

# Enhancing Corporate Transparency: The Impact of Auditor Quality and Audit Committee Dynamics on ESG Disclosure

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## Abstract

**Research aim:** This study examines the relationship between audit committee (AC) dynamics, such as size, gender diversity, and independence, auditor quality, and ESG disclosure practices.

**Design/ Methodology/ Approach:** Using a weighted least squared regression method, this study analyses 315 firm-year observations from 63 Malaysian public-listed companies between 2018 and 2022.

**Research finding:** The results indicate that AC independence and gender diversity significantly enhance ESG, social, and governance disclosures, while AC size negatively impacts social and governance disclosures. Auditor quality showed limited influence, with a negative effect on governance disclosure.

**Theoretical contribution/Originality:** This study contributes to agency and stakeholder theories by emphasising AC attributes' roles in mitigating information asymmetry and addressing stakeholder interests. It challenges existing assumptions about auditor quality, suggesting the need for ESG-specific audit frameworks, particularly in emerging markets.

**Practitioner/Policy implication:** For policymakers, the findings highlight the need to strengthen governance frameworks by promoting AC independence and diversity. Practitioners, especially audit firms, should integrate ESG expertise to support companies effectively. Regulators may consider revising corporate governance codes to encourage balanced ESG disclosures across all dimensions.

**Research limitation:** The study focuses solely on 63 Malaysian public-listed companies, using data between 2018 and 2022.

**Keywords:** ESG disclosure, Audit committee, Auditor quality, Agency theory, Stakeholder theory

**Type of article:** Research paper

**JEL Classification:** M14, G34, Q56

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## **1. Introduction**

Corporate executives have traditionally prioritised financial information disclosure, a fundamental responsibility under stakeholder and agency theories (Loughran & McDonald, 2014; Seow, 2025c). In recent years, however, this focus has broadened to include non-financial information, particularly environmental, social, and governance (ESG) data (Gurol & Lagasio, 2023; Seow, 2025a). This shift, driven by global disruptions, has spurred investors and shareholders to emphasise long-term value creation, integrating ESG considerations into investment decisions (Oladele et al., 2022). Beyond financial metrics, stakeholders increasingly assess sustainability information to gauge management's handling of ESG-related opportunities and risks (Sharma et al., 2020). This approach redefines comprehensive firm performance by highlighting sustainable practices as key to long-term success (Seow, 2025b). Recognising the inconsistencies in ESG data, institutional investors have enhanced efforts to assess corporate performance using standardised ESG metrics, prompting the development of robust frameworks for data collection and analysis (Ilhan, Sautner & Vilkov, 2021). As a result, organisations face growing pressure to ensure that ESG disclosures are reliable, accurate, and complete to meet financial market expectations (de Silva Lokuwaduge & de Silva, 2022; Ellili & Seow, 2025).

The growing emphasis on ESG has significantly increased the demand for transparency in corporate reporting, aligning with stakeholder theory and shifting corporate responsibility toward environmental and social concerns (Baldini et al., 2018; Hoang, 2022). Stakeholders, including customers, regulators, shareholders, employees, and social activists, expect firms to adopt socially responsible practices and align their operations with societal values (Cormier & Magnan, 2014; Fuadah et al., 2022). In response, corporations are tailoring ESG initiatives to fit institutional expectations and their organisational characteristics (Liu et al., 2022; Seow, 2024a). Voluntary ESG disclosures have risen globally as firms address information asymmetry and demonstrate their sustainability efforts and societal impacts (Ellili, 2022; Seow, 2024c). Integrating ESG concerns into corporate strategies is essential for building trust, differentiating firms in competitive markets, and ensuring long-term value creation (Li et al., 2018). This trend underscores the growing significance of ESG in shaping accountable and sustainable business practices.

In Malaysia, ESG reporting has gained momentum over the past decade. A key milestone was the Bursa Malaysia (2015) mandate requiring public-listed companies (PLCs) to disclose sustainability statements covering economic, environmental, and social (EES) impacts alongside corporate governance data. Click or tap here to enter text.. EES addresses broader impacts, while ESG focuses on specific sustainability criteria (Seow &

Loo, 2023). ESG reporting is now a standard practice among Malaysian PLCs, ranking the country second in ASEAN for sustainability reporting, just behind Singapore (ACN & CGN, 2020). The Malaysian government's commitment to the United Nations' Sustainable Development Goals (SDGs) and reforms under the Malaysian Code on Corporate Governance (MCCG) has further embedded ESG principles in corporate strategies (SC, 2021). ESG reporting has evolved from a non-financial disclosure requirement to a cornerstone of corporate governance, reinforcing its critical role in fostering sustainable business success and redefining corporate accountability and transparency.

Despite the growing focus on ESG principles, there is limited research examining the precursors of ESG disclosure, particularly the role of audit committees (ACs) and auditors (Seow, 2024b). In Malaysia, PLCs are mandated to establish an AC within their boards to promote governance practices that support long-term business sustainability (SC, 2007). The AC ensures timely, accurate, and detailed reporting of both financial and non-financial data, reinforcing transparency and accountability. External auditors complement the AC's role by providing independence, objectivity, and expertise, enhancing corporate ESG disclosure practices (Seow, 2024b). However, studies on how ACs and auditors influence ESG disclosure remain scarce, especially in Malaysia.

Existing literature on ACs covers attributes such as presence (Al Amosh & Khatib, 2021; Suttipun, 2021), meetings (Arif et al., 2020), external members (Bamahros et al., 2022), size (Umar et al., 2023), gender diversity (Bravo & Reguera-Alvarado, 2019), and independence (Arif et al., 2020; Lavin & Montecinos-Pearce, 2021). However, these studies lack a comprehensive analysis of the AC's role in ESG disclosure and its alignment with agency theory. Similarly, research on external auditors' contributions, particularly the impact of Big Four affiliation, to ESG transparency is limited, with conflicting findings and little focus on the Malaysian context (Al Amosh & Mansor, 2021; Chung, Bayne & Birt, 2024). This gap highlights the need for deeper insights into how AC attributes and auditor quality influence ESG reporting. Theoretically, while agency and stakeholder perspectives suggest that effective monitoring mechanisms should reduce information asymmetry and align corporate actions with stakeholder expectations, empirical studies have not fully reconciled how these theories apply in the ESG disclosure context. This study seeks to address these gaps by providing a comprehensive, theory-informed examination of how AC size, independence, and gender diversity, as well as external auditor quality, affect the breadth of ESG disclosures among Malaysian PLCs. To guide this inquiry, the study addresses the following research questions:

- RQ1 How do audit committee characteristics, specifically size, independence, and gender diversity, affect the extent of ESG disclosure?
- RQ2 What is the influence of auditor quality, measured by Big Four affiliation, on corporate ESG transparency?
- RQ3 Do these governance attributes differentially affect the environmental, social, and governance dimensions of ESG disclosure?

By focusing on 315 firm-year observations from 2018 to 2022, this study captures the initial implementation phase of Malaysia's mandatory ESG disclosure regime and offers empirical evidence to advance both theoretical understanding and practical policy formulation in emerging markets.

This study enhances the understanding of ESG disclosure and governance in the context of emerging economies. It offers theoretical insights into stakeholder and agency theories, emphasising the roles of ACs and external auditors in sustainable practices. By examining underexplored AC attributes, the research fills critical gaps in the literature and highlights how specific AC characteristics and auditor quality influence distinct aspects of ESG reporting. The findings provide valuable guidance for regulators in emerging markets to refine corporate governance frameworks, supporting sustainable profitability through improved ESG disclosures. Additionally, the study offers actionable insights for boards and ACs, equipping them with strategies to enhance ESG transparency and navigate the complexities of environmental and social changes in strategic management.

The paper is structured to ensure a comprehensive analysis. Section 2 reviews the relevant literature and develops hypotheses. Section 3 outlines the research framework, data collection, and sampling methods. Section 4 presents the empirical findings, offering critical insights into the research questions. Finally, Section 5 synthesises the results and discusses their broader implications, contributing to the ongoing discourse on ESG disclosure and governance.

## **2. Literature Review and Hypotheses Development**

### **2.1 Stakeholder theory**

Stakeholder theory, frequently acknowledged as a core theoretical tenet in corporate governance and sustainability, emphasises the importance of considering the interests of all stakeholders in business operations (Ismail & Latiff, 2019). Originating from Freeman's (1984) management philosophy, this theory advocates for a business approach that extends beyond the singular aim of maximising shareholder value, encompassing the broader spectrum of stakeholder interests. In today's commercial landscape, companies are expected to be seen as active ESG actors. Thus, effective engagement and communication with stakeholders are crucial

for the successful implementation of sustainability policies (Ahmed et al., 2022). The practice of ESG disclosure plays a pivotal role in shaping stakeholder perceptions of a company's practices (Hörisch et al., 2020). Furthermore, exhibiting socially responsible behaviour not only provides non-owner stakeholders with enhanced contracting opportunities, but also mitigates risks and paves the way for new avenues of growth (Velte, 2017). By adopting ESG disclosure, organisations can fulfil their duties toward a diverse array of stakeholders, thereby fostering robust and enduring relationships with them (Al Amosh & Mansor, 2021; Mohammadi, Saeidi & Naghshbandi, 2021). Additionally, this practice garners support from various stakeholder groups, reinforcing the company's commitment to corporate social responsibility (CSR) (Alsayegh, Rahman & Homayoun, 2020).

## **2.2 Agency theory**

Agency theory posits that shareholders delegate management responsibilities to agents, who oversee firms' operations due to shareholders' limited involvement in day-to-day operations. This delegation often leads to agency costs arising from the potential divergence in the interests of principals (shareholders) and agents (managers) (Jensen & Meckling, 1976, 2000). To align with stakeholder theory and mitigate information asymmetry, companies are inclined to disclose both financial and non-financial information, including their ESG practices (Harjoto & Jo, 2011). ESG disclosures are instrumental in bridging the information gap between companies and shareholders, thereby reducing agency costs (Arif et al., 2020). Cheng et al. (2014) highlight that excelling in the environmental and social aspects of ESG can lead to diminished agency costs, consequently reducing financing costs. Additionally, Gerwanski (2020) notes that the voluntary creation of integrated reports lessens information asymmetry, facilitating creditors' risk assessment and resulting in lower debt costs. Nonetheless, it is crucial to recognise that corporate managers might implement more ESG practices for personal gain, such as enhancing their own reputation or securing managerial incentives, potentially to the detriment of shareholder value (Broadstock et al., 2019).

## **2.3 Audit committee and ESG disclosure**

The impact of corporate governance mechanisms on ESG reporting has received considerable scholarly attention, with particular emphasis on the AC's evolving role in overseeing sustainability disclosures (Al-Shaer & Zaman, 2016; Salehi & Shirazi, 2016). Under Malaysia's MCCG framework, the AC is positioned as a key pillar of governance, comprising mainly independent non-executive directors with relevant financial and auditing

expertise (Al Amosh & Khatib, 2021; SC, 2007). While its traditional remit focused on financial oversight and collaboration with external auditors (Eluyela et al., 2018; Saibaba & Ansari, 2012), recent governance reforms and stakeholder expectations have expanded the AC's mandate to include ESG integration and disclosure assurance (Bédard, Coulombe & Courteau, 2008; Jamali, Safieddine & Rabbath, 2008).

A wide body of literature affirms the importance of AC in promoting transparency and mitigating agency problems, consistent with agency theory (Fama & Jensen, 1983; Rossi & Cebula, 2016). For example, AC independence and diligence are frequently associated with improved ESG alignment (Appuhami & Tashakor, 2017). However, the evidence regarding specific AC attributes, especially AC size, remains mixed. Some studies argue that larger ACs facilitate broader oversight and more comprehensive disclosures due to a diversity of expertise and workload distribution (Garas & El Massah, 2018; Mohammadi, Saeidi & Naghshbandi, 2021). Others contend that overly large ACs suffer from coordination inefficiencies and diluted accountability, leading to weaker ESG performance (Albitar, Abdoush & Hussainey, 2022; Hermawan & Gunardi, 2019). These contradictory findings suggest that AC size may exhibit a non-linear or context-dependent relationship with ESG outcomes, potentially shaped by national governance norms, cultural dynamics, or the level of regulatory enforcement.

Similarly, the literature on auditor quality, typically proxied by Big Four affiliation, offers inconclusive insights into its influence on ESG disclosure. While several studies report a positive association, attributing it to the auditors' reputational capital, stringent audit standards, and global ESG expertise (Chung, Bayne & Birt, 2024; Fernandez-Feijoo, Romero, & Ruiz., 2018), others find insignificant or even negative relationships (Habbash, Hussainey & Awad., 2016; Shan, 2019). One explanation could be that auditor focus remains primarily on financial compliance, with limited incorporation of ESG materiality into audit processes, particularly in emerging markets where ESG assurance frameworks are still nascent. This raises questions about the symbolic role of high-profile auditors in ESG reporting, challenging the assumption that reputational incentives alone drive deeper sustainability engagement.

Taken together, these inconsistencies underscore the need for further empirical investigation into how AC dynamics and auditor quality function as ESG disclosure mechanisms, particularly in contexts like Malaysia, where governance reforms are ongoing and ESG expectations are rapidly evolving. By addressing these ambiguities, this study contributes to a more nuanced understanding of governance-ESG linkages and their theoretical underpinnings.

### 2.3.1 Audit committee size

AC size is widely regarded as a structural attribute influencing the effectiveness of audit committees in overseeing financial and non-financial reporting (Albitar, Abdoush & Hussainey, 2022; Kent & Stewart, 2008). Several studies have reported a positive association between AC size and CSR or ESG disclosures, suggesting that a larger committee may enhance oversight capacity by incorporating a broader range of expertise, skills, and perspectives. For instance, Garas and El Massah (2018) find a significant positive relationship in firms from Gulf Cooperation Council countries, with similar patterns observed in Iranian and Malaysian contexts (Alotaibi & Hussainey, 2016; Appuhami & Tashakor, 2017; Mohammadi, Saeidi & Naghshbandi, 2021). These findings support the view that an expanded AC can better allocate responsibilities, engage more effectively with management, and promote comprehensive disclosure practices. However, this optimistic perspective is not universally supported. Other studies highlight a potential downside to larger ACs, noting that excessive size may hinder decision-making efficiency, reduce cohesion, and dilute individual accountability. For example, Kent and Stewart (2008) find that smaller ACs in Australian firms are associated with greater disclosure levels, a finding echoed in the Indonesian banking sector by Hermawan and Gunardi (2019). These contradictory findings suggest that the relationship between AC size and ESG disclosure may not be linear; rather, it could depend on contextual factors such as national governance norms, regulatory pressures, cultural attitudes toward compliance, and the maturity of ESG practices within the firm. Despite the mixed results, this study hypothesises that:

- H<sub>1</sub> AC size has a positive impact on ESG disclosure
- H<sub>1a</sub> AC size has a positive impact on environmental disclosure
- H<sub>1b</sub> AC size has a positive impact on social disclosure
- H<sub>1c</sub> AC size has a positive impact on governance disclosure

### 2.3.2 Gender diversity of the audit committee

The presence of female members on ACs has received increasing attention in ESG disclosure research, primarily due to the perceived value of gender diversity in enhancing governance quality. Numerous studies suggest that women bring distinctive perspectives and ethical orientations that contribute to a more stakeholder-inclusive approach to decision-making (Arayssi, Dah & Jizi, 2016). Empirical evidence supports the view that female directors tend to engage in more rigorous monitoring, demonstrate heightened meeting preparedness, and emphasise accountability and transparency, particularly in relation to social and environmental issues (Galbreath, 2018;

Husted & Sousa-Filho, 2019; Srinidhi, Gul & Tsui, 2011). From a stakeholder theory perspective, gender-diverse ACs may be better attuned to a wider range of societal expectations, thus promoting broader and more balanced ESG disclosures. This aligns with findings that women are more likely to champion sustainability-related agendas and assume leadership roles in environmental oversight (Liao, Luo & Tang, 2015; Rao & Tilt, 2016). For example, Appuhami and Tashakor (2017) and Bravo and Reguera-Alvarado (2019) find that greater female participation in ACs is positively associated with ESG transparency, particularly in the social and governance domains.

However, despite the largely affirmative tone in the literature, the strength and consistency of these effects may be context-dependent. In jurisdictions with weak enforcement or symbolic diversity policies, gender inclusion on ACs may be more performative than functional, thereby limiting its real impact on ESG practices. Moreover, some studies do not disaggregate ESG dimensions, potentially masking domain-specific effects. For instance, the influence of gender diversity may be more pronounced in social disclosures, where stakeholder sensitivity is higher, but less so in technical environmental disclosures requiring specialised expertise. These nuances highlight the need for more granular and context-specific analysis of how gender diversity within ACs influences ESG disclosure patterns. Accordingly, this study examines the following hypotheses:

H<sub>2</sub> AC gender diversity has a positive impact on ESG disclosure

H<sub>2a</sub> AC gender diversity has a positive impact on environmental disclosure

H<sub>2b</sub> AC gender diversity has a positive impact on social disclosure

H<sub>2c</sub> AC gender diversity has a positive impact on governance disclosure

### *2.3.3 Audit committee independence*

The MCCG stipulates that AC members must be drawn from independent or non-independent non-executive directors (SC, 2007). An independent AC is theorised to serve as a crucial monitoring mechanism that mitigates managerial opportunism and aligns managerial actions with shareholder and stakeholder interests (Arif et al., 2020). From an agency theory perspective, greater independence is expected to improve the credibility and objectivity of financial and non-financial disclosures. Indeed, several studies support this notion, indicating that a higher proportion of independent directors on the AC enhances transparency and disclosure quality (Dewata, Hadi & Jauhari, 2016; Farooq et al., 2018; Mangena & Pike, 2005; Pucheta-Martínez & De Fuentes, 2007). However, the empirical evidence is not uniformly consistent, especially within the ESG disclosure domain. While Arif et al. (2020) find a positive effect of AC independence on ESG disclosure in Australia, Lavin and Montecinos-Pearce (2021) report an insignificant relationship in

Chile. Similarly, studies examining CSR as a proxy for ESG, such as Said, Zainuddin and Haron (2009) in Malaysia and Appuhami and Tashakor (2017) in Australia, present favourable findings, but the generalisability across governance systems and disclosure regimes remains uncertain.

These divergent outcomes suggest that the effectiveness of AC independence may be contingent upon contextual factors, including the strength of regulatory enforcement, the prevalence of symbolic compliance, and cultural or institutional differences in how independence is interpreted and enacted. For instance, in jurisdictions where independent directors lack sufficient ESG expertise or where board independence is mandated but not substantively implemented, the anticipated benefits may not materialise. Moreover, the influence of independence may vary across different ESG dimensions, being potentially more relevant for governance disclosures than for technical environmental reporting. This study, therefore, seeks to empirically test whether increased independence within the AC correlates with enhanced ESG disclosure among Malaysian PLCs, where ESG reporting has transitioned from voluntary to mandatory in recent years. Therefore, this study hypothesises the following:

- H<sub>3</sub> AC independence has a positive impact on ESG disclosure.
- H<sub>3a</sub> AC independence has a positive impact on environmental disclosure
- H<sub>3b</sub> AC independence has a positive impact on social disclosure
- H<sub>3c</sub> AC independence has a positive impact on governance disclosure

### 2.3.4 Auditor quality

The engagement of external independent auditors, particularly those from Big Four audit firms, is frequently associated with improved corporate transparency and enhanced quality of both financial and non-financial disclosures (Fernandez-Feijoo, Romero & Ruiz, 2018). Owing to their global reputation, rigorous auditing standards, and extensive resources, Big Four firms are often perceived as catalysts for enhanced ESG reporting practices (Hazaea et al., 2020; Wong et al., 2016). From a stakeholder theory perspective, this aligns with the idea that reputable external auditors help firms satisfy stakeholder demands for credible and comprehensive sustainability disclosures (Al Amosh & Mansor, 2021). Empirical support for this view is evident in studies linking Big Four affiliation with broader ESG disclosures in Hong Kong (Chung, Bayne & Birt, 2024), as well as greater CSR transparency across multiple jurisdictions (Alkayed & Omar, 2022; Ananzeh, 2022; Mohamed Adnan, Hay & van Staden, 2018).

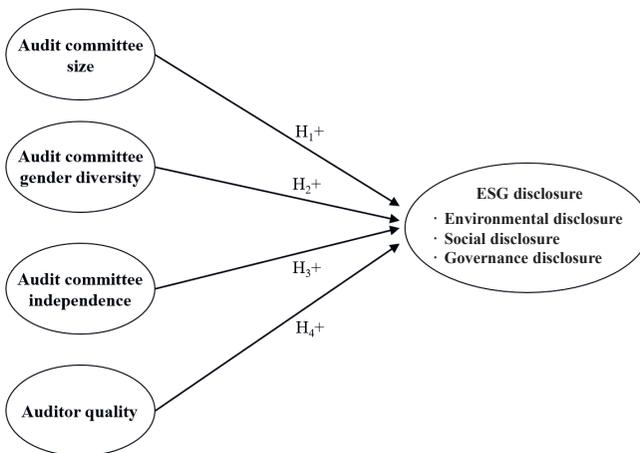
However, this positive association is not universally observed. Shan (2019), for instance, reports an insignificant relationship between Big Four auditors and voluntary disclosure among Chinese firms, while Habbash,

Hussainey and Awad (2016) find similar null results in the Saudi Arabian context. These contradictory findings raise important questions about the conditions under which auditor quality influences ESG disclosure. One possible explanation is that Big Four affiliation does not automatically translate into greater ESG engagement, particularly in jurisdictions where ESG reporting is either weakly regulated or treated as symbolic. In such settings, audit firms may prioritise financial reporting compliance over non-mandatory sustainability assurance, thereby limiting their influence on ESG disclosure practices. Additionally, cultural, institutional, and regulatory environments can mediate the extent to which audit quality impacts sustainability reporting. For example, in markets where ESG expectations are still evolving or lack enforcement mechanisms, the role of external auditors may be more ceremonial than substantive. These inconsistencies suggest that auditor quality may not function uniformly across all institutional contexts and that its effect on ESG reporting is likely contingent on both external regulatory environments and internal corporate governance maturity. Considering these diverse findings, this study proposes the following hypotheses:

- H<sub>4</sub> Auditor quality has a positive impact on ESG disclosure.
- H<sub>4a</sub> Auditor quality has a positive impact on environmental disclosure
- H<sub>4b</sub> Auditor quality has a positive impact on social disclosure
- H<sub>4c</sub> Auditor quality has a positive impact on governance disclosure

The conceptual framework of this study is illustrated in Figure 1 below.

Figure 1. Empirical Research Model



### 3. Methodology

#### 3.1 Data and sample selection

As of June 2023, 789 large companies are listed on Bursa Malaysia's Main Market. Consistent with prior research, banks and financial institutions were excluded due to their unique ESG considerations and accounting standards (Seow, 2025a; Sharma, Panday & Dangwal, 2020). Similarly, special purpose acquisition companies, real estate investment trusts, and closed-ended funds were omitted due to their distinct operational frameworks. Using a 10% margin of error, 90% confidence level, and 50% standard deviation, the Raosoft sample size calculator determined a minimum sample size of 63 companies for reliable statistical analysis (Alhomoud, 2016; Raosoft Inc., 2023). Accordingly, 63 companies were selected through stratified random sampling to ensure proportional representation across the 11 industries outlined in Table 1 (Wan Mohammad, Zaini & Kassim, 2023). The study focuses on the 2018–2022 period to account for the introduction of mandatory ESG disclosures in 2018, which many Malaysian companies approach as a regulatory compliance exercise (Seow & Loo, 2023). Data for 315 firm-year observations were collected from publicly accessible annual, corporate governance, and sustainability reports available on the Bursa Malaysia website.

**Table 1: Data Sample Across Industries**

No.	Industry	No. companies	No. firm-year observation
1	Construction	4	20
2	Consumer products and services	15	75
3	Energy	2	10
4	Healthcare	1	5
5	Industrial products and services	19	95
6	Plantation	4	20
7	Property	8	40
8	Technology	4	20
9	Telecommunications and media	2	10
10	Transportation and logistics	3	15
11	Utilities	1	5
	Total	63	315

### 3.2 Variables

Many researchers rely on ESG scores from rating agencies, but their opaque methodologies often result in significant inconsistencies (Berg, Kölbel & Rigobon, 2022; Christensen, Serafeim & Sikochi, 2022). Clément, Robinot and Trespeuch (2023) further critique the universal application of such scores, highlighting their context-specific limitations. To address these challenges, this study employs a content analysis approach, widely used in ESG disclosure research (Chung, Bayne & Birt, 2024; Seow, 2025a), to draw systematic and valid inferences from textual data (Krippendorff, 2019). In the absence of a universal ESG framework, a customised 37-criterion framework was developed by integrating elements from Cordazzo, Bini and Marzo (2020), Li et al. (2021), and the *PLCT Guidebook 2* (Bursa Malaysia, 2022) to align with local requirements. ESG disclosures were identified and matched against this framework through detailed line-by-line analysis of annual, sustainability, and corporate governance reports. To ensure coding reliability, three ESG researchers were involved throughout the process. Prior to formal coding, the team underwent joint coder training sessions, including multiple calibration exercises to align interpretation of the disclosure criteria. A pilot coding exercise was conducted on a subsample of ten firms, during which inter-rater reliability was assessed using Krippendorff's alpha. Discrepancies were resolved through consensus discussions, and the coding manual was refined accordingly to enhance clarity and replicability. An unweighted binary scoring system assigned 1 for disclosure and 0 for non-disclosure (Seow, 2025b). This method, while simplistic, was selected for its objectivity and ease of replication across firms and years. It avoids the subjectivity associated with assessing disclosure depth or quality, which can introduce coder bias, particularly in cross-sectional studies where disclosure formats vary widely. The aggregated scores were normalised on a 1–100 scale, with separate calculations for environmental (ED), social (SD), and governance disclosures (GD).

Four independent variables are examined (see Table 2). AC size (ACS) is measured by the number of AC members (Arif et al., 2020), while AC gender diversity (ACGD) is the proportion of female members (Bravo & Reguera-Alvarado, 2019). AC independence (ACIND) reflects the ratio of independent directors on the AC (Bamahros et al., 2022). Auditor quality (AUDQ) is a binary variable, assigned 1 if the external auditor is a Big Four firm, and 0 otherwise (Ananzeh, 2022). Data for these variables were meticulously sourced from the sample firms' annual reports.

**Table 2: Variables and Their Definitions**

Variable	Notation	Measure
Audit committee size	ACS	Number of audit committee members
Audit committee gender diversity	ACGD	Percentage of female representation in the audit committee
Audit committee independence	ACIND	Percentage of independent directors on the audit committee
Auditor quality	AUDQ	A dummy variable, 1 in case of the external auditor belongs to one of the big four auditing firms, 0 otherwise
ESG disclosure score	ESGD	Sum of ESG items disclosed, ranging from 1 to 100
Environmental disclosure score	ED	Sum of environmental items disclosed, ranging from 1 to 100
Social disclosure score	SD	Sum of social items disclosed, ranging from 1 to 100
Governance disclosure score	GD	Sum of governance items disclosed, ranging from 1 to 100
Board size	BSIZE	Number of directors
Board independence	BIND	Ratio of independent directors on the board
Board gender diversity	BGD	Ratio of female representation on the board
CEO tenure	CEOT	Duration of the CEO's term in office
Firm size	SIZE	Natural log of total assets
Profitability	ROA	Net income divided by total assets
Leverage	LEV	Total liabilities divided by total assets

This study controls for extraneous variables influencing ESG practices by incorporating a range of established control variables (Manita et al., 2018). Board size (BSIZE), representing the total number of directors, board independence (BIND), measured as the percentage of independent directors, and board gender diversity (BGD), defined by the proportion of female directors, are included due to their documented impact on ESG disclosure (Bhatia & Marwaha, 2022; Fallah & Mojarrad, 2019; Husted & Sousa-Filho, 2019; Ismail & Latiff, 2019; Malik et al., 2020). CEO tenure (CEOT), reflecting the length of the CEO's leadership, is also considered for its potential influence (Seow, 2025a). Firm size (SIZE), measured as the natural logarithm of total assets, accounts for the tendency of larger firms to engage more actively in ESG initiatives (Kamaludin et al., 2022). Profitability, assessed via return on assets (ROA), reflects the expectation that profitable firms face higher demands for social responsibility (Qasem et al., 2022). Financial leverage (LEV), calculated as the ratio of total debt to total assets, is

included to account for variations in ESG practices associated with differing debt levels (Orazalin & Mahmood, 2019). These variables provide a robust framework for isolating the effects of the main explanatory variables on ESG disclosure.

### 3.3 Model specification

In this empirical study, several regression analyses were conducted to explore the impact of AC characteristics and auditor quality on ESG disclosure. The regression models formulated for these analyses are as follows:

$$ESGD_{i,t} = \beta_0 + \beta_1(ACS)_{i,t} + \beta_2(ACGD)_{i,t} + \beta_3(ACIND)_{i,t} + \beta_4(AUDQ)_{i,t} + \beta_5(BSIZE)_{i,t} + \beta_6(BIND)_{i,t} + \beta_7(BGD)_{i,t} + \beta_8(CEOT)_{i,t} + \beta_9(SIZE)_{i,t} + \beta_{10}(ROA)_{i,t} + \beta_{11}(LEV)_{i,t} + \varepsilon_t$$

$$ED_{i,t} = \beta_0 + \beta_1(ACS)_{i,t} + \beta_2(ACGD)_{i,t} + \beta_3(ACIND)_{i,t} + \beta_4(AUDQ)_{i,t} + \beta_5(BSIZE)_{i,t} + \beta_6(BIND)_{i,t} + \beta_7(BGD)_{i,t} + \beta_8(CEOT)_{i,t} + \beta_9(SIZE)_{i,t} + \beta_{10}(ROA)_{i,t} + \beta_{11}(LEV)_{i,t} + \varepsilon_t$$

$$SD_{i,t} = \beta_0 + \beta_1(ACS)_{i,t} + \beta_2(ACGD)_{i,t} + \beta_3(ACIND)_{i,t} + \beta_4(AUDQ)_{i,t} + \beta_5(BSIZE)_{i,t} + \beta_6(BIND)_{i,t} + \beta_7(BGD)_{i,t} + \beta_8(CEOT)_{i,t} + \beta_9(SIZE)_{i,t} + \beta_{10}(ROA)_{i,t} + \beta_{11}(LEV)_{i,t} + \varepsilon_t$$

$$GD_{i,t} = \beta_0 + \beta_1(ACS)_{i,t} + \beta_2(ACGD)_{i,t} + \beta_3(ACIND)_{i,t} + \beta_4(AUDQ)_{i,t} + \beta_5(BSIZE)_{i,t} + \beta_6(BIND)_{i,t} + \beta_7(BGD)_{i,t} + \beta_8(CEOT)_{i,t} + \beta_9(SIZE)_{i,t} + \beta_{10}(ROA)_{i,t} + \beta_{11}(LEV)_{i,t} + \varepsilon_t$$

where  $\beta_0$  is the constant term of the regression,  $\beta_1 - \beta_4$  the coefficients associated with the independent variables,  $\beta_5 - \beta_{11}$  the coefficients of the control variables,  $i$  the firms included in the sample,  $t$  the specific time period under consideration, and  $\varepsilon$  the error term in the regression models.

For the data analysis, Statistical Package for Social Sciences (SPSS) Statistics 28 software was used. This advanced statistical tool facilitates a nuanced examination of how AC characteristics correlate with corporate ESG disclosure practices (Bala, 2016). The use of SPSS enhances the depth and reliability of the analysis, offering critical insights into the corporate governance factors that shape Malaysian corporate ESG reporting (Ismail & Latiff, 2019).

Moreover, to assess multicollinearity and heteroscedasticity within the dataset, variance inflation factor (VIF) diagnostics and the Breusch-Pagan test were conducted. The VIF results indicated no significant multicollinearity among the variables, whereas the Breusch-Pagan test confirmed the presence of heteroscedasticity. To address this, weighted least squares (WLS) regression was employed, adjusting for conditional variance to restore analytical efficiency and ensure the validity of inferential methods (Seow, 2024a). This approach enhances the accuracy of examining the impact of AC characteristics and auditor quality on ESG reporting practices (Habshah, Sani & Arasan, 2018).

## 4. Empirical Results

### 4.1 Descriptive statistics

The mean ESGD score is 47.727, indicating significant diversity in ESG practices among these firms (see Table 3). These findings are in line with previous studies on Malaysian PLCs (Kamaludin et al., 2022; Mohd Azhari, Mahmud & Yildiz, 2023). ED and SD display mid-30s mean scores with substantial variability, while GD has a notably higher average score and a narrower distribution. The ACS typically consists of 3.298 members and the ACGD has a mean score of 0.133. ACIND is notably high, with an average of 0.927, indicating the strong presence of independent directors in AC. There is a strongly balanced AUDQ where 50.2% of firms engage with Big Four audit firms. The means for SIZE, ROA, and LEV are 5.933, 0.036, and 0.384 respectively, providing insights into company scale, financial performance, and leverage levels.

**Table 3: Descriptive Statistics**

Variables	Mean	Std. Deviation	Minimum	Maximum
ESG	47.727	13.043	16.00	84.00
ED	36.089	20.835	0.00	89.00
SD	36.600	17.398	0.00	87.00
GD	68.759	11.491	38.00	92.00
ACS	3.298	0.570	1.00	6.00
ACGD	0.133	0.204	0.00	0.75
ACIND	0.927	0.132	0.50	1.00
AUDQ	0.502	0.501	0.00	1.00
SIZE	5.933	0.661	4.61	7.88
ROA	0.036	0.085	-0.47	0.85
LEV	0.384	0.209	0.00	1.00

*Notes:* ESGD: ESG disclosure score, ED: environmental disclosure score, SD: social disclosure score; GD: governance disclosure score, ACS: audit committee size, ACGD: audit committee gender diversity, ACIND: audit committee independence, AUDQ: auditor quality, SIZE: firm size, ROA: profitability, LEV: leverage.

### 4.2 Correlation analysis

The correlation matrix in Table 4 analyses the relationships between corporate ESG reporting, AC characteristics, auditor quality, and financial performance metrics. A positive correlation was observed between the

ESGD score and its components (ED, SD, and GD), suggesting that firms excelling in one ESG dimension often perform well in others, indicating a comprehensive sustainability approach. While ESGD correlated significantly with most variables, exceptions such as ACIND and AUDQ highlight the nuanced effects of these factors on ESG reporting. Variations in the correlations between ED, SD, GD, and other variables suggest differing influences on specific aspects of sustainability. Positive correlations for variables associated with ED, SD, or GD emphasise the role of diverse AC compositions in enhancing ESG commitments.

Correlation coefficients below 0.8 indicate no significant multicollinearity among variables (Qasem et al., 2022). To confirm this, variance inflation factor (VIF) diagnostics showed all values below 1.5, well within the acceptable threshold of 3 (Purwanto & Sudargini, 2021). However, a Breusch-Pagan test revealed heteroscedasticity ( $p = 0.008$ ), indicating inconsistent variances across the dataset (Halunga, Orme & Yamagata, 2017).

**Table 4: Correlation Matrix**

Variables	ESGD	ED	SD	GD	ACS	ACGD	ACIND	AUDQ	SIZE	ROA	LEV
ESGD	1										
ED	0.788**	1									
SD	0.867**	0.482**	1								
GD	0.741**	0.460**	0.468**	1							
ACS	0.148**	0.230**	0.051	0.105	1						
ACGD	0.148**	0.053	0.133*	0.174**	0.138*	1					
ACIND	0.065	-0.017	0.141*	-0.011	-0.001	-0.108	1				
AUDQ	0.073	0.086	0.023	0.079	0.177**	0.050	-0.111*	1			
SIZE	0.478**	0.454**	0.326**	0.398**	0.276**	0.043	-0.076	0.231**	1		
ROA	0.169**	0.169**	0.113*	0.135*	0.001	0.161**	-0.060	-0.092	-0.109	1	
LEV	0.127*	0.068	0.107	0.132*	0.050	0.043	-0.162**	0.140*	0.500**	-0.267**	1
VIF	-	-	-	-	1.132	1.064	1.058	1.091	1.131	1.482	1.492

Notes: \* Correlations are significant at the 0.05 level (2-tailed). \*\* Correlations are significant at the 0.01 level (2-tailed). ESGD: ESG disclosure score, ED: environmental disclosure score, SD: social disclosure score, GD: governance disclosure score, ACS: audit committee size, ACGD: audit committee gender diversity, ACIND: audit committee independence, AUDQ: auditor quality, SIZE: firm size, ROA: profitability, LEV: leverage.

### 4.3 Regression results

The analysis reveals a complex and dimension-specific relationship between AC size and ESG disclosure among Malaysian PLCs. As shown in Table 5,

while AC size was positively associated with environmental disclosure, it exhibited a significant negative correlation with both social and governance disclosures, and an overall insignificant relationship with total ESG disclosure. These mixed findings offer only partial support for H<sub>1a</sub> while necessitating the rejection of H<sub>1</sub>, H<sub>1b</sub>, and H<sub>1c</sub>. Although prior studies such as Fahad and Rahman (2020) and Mangena and Pike (2005) reported no clear link between AC size and disclosure quality, the present study advances this literature by distinguishing ESG dimensions, revealing that the direction of impact may vary depending on disclosure type. A possible theoretical explanation lies in the coordination and decision-making inefficiencies often attributed to larger committees (Albitar, Abdoush & Hussainey, 2022). While more members may enhance environmental monitoring, especially where regulatory and reputational pressures are higher, they may also dilute focus, reduce cohesion, and create strategic ambiguity when addressing complex or less regulated domains such as social and governance issues. This pattern supports the idea that larger ACs may engage more with issues under regulatory scrutiny (e.g., environmental risks) while deprioritising less enforced areas, consistent with institutional and resource-based views.

The consistent and significant positive effects of AC gender diversity and independence on ESG, social, and governance disclosures (but not environmental) suggest that diverse and independent ACs may be more stakeholder-oriented, particularly in addressing softer, socially embedded dimensions of ESG. These findings supported H<sub>2</sub>, H<sub>2b</sub>, and H<sub>2c</sub>, but not H<sub>2a</sub>. These results align with stakeholder theory and prior findings (Bravo & Reguera-Alvarado, 2019; Rao & Tilt, 2016), but also reinforce the argument that environmental reporting may be driven more by external regulatory and reputational imperatives than by internal committee dynamics. Appuhami and Tashakor (2017) report similar positive impacts on Australian firms. The increased focus on social and governance issues, often attributed to the unique sensitivity and commitment of female members (Rao & Tilt, 2016), underscores the pivotal role women play in enhancing ESG transparency, as evidenced in this study.

**Table 5: WLS Regression Results**

	ESGD	ED	SD	GD
ACS	-0.003	0.060***	-0.147***	-0.064***
ACGD	0.088***	-0.019	0.599***	0.396***
ACIND	0.216***	0.014	0.385***	0.098***
AUDQ	-0.017	-0.013	-0.042	-0.072**
SIZE	0.943***	1.343***	1.544***	1.355***
ROA	0.341***	0.155***	0.355***	0.172***

	ESGD	ED	SD	GD
LEV	-0.112***	-0.447***	0.005	-0.113***
N	315	315	315	315
R <sup>2</sup>	0.995	0.995	0.965	0.992
Adjusted R <sup>2</sup>	0.995	0.995	0.965	0.992
F-statistic	8,764.950	8,383.901	1,230.347	5,799.635
Durbin-Watson	0.922	0.939	0.961	1.039

Notes: \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively. ESGD: ESG disclosure score, ED: environmental disclosure score, SD: social disclosure score, GD: governance disclosure score, FOWN: family ownership, FCEO: family CEO, FEXEC: family executive chairman, FEFE: family executive director, SIZE: firm size, ROA: profitability, LEV: leverage.

The findings concerning the impact of AC independence closely parallel those related to AC gender diversity. Empirical evidence consistently indicates a positive and significant correlation between AC gender diversity and enhanced overall ESG, social, and governance disclosures. An exception is noted in environmental disclosure, where the impact of gender diversity appears negative, albeit not significantly. These patterns endorsed  $H_{3'}$ ,  $H_{3b'}$  and  $H_{3c'}$  while refuting  $H_{3a}$ . These results align with the studies conducted by Appuhami and Tashakor (2017) and Arif et al. (2020), as well as echo the arguments put forth by Said, Zainuddin and Haron (2009) regarding the positive influence of greater independence within AC on ESG transparency in Malaysian PLCs. From the perspective of agency theory, it appears that independent directors are fulfilling their oversight roles effectively, thus promoting enhanced management focus on ESG initiatives.

Surprisingly, the findings for auditor quality reveal no significant influence on ESG disclosure, except for a significant negative association with governance disclosure, thereby rejecting  $H_{4'}$ ,  $H_{4a'}$  and  $H_{4b}$  while partially supporting  $H_{4c}$ . These observations are in line with the findings of Al Amosh and Khatib (2021) for Jordanian firms and Alotaibi and Hussainey (2016) for Saudi Arabian firms, where auditor quality was not found to significantly influence ESG or CSR disclosures, respectively. These results challenge assumptions based on stakeholder theory that Big Four affiliation naturally improves transparency (Fernandez-Feijoo, Romero & Ruiz, 2018). A plausible explanation is rooted in symbolic compliance and decoupling practices, where firms engage reputable auditors to signal legitimacy, while substantive ESG engagement remains superficial, especially in institutional environments with limited ESG assurance mandates (Habbash, Hussainey & Awad, 2016; Shan, 2019). Moreover, Big Four auditors may prioritise traditional financial compliance, lacking the specialised ESG expertise

or incentive structures needed to shape firms' sustainability disclosure practices, particularly in emerging markets like Malaysia, where ESG integration into audit services is still maturing.

Moreover, the high  $R^2$  values observed across models (e.g., above 0.99) may raise concerns of overfitting, especially when paired with the insignificant findings for some variables. However, the absence of multicollinearity (as indicated by low VIFs) and the use of robust weighting methods (WLS) mitigate this risk to some extent. Still, these values suggest that the models may be highly tailored to the sample data, possibly due to the structured binary scoring of ESG items, the homogeneity of ESG disclosures during early mandatory compliance, or latent firm-level factors not captured in the model.

The investigation of the relationship between corporate financial performance and ESG disclosure revealed significant associations. The study's findings indicate that both the size and the profitability of a firm are positively and significantly related to all ESG dimensions. This trend suggested a greater inclination toward ESG activities among larger and more profitable firms, a conclusion that aligns with the literature (Chung, Bayne & Birt, 2024; Khalid et al., 2022; Rahman et al., 2021). These studies collectively underscore the correlation between firm size, profitability, and active ESG engagement. In contrast, the analysis revealed that firms with higher leverage exhibit a reduced tendency toward comprehensive ESG reporting, particularly in terms of environmental and governance aspects. This observation is consistent with the findings of Mehmood, De Luca and Quach (2023) and Toerien, Breedts and Jager (2023), who identify a negative correlation between financial leverage and ESG reporting. However, this finding stands in stark contrast to that of Huang et al. (2022), who report a positive correlation, suggesting that the impact of financial leverage on ESG reporting may vary according to specific firm contexts and characteristics.

#### **4.4 Robustness check**

To further validate the robustness of these results, the study employed an alternative WLS regression model, (Cordazzo, Bini & Marzo, 2020). This model recalculated the ESGD as the mean of the ED, SD, and GD scores, rather than as a summation (Avramov et al., 2022). The refined ESGD served as the dependent variable in this robustness test. The outcomes of this secondary WLS regression echoed the primary analysis, with only minor differences in coefficient magnitudes. The consistency of these results with the initial analysis bolsters the study's conclusions, underscoring the significant influence of AC on ESG reporting practices among Malaysian PLCs. This concurrence affirms the reliability and validity of the study's primary findings, enhancing its contribution to the academic discourse on corporate sustainability practices.

## **5. Discussion**

This study offers critical insights into the governance determinants of ESG disclosure among Malaysian PLCs, with a particular focus on AC characteristics and external auditor quality. The findings reveal nuanced and, at times, counterintuitive relationships that contribute to both theory and practice. While AC size exhibited a non-significant negative association with overall ESG disclosure, it had a positive effect on environmental disclosure and significant negative effects on social and governance disclosures. These contrasting effects suggest that AC size may not operate uniformly across ESG domains. Echoing Albitar, Abdoush and Hussainey (2022), this pattern indicates that larger ACs may face coordination and oversight challenges, particularly in areas requiring qualitative judgment and stakeholder engagement. From an agency theory perspective, these results underscore that structural attributes alone, such as AC size, do not guarantee effective oversight. Instead, the influence of ACs may be mediated by regulatory focus, internal dynamics, and the prioritisation of specific ESG domains.

The significant positive impact of AC gender diversity on social and governance disclosures reinforces stakeholder theory's proposition that diverse boards are more attuned to stakeholder expectations. Female AC members may bring greater sensitivity to social justice, ethical governance, and transparency concerns (Bravo & Reguera-Alvarado, 2019; Rao & Tilt, 2016). However, the absence of a similar effect on environmental disclosure highlights the dimension-specific nature of ESG responsiveness and suggests that the impact of gender diversity may be stronger where stakeholder visibility and accountability are higher. Similarly, the consistently positive influence of AC independence across ESG, social, and governance disclosures supports agency theory by demonstrating the role of independent directors in mitigating managerial discretion and enhancing transparency. Yet, the lack of significant effect on environmental disclosure may reflect limitations in internal expertise or insufficient regulatory enforcement in that domain, thereby calling for more targeted ESG oversight mechanisms.

Most notably, the findings regarding auditor quality challenge prevailing assumptions. Contrary to expectations, the study finds no significant effect of Big Four affiliation on overall ESG disclosure and a significant negative association with governance disclosure. This outcome diverges from prior studies that emphasise the role of Big Four auditors in promoting transparency through reputational capital and higher assurance standards (e.g., Chung, Bayne & Birt, 2024; Fernandez-Feijoo, Romero & Ruiz, 2018). One possible explanation lies in the symbolic compliance perspective, whereby the engagement of prestigious audit firms may serve more as a reputational signal than as a mechanism for substantive ESG scrutiny. In institutional contexts like Malaysia, where ESG assurance is still

evolving and often non-mandatory, Big Four auditors may focus primarily on financial compliance, with ESG issues treated as peripheral or client-driven.

Additionally, ESG expertise within audit firms remains unevenly developed, and audit engagements may not systematically incorporate sustainability metrics into their assurance processes. This may limit the auditors' capacity to meaningfully influence ESG reporting, particularly for governance disclosures, which are often viewed as internal matters. These findings align with the notion of decoupling, where firms adopt formal structures (e.g., hiring Big Four auditors) to gain legitimacy without necessarily enhancing substantive outcomes. From a theoretical standpoint, these results suggest that auditor quality may not function uniformly across disclosure domains or institutional contexts, and its effectiveness is contingent on the integration of ESG standards within the assurance ecosystem.

Taken together, these surprising findings invite a re-examination of traditional assumptions embedded in stakeholder and agency theories, particularly when applied to ESG disclosure in emerging markets. They underscore the importance of contextualising governance mechanisms, recognising that their effects are mediated by institutional, cultural, and regulatory environments.

## **6. Conclusion**

There is a burgeoning global trend compelling companies to augment their disclosure of non-financial information, particularly pertaining to ESG aspects. This trend has gained substantial momentum due to heightened awareness of sustainability issues, with Malaysia being a prominent proponent. Grounded in both stakeholder and agency theories, this study investigates the interplay between AC dynamics, auditor quality, and ESG disclosure practices in Malaysian PLCs, providing valuable insights into corporate governance and sustainability reporting. This research identifies AC independence and gender diversity as significant contributors to enhanced ESG transparency, particularly in social and governance dimensions. Conversely, AC size and auditor quality exhibited limited influence, with notable divergences in governance disclosure outcomes. These findings underscore the importance of effective AC composition in promoting robust ESG reporting and highlight the potential underutilisation of auditor expertise in driving ESG initiatives. The study contributes to the literature by addressing gaps in understanding ESG disclosure determinants and offers actionable recommendations for regulators and corporations to enhance governance frameworks, ensuring greater alignment with sustainability goals.

The study's limitations pave the way for future research directions. First, as the focus is limited to Malaysian PLCs, extending the research to other geographic, cultural, and sectoral contexts, as well as conducting comparative analyses, would provide broader insights. Second, examining ESG disclosure practices across different industries, or comparing family and non-family firms in Malaysia, could enrich the understanding of ESG disclosure diversity which this study has omitted. Third, in addition to AC attributes, future research might also consider other corporate governance factors, including top leadership attributes, board characteristics, and family involvement, to provide a more comprehensive view of the antecedents of ESG disclosure. Lastly, exploring diversity in the AC beyond gender, such as age, tenure, expertise, and educational background, could further enrich academic discussions and offer practical insights into corporate sustainability and governance for a wider range of stakeholders.

### **6.1 Implications**

This study advances theoretical understanding by integrating stakeholder and agency theories to explore the governance dynamics underlying ESG disclosure in an emerging market context. The findings reinforce agency theory by demonstrating that AC independence and gender diversity significantly enhance ESG transparency, suggesting that effective monitoring reduces information asymmetry and strengthens accountability. At the same time, stakeholder theory is extended by showing that diverse AC compositions respond more effectively to the varied expectations of internal and external stakeholders, especially within the social and governance dimensions. However, the lack of a significant or positive relationship between auditor quality and ESG disclosure, contrary to dominant assumptions, invites theoretical refinement. It suggests that reputational capital and monitoring incentives associated with Big Four auditors may be insufficient when ESG assurance mechanisms are not formally institutionalised. This calls for a more nuanced theoretical framing that incorporates institutional theory and symbolic compliance, recognising that governance structures may function differently across regulatory regimes.

From a practical standpoint, the study provides several actionable insights. For corporate boards and governance committees, the evidence supports enhancing AC composition, particularly in terms of gender diversity and independence, as a strategic lever for improving ESG accountability. Beyond structural requirements, regulators and policymakers should consider introducing mandatory ESG training programs for AC members, equipping them with the necessary expertise to oversee non-financial disclosures effectively. In Malaysia, this aligns with the Securities Commission's MCCG 2021 emphasis on board competency

and Bursa Malaysia's mandatory ESG reporting guidelines under the *Sustainability Reporting Guide* (2022). Similarly, audit firms, particularly the Big Four, should integrate dedicated ESG metrics, assurance protocols, and sustainability expertise into their service portfolios. This would not only improve the quality of ESG assurance but also address gaps observed in the current regulatory landscape. Regionally, these insights are relevant for initiatives such as the ASEAN Taxonomy for Sustainable Finance, which calls for harmonised sustainability practices across member states. National regulators may also consider setting minimum thresholds for AC diversity and independence, supported by enforcement mechanisms to ensure compliance beyond symbolic adoption. Finally, the unexpected and sometimes contradictory findings in this study, such as the negative association between AC size and social/governance disclosures, and the limited role of auditor quality, highlight the need to reassess how traditional governance mechanisms operate in emerging market contexts.

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