability*, *24* (4), 5052–5079.

Abidin, Z. Z., Kamal, N. M., & Jusoff, K. (2009). Board structure and corporate performance in Malaysia. *International Journal of Economics and Finance*, *1*(1), 150–164.

Achim, M. V., & Borlea, S. N. (2015). Developing of ESG score to assess the non-financial performances in Romanian companies. *Procedia Economics and Finance*, *32*, 1209–1224.

Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, *100*(1), 154–181.

Aggarwal, R., Schloetzer, J. D., & Williamson, R. (2019). Do corporate governance mandates impact long-term firm value and governance culture? *Journal of Corporate Finance*, *59*, 202–217.

Agyemang-Mintah, P. (2015). The nomination committee and firm performance: An empirical investigation of UK financial institutions during the pre/post financial crisis. *Corporate Board: role, Duties and Composition*, *11*(3), 176–190.

Ahmad, N., Mobarek, A., & Roni, N. N. (2021). Revisiting the impact of ESG on financial performance of FTSE350 UK firms: Static and dynamic panel data analysis. *Cogent Business & Management*, *8*(1), 1900500.

Albitar, K. (2015). Firm characteristics, governance attributes and corporate voluntary disclosure: A study of Jordanian listed companies. *International Business Research*, *8*(3), 1–10.

Albitar, K., Abdoush, T., & Hussainey, K. (2022). Do corporate governance mechanisms and ESG disclosure drive CSR narrative

tones? *International Journal of Finance & Economics*, 1–15. https://doi.org/10.1002/ijfe.2625

Albitar, K., Hussainey, K., Kolade, N., & Gerged, A. (2020). ESG disclosure and firm performance before and after IR: The moderating role of governance mechanisms. *International Journal of Accounting & Information Management*, *28*(3), 429–444.

Al-Hiyari, A., Mas'ud, A., & Kolsi, M. C. (2023). Environmental, social and governance (ESG) activity and corporate controversies in South Africa: The interacting role of a skillful board. In *The implementation of smart technologies for business success and sustainability* (pp. 335–346). Springer.

Alhossini, M. A. M., Ntim, C. G., & Zalata, A. (2021). Corporate board committees and corporate outcomes: An international systematic literature review and agenda for future research. *The International Journal of Accounting*, *56*(1), 2150001.

Allegrini, M., & Greco, G. (2011). Corporate boards, audit committees and voluntary disclosure: Evidence from Italian listed companies. *Journal of Management & Governance*, *17*, 1–30.

Almeyda, R., & Darmansya, A. (2019). The influence of environmental, social, and governance (ESG) disclosure on firm financial performance. *Journal of Proceedings Series*, *5*, 278–290.

Alsayegh, M. F., Abdul Rahman, R., & Homayoun, S. (2020). Corporate economic, environmental, and social sustainability performance transformation through ESG disclosure. *Sustainability*, *12*(9), 3910.

Al-Shaer, H., & Zaman, M. (2019). CEO compensation and sustainability reporting assurance: Evidence from the UK. *Journal of Business Ethics*, *158*(1), 233–252.

Ammari, H., Dastmalchian, A., & Fidrmuc, J. (2016). Board structure, remuneration committees, and environmental, social, and governance reporting. *Corporate Governance: An International Review*, *24*(1), 7–18.

Arif, M., Sajjad, A., Farooq, S., Abrar, M., & Joyo, A. S. (2021). The impact of audit committee attributes on the quality and quantity of environmental, social and governance (ESG) disclosures. *Corporate Governance: The International Journal of Business in Society*, *21*(3), 497–514.

Arranz-Aperte, L. (2015). Nomination committee and the choice of a diverse board. *Nordic Journal of Business*, *65*(1), 41–61.

Atan, R., Alam, M. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance. *Management of Environmental Quality: An International Journal*, *29*(2), 182–194.

Ayuso, S., Rodríguez, M. A., García-Castro, R., & Ariño, M. A. (2014). Maximizing stakeholders' interests: An empirical analysis of the stakeholder approach to corporate governance. *Business & Society*, *53*(3), 414–439.

Bacha, S., Ajina, A., & Saad, S. B. (2020). CSR performance and the cost of debt: Does audit quality matter? *Corporate Governance: The International Journal of Business in Society*, *21*(1), 137–158.

Bajic, S., & Yurtoglu, B. (2018). Which aspects of CSR predict firm market value? *Journal of Capital Markets Studies*, *2*(1), 50–69.

Baraibar-Diez, E., & Odriozola, M. D. (2019). CSR committees and their effect on ESG performance in UK, France, Germany, and Spain. *Sustainability*, *11*(18), 5077.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.

Bartov, E., Mohan, S., & Wu, J. (2002). The role of auditor industry specialization in small firm auditing. *Auditing: A Journal of Practice & Theory*, *21*(1), 51–70.

Batae, O. M., Dragomir, V. D., & Feleaga, L. (2021). The relationship between environmental, social, and financial performance in the banking sector: A European study. *Journal of Cleaner Production*, *290*, 125791.

Bebchuk, L. A., & Fried, J. M. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives*, *17*(3), 71–92.

Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. *Sustainability*, *10*(12), 4699.

Bloomberg L. P. (2020) Financial Analysis ESG Data. 12/1/2020 to 31/08/2020. Retrieved August 30, 2020, from Bloomberg terminal.

Branco, M. C., & Rodrigues, L. L. (2006). Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics*, *69*(2), 111–132.

Bravo, F., & Reguera-Alvarado, N. (2019). Sustainable development disclosure: Environmental, social, and governance reporting and gender diversity in the audit committee. *Business Strategy and the Environment*, *28*(2), 418–429.

Buallay, A. (2019). Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. *Management of Environmental Quality*, *30*(1), 98–115.

Buallay, A., & Al-Ajmi, J. (2019). The role of audit committee attributes in corporate sustainability reporting: Evidence from banks in the Gulf Cooperation Council. *Journal of Applied Accounting Research*, *21*(2), 249–264.

Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, *32*(3), 946–967.

Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, *18*(5), 396–414.

Chang, Y. J., & Lee, B. H. (2022). The impact of ESG activities on firm value: Multi-level analysis of industrial characteristics. *Sustainability*, *14*(21), 14444.

Chen, K. D., & Wu, A. (2016). *The structure of board committees* (Vol. 1). Harvard Business School.

Cheng, C. C., Lo, H. W., & Ren, M. (2021). The role of board compensation committees in environmental corporate social responsibility. *Journal of Business Ethics*, *171*(3), 551–573.

Crespí-Cladera, R., & Pascual-Fuster, B. (2014). Does the independence of independent directors matter? *Journal of Corporate Finance*, *28*, 116–134.

Cucari, N., Esposito de Falco, S., & Orlando, B. (2018). Diversity of board of directors and environmental social governance: Evidence from Italian listed companies. *Corporate Social Responsibility and Environmental Management*, *25*(3), 250–266.

Dalal, K. K., & Thaker, N. (2019). ESG and corporate financial performance: A panel study of Indian companies. *Journal of Corporate Governance*, *18*(1), 44–59.

Dam, L., Scholtens, B., & Sterken, E. (2007). Corporate governance and international location decisions of multinational enterprises. *Corporate Governance: An International Review*, *15*(6), 1330–1347.

Davis, A. K., Guenther, D. A., Krull, L. K., & Williams, B. M. (2016). Do socially responsible firms pay more taxes? *The Accounting Review*, *91*(1), 47–68.

De Andres, P., & Vallelado, E. (2008). Corporate governance in banking: The role of the board of directors. *Journal of Banking & Finance*, *32*(12), 2570–2580.

Desender, K., & Epure, M. (2021). The pressure behind corporate social performance: Ownership and institutional configurations. *Global Strategy Journal*, *11*(2), 210–244.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*(2), 147–160.

Dou, Y., Sahgal, S., & Zhang, E. J. (2015). Should independent directors have term limits? The role of experience in corporate governance. *Financial Management*, *44*(3), 583–621.

Duque-Grisales, E., Aguilera-Caracuel, J., Guerrero-Villegas, J., & García-Sánchez, E. (2020). Can proactive environmental strategy improve Multilatinas' level of internationalization? The moderating role of board independence. *Business Strategy and the Environment*, *29*(1), 291–305.

Duque-Grisales, E., & Aguilera-Caracuel, J. (2021). Environmental, social and governance (ESG) scores and financial performance of multilatinas: Moderating effects of geographic international diversification and financial slack. *Journal of Business Ethics*, *168*(2), 315–334.

Dwekat, A., Seguí-Mas, E., Tormo-Carbó, G., & Carmona, P. (2020). Corporate governance configurations and corporate social responsibility disclosure: Qualitative comparative analysis of audit committee and board characteristics. *Corporate Social Responsibility and Environmental Management*, *27*(6), 2879–2892.

Eberhardt-Toth, E. (2017). Who should be on a board corporate social responsibility committee? *Journal of Cleaner Production*, *140*, 1926–1935.

Elmaghrabi, M. E. (2021). CSR committee attributes and CSR performance: UK evidence. *Corporate Governance: The International Journal of Business in Society*, *21*(5), 892–919.

Elmagrhi, M. H., Ntim, C. G., Wang, Y., Abdou, H. A., & Zalata, A. M. (2020). Corporate governance disclosure index–executive pay nexus: The moderating effect of governance mechanisms. *European Management Review*, *17*(1), 121–152.

Elmghaamez, I. K. (2021). Reasons behind the worldwide diversity in identity and issuance of good governance codes. *International Journal of Disclosure and Governance*, *18*(2), 136–152.

Elmghaamez, I. K., & Akintoye, E. (2021). Internal corporate governance mechanisms and financial performance: Evidence from the UK's top FTSE 100 listed companies. *International Journal of Business Governance and Ethics*, *15*(2), 190–214.

Elmghaamez, I. K., & Gan, X. Y. (2023). Corporate governance and financial performance of firms listed on Asian Pacific stocks: Evidence from Malaysia, Thailand, and Singapore. *International Journal of Business Governance and Ethics*, *17*(2), 155–181.

Elmghaamez, I. K., & Ntim, C. G. (2016). Assessing the effectiveness of internal governance controls: The case of internal auditors skills and challenges in Libya. *Corporate Ownership & Control*, *13*(3), 46–59.

Elmghaamez, I. K., & Olarewaju, J. I. (2022). Corporate social responsibility and financial performance of product and service-based firms listed on London Stock Exchange. *Corporate Social Responsibility and Environmental Management*, *29*(5), 1370–1383.

Eminet, A., & Guedri, Z. (2010). The role of nominating committees and director reputation in shaping the labor market for directors: An empirical assessment. *Corporate Governance: An International Review*, *18*(6), 557–574.

Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, *38*, 45–64.

Fich, E. M., & Shivdasani, A. (2006). Are busy directors effective monitors? *Journal of Financial Economics*, *80*(2), 287–317.

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.

Freeman, R. E., & Reed, D. L. (1983). Stockholders and stakeholders: A new perspective on corporate governance. *California Management Review*, *25*(3), 88–106.

Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, *5*(4), 210–233.

Frynas, J. G., Mellahi, K., & Pigman, G. A. (2018). Board diversity and corporate social responsibility: Evidence from the US. *Journal of Business Ethics*, *149*(3), 411–432.

Garas, S., & ElMassah, S. (2018). Corporate governance and corporate social responsibility disclosures: The case of GCC countries. *Critical Perspectives on International Business*, *14*(1), 2–26.

Habbash, M., & Alghamdi, S. (2017). Audit quality and earnings management in less developed economies: The case of Saudi Arabia. *Journal of Management & Governance*, *21*, 351–373.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24.

Haj Salem, I., Ayadi, S., & Hussainey, K. (2019). Corporate governance and risk disclosure quality: Tunisian evidence. *Journal of Accounting in Emerging Economies*, *9*(4), 567–602.

Hamid, K. T., & Ibrahim, M. (2020). The moderating effect of corporate governance on the relationship between corporate social responsibility and financial performance of listed non-financial services companies in Nigeria. *International Journal of Accounting & Finance*, *9*(1), 71–91.

Hamman, J. R., Loewenstein, G., & Weber, R. A. (2010). Self-interest through delegation: An additional rationale for the principal-agent relationship. *American Economic Review*, *100*(4), 1826–1846.

Hassan, M. K. (2012). A disclosure index to measure the extent of corporate governance reporting by UAE listed corporations. *Journal of Financial Reporting and Accounting*, *10*(1), 4–33.

Hermalin, B. E., & Weisbach, M. S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic, Policy Review*, *9*(1), 7–27.

Hooghiemstra, R., Hermes, N., & Oxelheim, L. (2019). The relation between firm ESG disclosure and financial performance: Evidence from worldwide data. *Journal of Business Ethics*, *156*(2), 333–362.

Hu, J., Li, S., Taboada, A. G., & Zhang, F. (2020). Corporate board reforms around the world and stock price crash risk. *Journal of Corporate Finance*, *62*, 101557.

Hundal, S. (2013). Independence, expertise and experience of audit committees: Some aspects of Indian corporate sector. *American International Journal of Social Science*, *2*(5), 1–20.

Javalgi, R. R. G., Dixit, A., & Scherer, R. F. (2009). Outsourcing to emerging markets: Theoretical perspectives and policy implications. *Journal of International Management*, *15*(2), 156–168.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360.

Khan, J., & Rehman, S. U. (2020). Impact of corporate governance compliance and board attributes on operating liquidity in pre- and post-corporate governance reforms. *Corporate Governance: The International Journal of Business in Society*, *20*(7), 1329–1347.

Klein, A. (1998). Firm performance and board committee structure. *The Journal of Law and Economics*, *41*(1), 275–304.

Kolev, K. D., Wangrow, D. B., Barker, V. L., III, & Schepker, D. J. (2019). Board committees in corporate governance: A cross-disciplinary review and agenda for the future. *Journal of Management Studies*, *56*(6), 1138–1193.

Lam, T. Y., & Lee, S. K. (2012). Family ownership, board committees and firm performance: Evidence from Hong Kong. *Corporate Governance: The International Journal of Business in Society*, *12*(3), 353–366.

Lantos, G. P. (2001). The boundaries of strategic corporate social responsibility. *Journal of Consumer Marketing*, *18*(7), 595–632.

Liu, X., Wang, S., & Yang, Z. (2018). The moderating effect of nomination committees on the relationship between ESG performance and financial performance. *Journal of Cleaner Production*, *172*, 3926–3935.

Lopez-Arceiz, F. J., Del Río, C., & Bellostas, A. (2022). The mediating effect of sustainability strategy between sustainability committees and business performance: Can persistent assessment condition this effect? *Sustainability Accounting, Management and Policy Journal*, *13*(3), 708–739.

Luoma, P., & Goodstein, J. (1999). Stakeholders and corporate boards: Institutional influences on board composition and structure. *Academy of Management Journal*, *42*(5), 553–563.

Mallin, C. A., & Michelon, G. (2017). Board roles in fostering the adoption of corporate social responsibility assurance: An international analysis. *Journal of Management & Governance*, *21*(4), 959–985.

Martínez-Ferrero, J., Lozano, M. B., & Vivas, M. (2021). The impact of board cultural diversity on a firm's commitment toward the sustainability issues of emerging countries: The mediating effect of a CSR committee. *Corporate Social Responsibility and Environmental Management*, *28*(2), 675–685.

Michelon, G., Boesso, G., Kumar, K., & Michelon, L. (2019). The role of the sustainability committee in enhancing sustainability performance: Evidence from public entities. *Journal of Business Ethics*, *156*(4), 1015–1031.

Minciullo, M., Zaccone, M. C., & Pedrini, M. (2022). The antecedents of corporate sustainability performance: A study on generic and sustainability-related corporate governance mechanisms. *Sustainability*, *14*(15), 9761.

Mohammad, W. M. W., & Wasiuzzaman, S. (2021). Environmental, social and governance (ESG) disclosure, competitive advantage, and performance of firms in Malaysia. *Cleaner Environmental Systems*, *2*, 100015.

Money, K., & Schepers, H. (2007). Are CSR and corporate governance converging?: A view from boardroom directors and company secretaries in FTSE100 companies in the UK. *Journal of General Management*, *33*(2), 1–11.

Muchemwa, M. R., Padia, N., & Callaghan, C. W. (2016). Board composition, board size and financial performance of Johannesburg Stock Exchange companies. *South African Journal of Economic and Management Sciences*, *19*(4), 497–513.

Mughal, Y. H., Jehangir, M., Khan, M., & Saeed, M. (2020). Nexus between corporate social responsibility and firm's performance: A panel data approach. *International Journal of Finance & Economics*, *26*(2), 3173–3188.

Nekhili, M., Boukadhaba, A., & Nagati, H. (2021). The ESG–financial performance relationship: Does the type of employee board representation matter? *Corporate Governance: An International Review*, *29*(2), 134–161.

Nguyen, T. H., Elmagrhi, M. H., Ntim, C. G., & Wu, Y. (2021). Environmental performance, sustainability, governance and financial performance: Evidence from heavily polluting industries in China. *Business Strategy and the Environment*, *30*(5), 2313–2331.

Nguyen, T. H. H., Ntim, C. G., & Malagila, J. (2020). Women on corporate boards and corporate financial and non-financial performance: A systematic literature review and future research agenda. *International Review of Financial Analysis*, *71*, 1–24.

Ntim, C. G. (2013). Monitoring board committee structure and market valuation in large publicly listed South African corporations. *International Journal of Managerial and Financial Accounting*, *5*(3), 310–325.

Ntim, C. G. (2015). Board diversity and organizational valuation: Unravelling the effects of ethnicity and gender. *Journal of Management & Governance*, *19*(1), 167–195.

Ntim, C. G., & Soobaroyen, T. (2013). Corporate governance and performance in socially responsible corporations: New empirical insights from a neo-institutional framework. *Corporate Governance: An International Review*, *21*(5), 468–494.

Ofoeda, I., Commey, J., Osabutey, W., & Afoley, L. (2020). Effects of internal audit committee size on profitability. *International Journal of Academic Research in Business and Social Sciences*, *10*(5), 221–228.

Orazalin, N., Ntim, C. G., & Malagila, J. (2023). Board sustainability committees, climate change initiatives, carbon performance, and market value. *British Journal of Management*. In press. https://doi.org/10.1111/1467-8551.12715

Pass, C. (2004). Corporate governance and the role of non-executive directors in large UK companies: An empirical study. *Corporate Governance: The International Journal of Business in Society*, *4*(2), 52–63.

Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource-dependence perspective*. Harper & Row.

Pozzoli, M., Pagani, A., & Paolone, F. (2022). The impact of audit committee characteristics on ESG performance in the European Union member states: Empirical evidence before and during the COVID-19 pandemic. *Journal of Cleaner Production*, *371*, 133411.

Puni, A. (2015). Do board committees affect corporate financial performance? Evidence from listed companies in Ghana. *International Journal of Business and Management Review*, *3*(5), 14–25.

Raimo, N., Vitolla, F., Marrone, A., & Rubino, M. (2021). Do audit committee attributes influence integrated reporting quality? An agency theory viewpoint. *Business Strategy and the Environment*, *30*(1), 522–534.

Romano, M., Cirillo, A., Favino, C., & Netti, A. (2020). ESG (Environmental, Social and Governance) performance and board gender diversity: The moderating role of CEO duality. *Sustainability*, *12*(21), 9298.

Rossi, M., Chouaibi, J., Chouaibi, S., Jilani, W., & Chouaibi, Y. (2021). Does a board characteristic moderate the relationship between CSR practices and financial performance? Evidence from European ESG firms. *Journal of Risk Financial Management*, *14*, 354.

Ruigrok, W., Peck, S., Tacheva, S., Greve, P., & Hu, Y. (2006). The determinants and effects of board nomination committees. *Journal of Management & Governance*, *10*, 119–148.

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, *40*(3), 534–559.

Saeed, A., Noreen, U., Azam, A., & Tahir, M. S. (2021). Does CSR governance improve social sustainability and reduce the carbon footprint: International evidence from the energy sector. *Sustainability*, *13*(7), 3596.

Samaha, K., Khlif, H., & Hussainey, K. (2015). The impact of board and audit committee characteristics on voluntary disclosure: A meta-analysis. *Journal of International Accounting, Auditing and Taxation*, *24*, 13–28.

Samans, R., & Nelson, J. (2022). Corporate governance and oversight. In *Sustainable enterprise value creation* (pp. 103–140). Palgrave Macmillan.

Samoei, R. K., & Rono, L. (2016). Audit committee size, experience, and firm financial performance. Evidence Nairobi securities exchange, Kenya. *Research Journal of Finance and Accounting*, *7*(15), 87–95.

Sarhan, A. A., & Al-Najjar, B. (2022). The influence of corporate governance and shareholding structure on corporate social responsibility: The key role of executive compensation. *International Journal of Finance & Economics*. https://doi.org/10.1002/ijfe.2663

Sarhan, A. A., Ntim, C. G., & Al-Najjar, B. (2019). Board diversity, corporate governance, corporate performance, and executive pay. *International Journal of Finance and Economics*, *24*(2), 761–786.

Shakil, M. H., Mahmood, N., Tasnia, M., & Munim, Z. H. (2019). Do environmental, social and governance performance affect the financial performance of banks? A cross-country study of emerging market banks. *Management of Environmental Quality: An International Journal*, *30*(6), 1331–1344.

Sharma, R., & Singh, F. (2009). Voluntary corporate governance disclosure: A study of selected companies in India. *Journal of Corporate Governance*, *8*(3/4), 91–108.

Shrivastav, S. M., & Kalsie, A. (2017). Corporate governance disclosure index and firm performance: Evidence from NSE companies. *Business Analyst*, *38*(1), 173–213.

Singh, S., Tabassum, N., Darwish, T. K., & Batsakis, G. (2018). Corporate governance and Tobin's Q as a measure of organizational performance. *British Journal of Management*, *29*(1), 171–190.

Soliman, M. M., & Ragab, A. A. (2014). Audit committee effectiveness, audit quality and earnings management: An empirical study of the listed companies in Egypt. *Research Journal of Finance and Accounting*, *5*(2), 155–166.

Sun, J., Cahan, S. F., & Emanuel, D. (2009). Compensation committee governance quality, chief executive officer stock option grants, and future firm performance. *Journal of Banking & Finance*, *33*(8), 1507–1519.

Suttipun, M. (2021). The influence of board composition on environmental, social and governance (ESG) disclosure of Thai listed companies. *International Journal of Disclosure and Governance*, *18*, 1–12.

Tamimi, N., & Sebastianelli, R. (2017). Transparency among S&P 500 companies: An analysis of ESG disclosure scores. *Management Decision*, *55*(8), 1660–1680.

Tumwebaze, Z., Bananuka, J., Kaawaase, T. K., Bonareri, C. T., & Mutesasira, F. (2021). Audit committee effectiveness, internal audit function and sustainability reporting practices. *Asian Journal of Accounting Research*, *7*(2), 163–181.

Uyar, A., Kuzey, C., Kilic, M., & Karaman, A. S. (2021). Board structure, financial performance, corporate social responsibility performance, CSR committee, and CEO duality: Disentangling the connection in healthcare. *Corporate Social Responsibility and Environmental Management.*, *28*, 1–19.

Vander-Bauwhede, H., & Willekens, M. (2008). Disclosure on corporate governance in the European Union. *Corporate Governance: An International Review*, *16*(2), 101–115.

Velte, P. (2016). The impact of corporate sustainability on firm performance: Evidence from Germany. *Journal of Economics and Management*, *3*(2), 52–66.

Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. *Journal of Global Responsibility*, *8*(2), 169–178.

Velte, P. (2019). Does CEO power moderate the link between ESG performance and financial performance? A focus on the German two-tier system. *Management Research Review*, *43*(5), 497–520.

Velte, P. (2021). Environmental performance, carbon performance and earnings management: Empirical evidence for the European capital market. *Corporate Social Responsibility and Environmental Management*, *28*(1), 42–53.

Velte, P., & Stawinoga, M. (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*, 333–377.

Vural-Yavaş, Ç. (2021). Economic policy uncertainty, stakeholder engagement, and environmental, social, and governance practices: The moderating effect of competition. *Corporate Social Responsibility and Environmental Management*, *28*(1), 82–102.

Waddock, S. A., & Graves, S. B. (1997). The corporate social performance–financial performance link. *Strategic Management Journal*, *18*(4), 303–319.

Wang, Q., Connelly, B. L., & Zheng, Q. (2020). ESG performance and executive compensation: The role of board governance and ownership structure. *Journal of Business Ethics*, *164*(1), 115–133.

Watts, R., & Zimmerman, J. (1986). *Positive accounting theory*. Prentice-Hall.

Weber, O. (2014). Environmental, social and governance reporting in China. *Business Strategy and the Environment*, *23*(5), 303–317.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, *5*(2), 171–180.

Wu, S. (2018). The impact of board governance on corporate social responsibility disclosure. *Journal of Business Ethics*, *151*(1), 41–56.

Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2018). Do environmental, social, and governance activities improve corporate financial performance? *Business Strategy and the Environment*, *28*(2), 286–300.

Yu, E. P. Y., Guo, C. Q., & Luu, B. V. (2018). Environmental, social and governance transparency and firm value. *Business Strategy and the Environment*, *27*(7), 987–1004.

Zahid, R. A., Khan, M. K., Anwar, W., & Maqsood, U. S. (2022). The role of audit quality in the ESG-corporate financial performance nexus: Empirical evidence from Western European companies. *Borsa Istanbul Review*, *22*, S200–S212.

Zaiane, S., & Ellouze, D. (2022). Corporate social responsibility and firm financial performance: The moderating effects of size and industry sensitivity. *Journal of Management and Governance*, 1–41. In press. https://doi.org/10.1007/s10997-022-09636-7

Zhou, G., Liu, L., & Luo, S. (2022). Sustainable development, ESG performance and company market value: Mediating effect of financial performance. *Business Strategy and the Environment*, *31*(7), 3371–3387.

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