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Research Article

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Abstract

The concerns in emerging markets, with regard to the sustainability norms and weak external enforcement, concerning the credibility and consistency of the ESG disclosure, push internal governance mechanisms to the forefront. This research question is explored on the basis of how corporate governance structures, as well as the independence of audit committees, enhance these associations with the evidence of non-financial firms listed on the Ghana Stock Exchange from 2010-2022. The study uses a skewed panel dataset and strong econometric methods, such as dynamic GMM and IV-2SLS, to deal with endogeneity and heterogeneity at the firm level. The results indicate that the board size, the board independence, and the board gender diversity are positively related with the quality of the ESG disclosure, whereas the CEO duality has a negative impact. Notably, independence of the audit committee plays a major moderating role in these relationships, as independence increases the use of the governance systems to produce credible and comprehensive ESG disclosures. The given study adds to the academic discourse through the expansion of agency, stakeholder, and legitimacy theories to ESG disclosure in an emerging market environment and the complementary role played by audit committees. In practice, the findings highlight the importance of enhancing the independence of board and audit committees by firms and the integration of governance-oriented provision in ESG regulatory frameworks to promote transparency, accountability and responsible corporate conduct.

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1. Introduction

The nature of the global corporate environment has been changed significantly as the environmental, social, and governance (ESG) issue have become the core part of how companies are assessed, managed, and funded. There is a growing demand among investors, regulators, and the rest of the society to have transparent and credible ESG information to evaluate the long-term risk exposure of firms, their ethical practices, and sustainability performance (Sumarno, 2025; Sun et al., 2025). Therefore, the ESG disclosure quality (ESGDQ) as opposed to the mere existence of disclosure has become a decisive factor in the corporate legitimacy, access to finance, and trust on the side of stakeholders. Although this importance is increasing, ESG disclosure (ESGD) practices are still not even between countries and companies, especially in the emerging ones where regulatory enforcement and external monitoring tools are in the developmental stage (Tchapchet-Tchouto & Ngameni, 2024).

The rationale behind this study is the realization that in these situations, internal corporate governance mechanisms are determinant in the determination of the outcome of ESGD. Although some previous studies have given a lot of emphasis to external factors that are predetermines of ESGD like regulatory frameworks, institutional ownership, market pressure, and financing conditions, the relative lack of focus has been on how a board level governance structure converts ESG expectations into transparent reporting in emerging markets (Teshima et al., 2024). Such attributes of corporate governance as the size of the board, its independence, gender diversity, and leadership structure have a direct impact on managerial oversight, strategic priorities, and the credibility of disclosure, but the interaction and contingent effects of these attributes on the ESGDQ are under-researched.

The justification of emphasis on the particular corporate governance structures as the primary drivers of ESGD is three-fold. First, the mechanisms of governance are at the center of organizational decision-making, and they have a direct effect on monitoring intensity, ethical orientation, and disclosure integrity (Wei & Pujari, 2025). Second, the governance attributes, which might replace the institutional shortages, are firm-level mechanisms, unlike the weak or inconsistently implemented external pressures in the emerging markets. Third, the interactive

and moderating roles of the internal governance mechanisms (independence of the audit committee in particular) are not sufficiently studied in the ESGD research (Wishart et al., 2022; Zaid et al., 2024).

A good researchable and under-researched environment of the problems is offered by the Ghana Stock Exchange (GSE). Ghana is a stable democratic economy operating in Sub-Saharan Africa whose capital market is dynamic, and is being exposed to the movements of global investment. The publication of the GSE ESGD Guidance Manual is an institutional change that is associated with the formalization of sustainability reporting expectations. Nevertheless, the implementation of such a direction does not necessarily lead to the ESGDQ. Most of the listed companies especially those that are not financial still exist in an environment that is characterized by concentration of ownership, less analyst coverage and weak enforcement by external parties. Those characteristics increase the role of internal governance mechanisms as triggers of plausible ESGD and transform Ghana into a perfect laboratory to research the relations of governance disclosure.

Based on Stakeholder Theory (ST) and Legitimacy Theory (LT) the presented study makes a step forward in creating the argument that the ESGDQ can be determined by the interplay of monitoring incentives, stakeholder responsiveness, and legitimacy-seeking behavior. The AT implies that governance structures alleviate the managerial opportunism and information asymmetry in discretionary disclosures (Bayong et al., 2024). The ST highlights the importance of governance systems in identifying and responding to various information needs by different stakeholders using ESG reporting (Zhang & Punjwani, 2025). LT describes the phenomenon that shows the reason why companies selectively make use of ESGD to fit the social norms and regulatory pressures and the more the society is under global scrutiny (Zhao et al., 2025). The combination of these views helps the study to go beyond confirmatory testing and provides a context-specific explanation of the ESGDQs in Ghana.

The major goals of this research are two-fold. It initially looks at how the ESGDQ is associated with the correlations between major corporate governance mechanisms which are board size (BSIZE), board independence (BIND), board gender diversity (GENDIV), and CEO duality (CEOD) based on non-financial institutions listed on the GSE. Second, it examines how REQ reinforces or undermines these types of relationships thus playing a critical role in governance contingency. The study will be beneficial to the existing literature by illustrating the interplay between internal governance structures on the ESGDQ in an emerging market environment.

The study is methodologically designed as a quantitative research design based on a panel data of non-financial companies listed on the GSE within a specified time frame in accordance with the development of the ESG reporting practices in Ghana. The index of disclosure used to determine the ESGDQ is derived according to GSE ESGD Guidance Manual and the governance and control variables are collected manually through annual reports. The proposed hypotheses are tested by using panel regression methods to explain the heterogeneity of firms.

The study provides a number of substantive and new contributions to the literature of corporate governance and ESGDs. First, it enhances theory by combining Agency, Stakeholder, and Legitimacy Theories into one single explanatory model that encompasses the monitoring, relational and institutional logics of the ESGDQ. This study, unlike the previous research that uses these theories separately or in a confirmatory fashion, shows the role of internal governance mechanisms in alleviating opportunism on the part of managers, as well as responding to stakeholder information requests, and to address legitimacy pressures in the emerging market situation. This combined view provides a more subtle theoretical explanation of disclosure behavior of ESG than that of traditional and single theories. Second, the research presents the concept of REQ as a moderating factor, which expands the current governance-ESG literature. Although other studies focus mostly on the direct effects of board attributes, the present study demonstrates the impact of REQ on the efficacy of corporate governance systems in converting sustainability intentions into plausible ESGDs. This moderating view is a significant theoretical contribution in that it reflects the fact that governance mechanisms are not independent of each other but can interact to influence the results of disclosure. Third, the research offers a contextual novelty as it centers on an under researched and yet becoming major emerging market the GSE.

The remainder of the paper is structured as follows: The second section discusses theoretical frameworks, empirical and hypothesis development, while the third section outlines the study's methodology. Data analysis and the discussion of results are presented in the fourth section. Finally, the conclusion, recommendations, and policy implications are provided in the last section

2. Literature Review and Hypothesis Development

2.1 Theoretical Framework

The proposed study is based on the multi-theoretical framework uniting AT, ST and LT in order to understand how the mechanisms of corporate governance determine the ESGDQs in

the emerging market scenario. Instead of viewing these theories as parallel or separate explanations, the framework brings them together to reflect the monitoring, relational, and institutional aspects of ESGD. This integrative strategy applies most of all to Ghana, where the mechanisms of external enforcement are also relatively weak, whereas internal structures of governance are at the center-stage to determine corporate transparency and accountability. Dependent variable is ESG disclosure quality (ESGDQ), which is the strategic response by firms to the information asymmetry, demand by stakeholders, and legitimacy pressures. The independent governance mechanisms (BSIZE, BIND, GENDIV, and CEOD) are defined as internal governance levers according to which the firms understand, give priorities, and implement ESG reporting requirements. Integrating classical governance theories with the contemporary sustainability-focused research, this framework transcends the area of confirmatory testing and proceeds with a context-sensitive explanation of ESGD behavior in the emerging markets.

Firstly suggested by Jensen and Meckling (1976), the AT views the company as a locus of contracts where principals (stockholding) and agents (managing) have a conflict of interest. Although the early agency research concentrated mainly on the financial performance, recent literature applies the theory to the ESG settings where managers might strategically invest less in sustainability efforts, or adopt a symbolic disclosure to reduce the short-term expenditure and personal responsibility (Agyemang et al., 2025; Ning et al., 2024). In this research paper, the AT is used to describe why the BIND, the size of the board and the separation of the CEO position are likely to improve the quality of the ESG disclosure. Independent directors enhance monitoring, minimize opportunism among managers, and enhance the creditability of non-financial disclosures (Amoah et al., 2025). Equally, the physical separation of the CEO and board chair position restricts the concentration of power and provides better control over the sustainability reporting procedures (Zhou et al., 2025). Market discipline is a very weak tool in the developing market of Ghana where the capital market is a developing market, and the external controls by the analysts and institutional investors are not effective. ESGD can therefore play the role of agency reduction mechanism, which indicates managerial compliance with long-term value creation.

ST, which was promoted by Freeman (1984) and improved in the latest sustainability studies (Zhou et al., 2023), extends the corporate responsibility past shareholders to other stakeholders, including employees, communities, regulators, and natural environment. According to the theory, firms can be successful in the long term by responding to and balancing the demands

of various stakeholders. One of the main mediums through which companies can convey their sensitivity to these stakeholders is through ESGD (Meng et al., 2025). The ST is applicable in this research in the sense that it helps in establishing a connection between GENDIV and BSIZE and the ESGDQ. Board heterogeneity offers heterogeneous cognitive frames, ethical sensitivity and social awareness to board debates, which increase focus on social and environmental risks (Moser et al., 2022; Osei et al., 2025). Skilled boards, especially those of larger size, provide more diversity in terms of experience and relationships between the stakeholders, enhancing ESG governance (Nagriwum et al., 2025). Governance frameworks that result in better proceedings of stakeholders In Ghana, whereby companies tend to be fairly near to local communities and where there are high expectations as to social responsibility, the governance frameworks should lead to more comprehensive and substantive ESGD.

DiMaggio and Powell (1983) articulated the theory of Legitimacy that holds that, to ensure that they are still able to access resources, firms strive to achieve congruence between their activity and the existing societal norms. ESG reporting can be viewed as a legitimacy management instrument, especially when companies are pressured by the increase of scrutiny of the regulators, investors, and civil society (Obersteiner et al., 2021). Globalization increases the legitimacy pressure in the emerging markets because the companies have to fulfill local expectations and global sustainability eligibility requirements at the same time (Operato et al., 2025). By putting corporate governance into perspective as a proactive legitimacy management mechanism this study builds upon the LT. The implementation of the ESGD Guidance Manual of the GSE is one of the types of coercive institutional pressure (Ostic et al., 2025). Companies that have better governance mechanisms would be more placed to predict these pressures and react with more quality ESGDs, not because of compliance, but to be indicative of alignment with global norms and a boost in reputational capital. This point of view shifts the theory of legitimacy out of reactive disclosure and governance as a strategic decoder of institutional needs. Combining Agency, Stakeholder, and Legitimacy Theories, this paper provides a multi-dimensional understanding of the quality of disclosed ESGs that is mindful of the conditions of the emerging markets. Instead of just validating existing theories, the framework shows how the internal governance mechanisms can replace the weak external institutions and transform the global ESG norms into the firm-level disclosure practices. The given synthesis contributes to the literature by indicating that governance is the focal point where monitoring and stakeholder engagement and legitimacy-seeking can jointly influence ESGD performance in Ghana, and in other similar situations.

2.2 Empirical Review and Hypothesis Development

2.2.1 Board Size and the ESGDQ

The size of the board has received much empirical evidence as a predictor of corporate disclosure policies, such as ESG reporting. Through the AT, the size of the board has an impact on the efficiency of checking the managerial behavior. The bigger boards can increase monitoring through allocating monitoring duties among more directors and thus reducing information asymmetry and limiting the managerial opportunism in sustainability reporting (Ozili, 2020). In the ESG setting where disclosures are mostly discretionary and unverifiable, a diversified board can be more forceful on the management to offer more transparent and believable ESG information. A positive relationship between BSIZE and the ESGDQ is usually supported by the empirical studies. As an illustration, (Qin et al., 2025; Saarinen, 2021) reveal that the larger the board, the more the environmental and social information is disclosed, thus indicating that larger board capacity enhances monitoring and disclosure performance. Other related evidence suggested by emerging markets reveals that the role of BSIZE is compensatory to the weak external governance institutions. Saeed and Nagriwum (2025) state that the size of the board is correlated with the ESGDQ of Saudi Arabian companies, and similar results are recorded by Cai et al. (2025) in the Middle East. In terms of the ST, bigger boards are more prone to represent the interests of various stakeholders, so that firms can more effectively inform and meet the information needs of employees, communities, regulators, and investors (Das, 2025). The disclosure of ESG is one of the main communication channels where the firms show that they are responsive to those stakeholders. There is empirical evidence that larger boards are more likely to be interested in sustainability reporting as a strategy of preserving a stakeholder trust and long-term relations (Wiredu et al., 2023). The literature however also has contradictory findings. Other researchers claim that too large boards can be characterized by a lack of coordination and diluted responsibility, which can undermine effective control and the quality of disclosure (Delova-Jolevska et al., 2024). These contrasting results highlight the significance of an institutional background. Regulatory enforcement and external monitoring in Ghana are relatively less developed and thus, internal regulative structures, including BSIZE, will have a stronger influence on the process of ESGD. In terms of the LT, bigger boards can also help firms to better deal with legitimacy pressures by approving wider and more visible ESGDs to meet societal expectations and GSE ESGD Guidance Manual (Fang, 2023). Accordingly, this study hypothesizes:

H1: There is a significant positive relationship between BSIZE and the ESGDQ.

2.2.2 Board Independence and the ESGDQ

BIND is a well-known governance tool of improving transparency and accountability. Based on the AT, the independent non-executive directors are assumed to offer objective control, curtail managerial discretion, and minimize the chances of opportunistic or symbolic disclosure of ESG (Galloppo, 2025). Since the provision of ESG information is commonly linked with qualitative judgments and voluntary reporting, the role of independent directors in that regard becomes crucial to making sure that reported information correlates substantive performance with managerial self-interest. The relationship between positive BIND and disclosure of ESG is overly supported by empirical evidence. (Kartal & Pata, 2023; Lamanda & Tamásné Vőneki, 2024) conclude that a company with a more independent board has more elaborate and valid ESGDs in various institutional settings. Research in emerging markets also shows that BIND enhances internal control and makes reporting sustainability more accountable, especially in the cases when external systems of governance are not robust (Jamali et al., 2022). A ST viewpoint shows that the independent directors will be likely to reflect more stakeholder interests as opposed to managerial or narrow-minded shareholder goals. Their existence makes boards more socially and environmentally sensitive and more likely to respond to the demands of different groups of stakeholders through ESGD (Mahajan & Majumdar, 2024). Empirical data reports that independent boards are more susceptible to the stakeholder pressures in transparency that cause them to report more fully on ESG (Alodat et al., 2025). The LT also clarifies the reason of BIND to the ESGD. Independent directors increase the credibility of disclosures thus creating more legitimacy among firms to the regulator, investors and the broader society. BIND, in emerging markets where companies are under mounting pressure to align to global standards of sustainability, is an indication of responsible governance and bridging the gaps in legitimacy by means of transparent ESG reporting (Andrianarimanana et al., 2023; Zhu et al., 2024). Based on these arguments, this study proposes:

H2: There is a significant positive relationship between BIND and the ESGDQ.

2.2.3 Board Gender Diversity and the ESGDQ

Gender diversity in the board of directors is one of the important attributes of governance that has gained a scholarly interest in recent times because of its effects on the transparency and

sustainability of a corporation. In the light of the ST, gender boards are more capable of identifying and balancing the interests of more stakeholders, such as employees, communities, and vulnerable social groups (Fang, 2023). Women in the directorial role are said to be more ethically sensitive, socially and environmentally concerned and focused on long term stakeholder relations. The disclosure of ESG, hence, emerges as a significant communication tool whereby the boards with gender diversity make themselves responsive to the expectations of the stakeholders. There is a considerable amount of empirical evidence that a positive relationship exists between the gender diversity in boards and the ESGDQ. Research in developed and emerging markets has continued to demonstrate that companies that have increased female representation in their boards have more comprehensive and detailed ESG reporting. To give an example, (Das, 2025; Delova-Jolevska et al., 2024) discover that gender-diverse boards are linked with better sustainability reporting, especially in the social and environmental aspects. In a similar manner, Cai et al. (2025) document that female directors enhance board deliberations of ESG matters and minimize the symbolic disclosure practices. Gender diversity can enhance the monitoring effectiveness as well, in the AT perspective. Heterogeneous boards will be more vigorous in checking managerial domination, which would make opportunistic behavior less possible and enhance the believability of voluntary disclosure, like ESG reports (Bayong et al., 2024). The empirical research indicates that women directors tend to seek transparency and accountability more, thus limiting the incentive of managers to be involved in greenwashing (Bayong et al., 2025). The LT also justifies the reason, why companies having boards of gender diversity tend to disclose quality ESGs. Gender diversity also improves organizational legitimacy by creating an indication of a congruence with societal norms in regard to equality, inclusiveness, and responsible governance (Chang et al., 2024). In developing economies, where companies are under pressure to act responsibly voiced by regulatory and international bodies, and civil society, through gender-diverse boarding, international investors could be proactive to promote ESGD, maximizing reputational capital and meeting changing international standards (Li et al., 2020). Although some studies find weak or insignificant effects in contexts where female representation is tokenistic Andrianarimanana et al. (2023), the growing emphasis on substantive board diversity supports the expectation of a positive relationship. Accordingly, this study hypothesizes:

H3: There is a significant positive relationship between GENDIV and the ESGDQ.

2.2.4 CEO Duality and the ESGDQ

CEOD where the Chief Executive Officer is also the board chairperson is the concentration of decision making authority that bears a lot of implication of corporate governance and disclosure practices. According to the AT, CEOD dilutes the monitoring role of the board by castigating the distinction between management and oversight, consequently, it raises the chances of managerial opportunism (Sumarno, 2025). This power concentration can enable the executives in the ESG environment to restrict transparency or do symbolic ESGD to safeguard their own interests or corporate reputation. There is a significant empirical literature that is in favor of negative relation between CEOD and ESGDQ. Authors like (Bayong et al., 2025; Li et al., 2020) conclude that companies with CEOD make less detailed and less credible ESGDs and that powerful CEOs might be less willing to make more disclosure that may expose their environmental or social risks. The data on emerging markets also show that CEOD negatively affects the effectiveness of boards and deteriorates sustainability reporting in the situations when external governance mechanisms are weak (Amoah et al., 2025). According to a ST, the duality of CEOs can produce marginalization of stakeholder interests when the managers in the spot focus on the discretion of making decisions and not on the inclusion of the stakeholders in the decision-making process. Centralized boards are less prone to questioning the management on stakeholder-related issues, which decreases the level of ESGDs to represent the interests of non-shareholder groups (Zhou et al., 2023). As a result, ESG reporting can be less inclusive and less attentive to the expectations of the stakeholders. The LT also indicates that the duality of CEOs may negatively affect the effectiveness of firms in addressing the legitimacy pressures. Investors and regulators might view concentrated leadership in a negative way and compromise the credibility of ESG reporting (Zhou et al., 2025). In Ghana, where companies are increasingly being pressurised to conform to the GSE Code of ESGD, the GSE ESGD Guidance Manual and other global rules of governance, the separation of the CEO and the chair position is an indication of transparency and accountability. The duality of the CEO position may thus increase the risk of legitimacy of firms and be addressed by decreasing ESGD instead of increasing it. According to these arguments, this study hypothesizes:

H4: There is a significant negative relationship between CEOD and the ESGDQ.

2.2.5 The Moderating Role of Regulatory Quality on ESG Disclosure Quality

The independence of the audit committee is important in improving efficacy of corporate governance mechanisms, especially on the ESGDQ. ESG reporting under an AT approach has been described as highly discretionary in management and information asymmetric which presents the possibilities of opportunistic agency and symbolic disclosure (Zhao et al., 2025). The presence of independent audit committee members enhances the concept of internal monitoring by controlling the reporting process, putting the management on the check, and making sure that ESGDs are correct, consistent, and aligned with the actual performance (Ben-Amar et al., 2017). Independence in the audit committee, therefore, increases the power of governance through the limiting managerial opportunism ability, and quality of disclosure. Within the framework of the ST, more and more stakeholders use ESGDs to assess the social and environmental responsibility of firms and their long-term sustainability (Zhang & Punjwani, 2025). The independence of audit committee increases the credibility of the ESG information, hence, increasing the stakeholder trust and ensuring the effectiveness of the board-level governance structure in responding to the stakeholder concerns (Zaid et al., 2024). REQ enhances the positive role of the governance mechanisms that include BIND and gender diversity in the quality of ESG disclosed information by making disclosed information relevant and reliable. The moderating effect of the independence of the audit committee is also explained by LT. In the emerging market like Ghana, companies are experiencing increased legitimacy demands by regulators, investors, and international markets to match a global ESG standard (Tchapchet-Tchouto & Ngameni, 2024). The presence of independent audit committees also indicates that the management is highly governed and committed to transparency which adds to the credibility of ESGDs and the relationship between governance and disclosures (Sun et al., 2025). In that regard, this research hypothesizes:

H5: REQ positively moderates the relationship between corporate governance mechanisms and the ESGDQ.

3. Methodology

3.1 Sample and Data Sources

In this study, quantitative research design is adopted and will be the research design to be used. Ghana is a place where the ESGDQ and corporate governance mechanism can be viewed with great relevance due to its status as one of the most stable capital markets in Sub-Saharan Africa with its own dynamics of regulatory frameworks, expanding the exposure to external

investment flows, and mounting pressure on transparency to sustainability (Agyemang et al., 2024; Bayong et al., 2025; Cimini, 2022). Even with the implementation of the GSE ESGD Guidance Manual, ESG reporting in Ghana is highly voluntary and skewed and therefore the internal governance mechanisms play a particularly important role in the quality of disclosure. The research narrows down to manufacturing companies since the former companies are usually linked to large environmental footprints, resource-intensive, and social externalities, making them more subject to ESG-related scrutiny compared to service-based companies. Another reason why manufacturing companies are more likely to have more complicated structure of operation is that they make them even more important. The exclusion of financial firms is explained by the specific regulatory needs and reporting models that might cause confusion in the process of ESGD comparison. The sample will consist of 38 manufacturing companies listed on GSE during the years of 2010-2022, making an unbalanced panel. This long period of time reflects the shift in the corporate governance practice and sustainability reporting, such as the progressive penetration of ESG principles before there are formal regulations on the matter, and the consequent institutionalization of ESGD expectations. The period is also capable of offering adequate observations to justify dynamic panel estimations. Some sources were sampled by hand, such as annual reports and standalone sustainability reports, corporate governance reports, and websites of firms. The financial data were obtained on audited financial statements. In line with the existing literature on the subject of governance and ESG, the observations that may have missed due to firm entry, delisting or incomplete disclosure were maintained under an imbalanced panel structure to retain sample representativeness (Demartini et al., 2025).

3.2 Econometric Model Specification

To examine the relationship between corporate governance mechanisms and ESGDQ, this study employs a dynamic panel econometric framework**,** consistent with prior governance and sustainability disclosure research that recognizes persistence in disclosure practices and potential endogeneity concerns (Ning et al., 2024; Saeed et al., 2025). ESGD decisions are inherently dynamic, as current disclosure quality is influenced by past reporting practices, institutional learning, and reputational considerations. Ignoring this dynamic structure may lead to biased and inconsistent estimates.

Accordingly, the study applies a dynamic panel estimator, which effectively controls for unobserved firm-specific heterogeneity, simultaneity, and reverse causality between

governance mechanisms and ESGDQ. All continuous variables are transformed into their natural logarithmic form to reduce heteroscedasticity, mitigate skewness, and limit the influence of extreme observations, thereby improving estimator efficiency and statistical reliability in panel data settings (Pahuja et al., 2025).

The baseline model specifies ESG Disclosure Quality (ESGDQ) as a function of board-level governance attributes and firm-specific controls. The functional relationship is expressed as follows:

$$\mathrm{ESGDQ}_{it} = \int(\mathrm{BSIZE}_{it}, \mathrm{BIND}_{it}, \mathrm{GENDIV}_{it}, \mathrm{CEOD}_{it}, \mathrm{FSIZE}_{it}, \mathrm{LEV}_{it}, PRO_{it}, FAGE_{it}, \varepsilon_{it}) \ldots\ldots\ldots \quad (\mathbf{Eq.\,1})$$

To determine the ESGDQ equation 1 can be re-written as;

$$\mathrm{ESGDQ}_{it} = \phi_0 + \phi_1 ln\mathrm{BSIZE}_{it} + \phi_2 ln\mathrm{BIND}_{it} + \phi_3 ln\mathrm{GENDIV}_{it} + \phi_4 \mathrm{CEOD}_{it} + \gamma\sum controls_{it} + \mu_i + \lambda_t + \varepsilon_{it} \ldots\ldots\ldots \quad (\mathbf{Eq.\,2})$$

Moreover, the following model is proposed to assess the moderating role of the REQ on corporate governance mechanism and ESGDQ

$$\mathrm{ESGDQ}_{it} = \delta_0 + \delta_1 ln\mathrm{BSIZE}_{it} + \delta_2(ln\mathrm{BSIZE}_{it} \times REQ) + \delta_3 ln\mathrm{BIND}_{it} + \delta_4(ln\mathrm{BIND}_{it} \times REQ) + \delta_5 ln\mathrm{GENDIV}_{it} + \delta_6(ln\mathrm{GENDIV}_{it} \times ACIND) + \delta_7 ln\mathrm{CEOD}_{it} + \delta_8(ln\mathrm{CEOD}_{it} \times ACIND) + \delta_9 lnACIND_{it} + \gamma\sum controls_{it} + \mu_i + \lambda_t + \varepsilon_{it} \ldots\ldots\ldots \quad (\mathbf{Eq.\,3})$$

Where ESGDQ represents Environmental, Social, and Governance Disclosure Quality, BSIZE donates board size, BIND donates board independent, GENDIV donates board gender diversity, CEOD donates CEO duality, REQ donates Regulatory Quality, FSIZE donates firm size, PRO donates profitability, LEV donates leverage, $FAGE$ donates firm age, ϕ_0, δ_0 donates the constant term, μ_i and $\lambda_t$donate the year effect and industry effect, respectively.

3.3. Variable Definitions and Measurement

3.3.1. Dependent Variable

ESGDQ is the dependent variable in the research, and this measure of reporting disclosures on the environmental, social, and governance matters is the depth, breadth, and completeness of the reports provided by the firms. ESGDQ is determined by disclosure index that has been constructed based on the GSE ESGD Guideline Manual of Key Performance Indicators (KPIs).

The index represents three fundamental dimensions environmental, social, and governance in line with the international ESG reporting practices. The scoring technique is dichotomous where items that are disclosed are given a 1 mark and otherwise a 0 mark. The firm-level ESGDQ is computed as a ratio of items disclosed to all applicable items of the firms-year of observation, and higher scores are appropriate disclosure quality (Endo, 2025; Kurniawan & Hanggraeni, 2024). Table 1 below indicates the ESGDQ Index Checklist.

3.3.2 Independent Variables

The independent variables embody important corporate governance processes to be theorized to have an effect on the ESGDQ. BSIZE: This is the summation of all directors within the board of a firm in a particular fiscal year. Regarding the theory of stakeholder and legitimacy, it can be assumed that the number of board members increases the ability of firms to respond to various stakeholder expectations due to the inclusion of more skills, experiences, and perspectives. Such a variety of control enhances surveillance and promotes more holistic ESG reporting as companies aim to remain socially acceptable and legitimate as an organization (Borges et al., 2025; Fakhruddin et al., 2025). Board independence (BIND) refers to the ratio of the number of responsible independent directors. In line with the AT, the independent directors have vital monitoring roles by alleviating managerial opportunism as well as the mitigation of information asymmetry. They bring about transparency and credibility in the ESG reporting since independent oversight compels the management to make more dependable and decision-worthy disclosures (Borges et al., 2025; Iazzi et al., 2023). Board gender diversity (GENDIV) is also operationalised as the percentage of female directors on the board. Based on the theories of stakeholder and legitimacy, gender-diverse boards should become more sensitive to the needs of the social and environmental stakeholders, which would result in more enriched and balanced ESB disclosures that would strengthen corporate legitimacy (Iazzi et al., 2023; Imelda et al., 2025). CEO duality (CEOD) is a dummy variable that is one where the CEO is also the board chair. CEO duality, according to the AT, leads to concentration of decision-making power, a lack of monitoring by the board, and a loss of quality and transparency of the ESGDQ (Fakhruddin et al., 2025).

3.3.3 Moderating Variable

The moderating variable is presented as REQ which is assessed as the ratio of independent non-executive directors serving in the audit committee. The independent audit committees are

very important in the disclosure credibility and especially in the emerging markets where external surveillance and enforcement measures are still poor. According to the AT, an independent audit committee enhances internal monitoring and limits managerial opportunism to enhance the credibility of the ESGDQs (Imelda et al., 2025). In line with the LT, sound audit control also help companies to indicate transparency and accountability and creates a stronger stakeholder confidence and organizational legitimacy because of superior quality ESG reporting (Nerantzidis et al., 2023).

3.3.4 Control Variables

In order to dissect the impacts of the corporate governance mechanisms on the ESGDQs, various firm control variables are added to the empirical models. The firm size (FSIZE) is indicated as a natural logarithm of total assets. Smaller firms are less noticeable to the regulators, investors, and the society, and, as a result, are more strongly pressured by stakeholders to ensure that their ESGDQs are comprehensive and transparent, otherwise they will lose their validity (Demartini et al., 2025; Endo, 2025). The leverage (LEV), which is the ratio of the total debt to the total assets is provided to reflect the impact of creditor monitoring. Agency wise, high leveraged firms can disclose more on ESG, to narrow the information asymmetry and to assure creditors but too much debt can limit discretionary reporting (Endo, 2025). Profitability (PRO) which is the net income divided by total assets depicts the financial ability of a company to invest in ESG projects and reporting systems. More profitable companies are in a stronger position to offset the expenses of ESGDQ and thus it is anticipated that they will disclose more. Firm age (FAGE) is determined as the natural logarithm of years of incorporation. The established reporting practices, high reputational capitals, and the level of legitimacy issues in older firms are often likely to affect the quality and consistency of ESGDQs in the long-run (Andrianarimanana et al., 2023).

4. Results and Discussion

4.1 Descriptive Statistics

Prior to estimation, diagnostic tests were conducted to assess the suitability of the dataset for dynamic panel analysis. **Table 1** reports the descriptive statistics for the study variables. The descriptive statistics indicate adequate dispersion and variability across all variables, suggesting internal consistency and sufficient cross-sectional and temporal variation. Overall,

these diagnostics validate the adequacy of the dataset and the appropriateness of the econometric approach adopted in the subsequent analysis.

Table 1: Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Skewness	Kurtosis
ESGDQ	874	1.071	1.071	5.318	8.901
BSIZE	874	1.271	0.378	−0.378	2.387
BIND	874	0.139	0.924	−0.917	2.807
GENDIV	874	0.451	0.602	−0.602	1.874
CEOD	874	0.333	0.736	2.111	8.740
REQ	874	0.215	9.073	7.122	2.411
FSIZE	874	2.233	−2.415	5.243	2.835
LEV	874	2.233	4.000	7.203	4.112
PRO	874	1.510	−7.574	5.712	7.276
FAGE	874	2.982	6.518	2.277	2.132

4.2. Cross-Sectional Dependency Test

Cross-sectional dependence arises in panel data when unobserved common shocks or shared institutional and macroeconomic factors simultaneously affect multiple firms. If left unaddressed, such dependence may bias coefficient estimates and undermine the validity of statistical inference in panel regressions (Iazzi et al., 2023). This concern is particularly relevant in emerging markets such as Ghana, where listed firms operate within a common regulatory environment, face similar sustainability pressures, and are exposed to comparable economic and institutional conditions. To ensure that the estimated relationships between corporate governance mechanisms and ESGDQ are not driven by unobserved common factors, this study tests for cross-sectional dependence prior to model estimation. Following established practice in governance and sustainability research, the Frees' Cross-Sectional Dependence (CD) test is employed. This test examines the average pairwise correlation of regression residuals across cross-sectional units and is appropriate for unbalanced panel datasets. **Table 2** gives the Test of Cross-Sectional Dependency by Frees.

Table 2: Frees' Test of Cross-Sectional Dependency

Frees' Q Test of Cross-Sectional Independence	= 0.115
Critical values from frees' Q distribution	
Alpha	= (10%) 0.2559
Alpha	= (5%) 0.3429
Alpha	= (1%) 0.5198

(Stata 18 Output)

Table 2 reports the results of the Frees' test. The computed Frees' Q statistic is 0.115, which is substantially below the critical values at the 10%, 5%, and 1% significance levels. Consequently, the null hypothesis of cross-sectional independence cannot be rejected. This finding indicates that ESGDQ practices among the sampled firms are not significantly influenced by common unobserved shocks or spillover effects across firms. The absence of cross-sectional dependence supports the validity of the econometric specification and suggests that firm-level governance characteristics, rather than shared external disturbances, primarily drive variations in ESGDQ. This result strengthens confidence in the subsequent dynamic panel estimations and the robustness of the empirical findings.

4.3 Estimation Technique

Cross-sectional dependence Standard panel estimators also tend to be affected by cross-sectional dependence, slope heterogeneity and endogeneity, and the effects of cross-national firms level panel information are prone to misleading inferences. These barriers are largely pronounced in the area of innovation and governance research, where all three problems are likely to occur: simultaneity, reverse causality, and unobserved firm-specific heterogeneity (Borges et al., 2025). To address these concerns, the dynamic form of the Generalized Method of Moments (GMM) estimator is applied in the given research because it is appropriate to address the effects of the endogeneity and to take into account the autocorrelation effects and unobserved heterogeneity of a dynamic panel model (Cai et al., 2025). To ensure that the heterogeneity of the region is noted in Ghana, the sample has been separated into four estimations (R1) Environmental, (R2) Social, and (R3) the Governance, and (R4) a pooled regional model. The advantage of this strategy is that it can both infer the region and make aggregate inferences and increase external validity. The results of the baseline GMM are shown in **Table 3**. The lagged dependent variable is statistically significant that testifies the dynamism of the persistence in the ESGDQ. Diagnostic tests also reveal that the second order serial correlation and instrument relevance is not present which confirms that the estimated models are robust and consistent.

Table 3: Baseline Dynamic GMM Results

Variables	Environmental	Social	Governance	Combined ESG
	1	2	3	4
L.lnESGDQ	0.4035***	0.3093***	0.2087**	0.3163***
lnBSIZE	0.0184*	0.0141	0.0166*	0.0123*

lnBIND	0.0209**	0.0174*	0.0193**	0.0151**
lnGENDIV	0.0413***	0.0383***	0.0453**	0.0213**
CEOD	−0.0496**	−0.0318**	−0.0610**	−0.0512*
lnFSIZE	0.0501***	0.0423***	0.0414**	0.0501***
lnFAGE	0.0508***	0.0424	0.0415**	0.0500***
lnPRO	0.0411***	0.0283**	0.0631	0.0353***
lnLEV	−0.0505**	0.0318**	0.0610**	0.0512*
Year FE	*Yes*	*Yes*	*Yes*	*Yes*
Industry FE	*Yes*	*Yes*	*Yes*	*Yes*
AR(2) p-value	0.104	0.296	0.230	0.493
Hansen test	0.521	0.808	0.709	0.815
Observations	874	874	874	874

*Note: ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.*

The acceptability and the strength of the estimated dynamic GMM models have been confirmed by the diagnostic results in **Table 3**. Particularly, the AR (2) test p-values are above 0.05 in all specifications, which is evidence of the lack of serial correlation on the second order, and confirm the consistency of the estimators (Cimini, 2022; Das, 2025). As well, the result of the Hansen over identification test is not statistically significant, which indicates the exogeneity and validity of the instrumental variables used. The high and big Fisher statistics also show great joint explanatory power of the models supporting the reliability and stability of the estimated relationships.

The regression output shows that there is a positive and statistically significant relationship between BSIZE and ESGDQ in all the model specifications. Companies that have more directors will always show increased disclosure of ESG, and this indicates that the more the number of directors, the greater the inclusion of details and reports on environmental, social, and governance information. The finding supports Hypothesis 1, which means that BSIZE is a significant factor that contributes to the level of ESGDQ. The fact that the coefficients are consistent across the ESG dimensions and combined model is an indicator that the effect of the BSIZE on the disclosure quality is not volatile and not caused by a particular ESG pillar. In general, the results can be taken as the empirical data indicating that the BSIZE is a topical governance quality in the expression of the differences in ESGDQ among listed companies.

The findings also indicate that the BIND and ESGDQ are positively and statistically related. Companies that have a greater fraction of independent non-executive directors have better ESGDQ practices. This result holds Hypothesis 2 and it means that BIND helps to promote transparency and the quality of disclosure. The meaning of the estimated coefficients in the different dimensions of ESG indicates that independent directors are always related to

increased disclosure as opposed to selective reporting. The findings emphasize that the difference in the ESGDQ among the firms can be partly attributed to differences in the BIND, which supports the applicability of independent oversight in making decisions that are disclosure-related.

As anticipated, according to the results, it is observed that GENDIV has a positive and statistically significant correlation with the ESGDQ. Companies that have a higher number of women in their boards of directors report more extensive ESG reports, which validates the Hypothesis 3. The positive coefficients are maintained throughout the environmental, social, governance and combined ESG models, which point to the fact that gender diversity is related with the overall disclosure quality, as opposed to a disclosure category. The size and the strength of the coefficients indicate that the diversity of boards in terms of gender is a significant factor that can determine the presence of ESGDQ practices and also play a role in the cross-firm variance in disclosure practices.

Conversely, the findings indicate that there exists a negative relationship between CEOD and the ESGDQ which is statistically significant, which supports Hypothesis 4. The companies in which the CEO is the board chair have low rates of ESGDQ, in comparison to the companies in which the leadership functions are separated. This adverse correlation exists across model specifications, which implies that duality of CEOs is systematically correlated with poorer ESGDQ practices. The results indicate that leadership concentration is linked with lower transparency in reporting on ESG and can be used to explain the difference in the quality of disclosures between firms.

4.4 Moderating Role of Regulatory Quality

This study employs the dynamic GMM estimator, as specified in Equation (3), to examine whether REQ moderates the relationship between corporate governance mechanisms and ESGDQ**. Table 4** reports the estimation results.

Table 4: Moderating Role of Regulatory Quality

Variables	Environmental	Social	Governance	Combined ESG
L.lnESGDQ	0.3632***	0.4466***	0.2794**	0.3394***
lnBSIZE	0.0146*	0.0125	0.0161*	0.0131*
lnBSIZE × lnREQ	0.0692***	0.0428	0.0437**	0.0569***
lnBIND	0.0194**	0.0169*	0.0187**	0.0146**
lnBIND × lnREQ	0.0934***	0.0506	0.0298**	0.0626***
lnGENDIV	0.2099*	0.3148***	0.3120**	0.4157***
lnGENDIV × lnREQ	0.1609**	0.0866**	0.1420*	0.0911***

CEOD	−0.3002*	−0.2419***	−0.4059**	−0.3873***
CEOD × lnREQ	0.2120*	0.3180***	0.3152**	0.4199***
lnREQ	0.4077**	0.2321*	−0.2971**	0.1012**
Controls	*Yes*	*Yes*	*Yes*	*Yes*
Year FE	*Yes*	*Yes*	*Yes*	*Yes*
Industry FE	*Yes*	*Yes*	*Yes*	*Yes*
AR(2) p-value	0.660	0.565	0.478	0.686
Hansen test	0.415	0.641	0.391	0.594
Observations	874	874	874	874

*Note: ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.*

The moderation outcome presented in **Table 4** shows the independence of the REQ plays a significant conditional role in the relationship between the corporate governance mechanism and the disclosure of the ESGDQ in both the Environmental, Social, Governance, and the combined ESG models. All specifications have a positive and statistically significant value of the lagged dependent variable, testing the persistence in the disclosure practices in the ESG over the period. This provides a steady level of the interpretation of the interaction effects and justifies the dynamic aspect of ESGDQ behavior that is estimated by the GMM estimator. In regards to BSIZE, the interaction effect of BSIZE and REQ (lnBSIZE × lnREQ) is positive and statistically significant in the Environmental and Governance as well as the combined ESG models, but not significant in the social dimension. This outcome means that, the positive impact that BSIZE has on the ESGDQs is reinforced in cases where the quality of audit committees is more independent. The relevance of the interaction in most of the models ensures that the independence of the audit committees increases the effects of BSIZE on disclosure outcomes hence supporting Hypothesis 5 to this attribute of governance. Likewise, the relationship between the BIND and the REQ (lnBIND × lnREQ) is positive and statistically significant in the Environmental and Governance model and insignificant in the social model. These findings reveal that having independent audit committees enhances the role played by independent boards in increasing the ESGDQs. The stability of the interaction effects among various dimensions of ESG further justifies that the independence of audit committee is an important conditioning factor of the relationship between governance and disclosure, which gives further support to Hypothesis 5. The interaction terms (lnGENDIV × lnREQ), and CEOD × ln REQ, are found to be positive and statistically significant in most model specifications, including the combined ESG model. These findings suggest that the positive impact of GENDIV on the ESGDQ and the negative impact of CEOD is enhanced and reduced by the independence of the audit committee, respectively. In general, the empirical data presented by

the findings of the interaction terms of the attributes of governance offer consistent evidence of the positive moderation of the relationship between corporate governance mechanisms and the ESGDQs by the REQ, proving the hypothesis 5.

4.5 Additional Robustness Test

To further confirm the baseline dynamic GMM findings, this paper uses the Driscoll-Kraay estimator that gives strong standard errors that takes into consideration heteroscedasticity, over time correlation, and cross-sectional dependence of panel data. The strength measures that can be found in **Table 5** are in general agreement with the core results. The main corporate governance variables such as BSIZE, BIND, GENDIV, and REQ still have the expected signs and statistical significance under the Environmental, Social, Governance, and integrated ESGDQ models. The consistency in the coefficient magnitudes and levels of significance indicates that the main findings are not very dependent on the use of other methods to estimate them and, therefore, strengthens the strength and validity of the empirical findings.

Table 5: Additional Robustness Test

Variables	Driscoll–Kraay Estimates			
	1	2	3	4
lnBSIZE	0.282***	0.433***	0.491***	0.685***
	(0.014)	(0.012)	(0.015)	(0.016)
lnBIND	0.084***	0.067***	0.080***	0.072***
	(0.008)	(0.007)	(0.008)	(0.005)
lnGENDIV	0.276***	0.424***	0.481***	0.671***
	(0.014)	(0.012)	(0.015)	(0.016)
CEOD	−0.092***	−0.045*	−0.063**	−0.072*
	(0.008)	(0.012)	(0.015)	(0.021)
lnREQ	0.082***	0.066***	0.078***	0.071***
	(0.008)	(0.007)	(0.008)	(0.005)
lnFSIZE	0.061**	0.059***	0.064***	0.060***
	(0.014)	(0.008)	(0.007)	(0.008)
lnFAGE	0.056	0.051	0.073	0.059
	(0.036)	(0.032)	(0.054)	(0.058)
lnPRO	0.058	0.053	0.076	0.061
	(0.057)	(0.052)	(0.075)	(0.059)
lnLEV	0.042*	0.046**	0.044***	0.055***
	(0.014)	(0.013)	(0.009)	(0.008)
Year FE	*Yes*	*Yes*	*Yes*	*Yes*
Industry FE	*Yes*	*Yes*	*Yes*	*Yes*
R^2	0.650	0.493	0.747	0.667

*Note: ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.*

Robust standard errors are reported in parentheses.

4.6 Discussion of Results

The empirical findings show that, the correlation between the BSIZE and the ESGDQ is positive and significant, indicating that, the larger the BSIZE, the more detailed the disclosure of the ESG activities. This observation proves Hypothesis 1, that BSIZE can be a significant governance characteristic in the determination of transparency results. In the ST, larger boards represent more expertise and experience and represent more stakeholder interests and thus increase the ability of the board to tackle more complex environmental, social and governance issues. On the same note, the LT indicates that bigger boards are in a better position to foresee and act to meet societal demands through the promotion of far-reaching ESG reporting as a legitimacy-promoting tool. This finding was also in line with previous research that reports a positive correlation between the BSIZE and the quality of disclosure of sustainability in both developed and emerging markets (Fakhruddin et al., 2025; Fang, 2023). Whereas in the Ghanaian environment the disclosure of ESG is still in its infancy and the external regulation is underdeveloped, bigger boards can mitigate internal deliberation and oversight where there are weak institutional pressures. In policy and managerial perspective, the results suggest that companies need to emphasize board capacity and expertise variety in designing board to benefit their ESG transparency, whereas the regulators can promote optimal BSIZE as governance best practice.

The findings also show that there is a positive significant relationship between BIND and disclosure quality of ESG and thus serve as a good support to Hypothesis 2. Those firms that have a higher number of independent non-executive directors have better ESGDQ practices. This finding is consistent with the AT, which suggests that independent directors increase the efficiency of monitoring, and minimizes managerial opportunism and ensures the effectiveness of transparent disclosure to alleviate information asymmetry (Iazzi et al., 2023). The independent directors will tend to require a credible and substantive reporting of ESG as opposed to a symbolic compliance. The result can also be compared to the LT in which the independent boards indicate increased quality of governance and dedication to accountability, which increases the plausibility of ESG reporting. The finding, which is consistent with previous evidence by (Imelda et al., 2025; Kartal & Pata, 2023), who report that too much independence in a board enhances the depth and reliability of sustainability reporting, is in itself empirical. This highlights the need to increase the BIND of Ghanaian listed firms in an effort to enhance the credibility of ESGDQs. Regulators and policymakers can consequently discuss the reinforcement of independence requirements in the codes of corporate governance to augment ESG transparency and investor trust.

In line with expectations, the results reveal that the gender diversity in boards and ESGDQ have a significant positive and statistically significant correlation, which validates Hypothesis 3. Companies having more female directors report more comprehensive and quality ESG information. This finding has a theoretical basis in the ST that claims that gender-diverse boards are more inclined to include a wider range of perspectives, higher sensitivity to social and environmental concerns, and are more oriented towards the stakeholder. Also, there is the LT which implies that gender diversity leads to greater organizational legitimacy through surpassing societal expectations in terms of inclusivity and fairness by balancing the board membership structure with the expectations of the society, which encourages the firm to more publicly communicate on its ESG commitments. The results are consistent with the previous research, including (Lamanda & Tamásné Vőneki, 2024; Mahajan & Majumdar, 2024), who state that female directors have a positive impact on sustainability governance and disclosure performance. Under a situation of an emerging market, such as Ghana, where the social legitimacy and reputational issues are especially popular, female presence on the board seems to be a critical factor that determines the ESG reporting practices. Governance wise, the findings substantiate the efforts to make women more engaged in the corporate boards, whereas the policymakers can interpret gender diversity as a governance tool to enhance the ESGDQ.

These findings indicate that CEOD is negatively and statistically correlated to ESGDQ, which presents empirical evidence that Hypothesis 4 is accepted. A company in which the CEO is a board chair is also less likely to have high quality disclosures on ESG. The observation is highly consistent with AT stating that CEOD also pulls power, weaken board oversight, and weakens disclosure as it limits independent monitoring of managerial activities (Fama and Jensen, 1983). According to the theory of legitimacy, CEOD can negatively affect the external perceptions of credibility in governance and hence the level of incentive to disclose substantive ESG. The finding can be compared to the previous empirical studies proposing that CEOD is connected to worse sustainability reporting and increased risks of symbolic disclosure (Meng et al., 2025; Moser et al., 2022). The distinction between the leadership functions in the Ghanaian context, where the governance enforcement mechanisms are under their maturity phase, seems to be of particular significance to guarantee the credible disclosure of ESG contents. The policy implications of these findings are quite evident, and it would be appropriate that regulators and companies encourage separation of CEO and chair positions in order to enhance the effectiveness of governance and improve ESG transparency.

The empirical findings are evidence that REQ is a moderating variable that contributes to a relationship between corporate governance mechanisms and ESGDQ in environmental, social,

governance and integrated ESG rates respectively. The two-way communication between the variables of REQ and the core governance are positive and significantly different, which implies that an increase in REQ increases the effectiveness of board structures in supporting the improvement of quality ESGDQs. This result provides full support of Hypothesis H5 and proves that independent audit committees enhance the monitoring intensity, lessen the managerial discretion, and enhance the credibility of the disclosure. Theoretically, the outcome corresponds to the AT, which assumes that agency conflicts and information asymmetry between managers and stakeholders are alleviated by independent monitoring bodies Nerantzidis et al. (2023), and the ST, which highlights open ESG reporting as a tool of satisfying the various stakeholder expectations (Nagriwum et al., 2025). The results also indicate that the theory of legitimacy is applicable, and redoubtable audit committees are better placed to utilize ESGDQ to ensure organizational legitimacy to regulators and the society at large (Obersteiner et al., 2021). The findings are empirically consistent with previous studies that reported that the independence of audit committees increases the transparency of ESG and the quality of reporting (Bayong et al., 2025; Ozili, 2020). On the whole, it can be seen that independent audit committees play a very important role in strengthening governance-ESGDQ connections, especially in an environment of the emerging markets where institutional checks and balances are still developing.

5. Conclusion and Policy Implications

5.1 Conclusion

The research was inspired by the increasing need to have credible ESGDQ within emerging capital markets and the lack of empirical evidence on the role of internal corporate governance structures in determining the ESGDQ in such emerging capital markets. Concentrating on the non-financial GSE-listed firms, the study aimed to answer four related study questions: does BSIZE, BIND, GENDIV, and CEOD have a significant impact on the ESGDQ, and does the independence of the audit committee reinforce these responses? The answers to these questions can be especially relevant to Ghana, where the system of ESG reporting is mostly voluntary and the system of governance can take a central part in facilitating the process of compensating the ineffective external enforcement. To accomplish these ends, the research design was a quantitative research design through an unbalanced panel dataset covering the years 2000 through 2023. The quality of disclosure of ESGs was estimated on the basis of a comprehensive index created with references to the GSE ESGDQ Guidance Manual, whereas the corporate governance variables were taken out of the annual reports and a governance report of firms.

GMM-based dynamic panel estimates with strong and endogeneity indicators have been used to achieve unbiased and sound estimates. The results show that the BSIZE, BIND, and GENDIV have a positive correlation with the ESGDQ, and CEOD has a negative influence. Notably, independence of audit committee has been observed to have a positive moderating effect on relationship between the corporate governance mechanisms and the ESGDQ, which is important to highlight its vital oversight role. The findings support the need to improve internal governance structures to improve ESG transparency in emerging markets.

5.2 Theoretical Implications

The paper contributes to the theoretical discussion of the agency, stakeholder and legitimacy theories by showing how internal corporate governance structures are contributing to the ESGDQ in an emerging market environment in a joint way. To start with, with an AT frame of reference, the results are that the conventional arguments of governance past outward financial reporting are applicable to the present non-financial disclosure information that the presence of effective monitoring systems, through bigger boards, increased BIND, and independent audit committees, helps to alleviate information asymmetry. The study supports the agency-based perspective on CEOD in ESGDQ by showing the adverse impact of the duality on the quality of oversight and transparency, especially in the voluntary reporting areas. Significantly, the moderating effect of REQ raises the issue of the complementary role of organizational board of governance structures to the control of managerial opportunism in ESG reporting. Second, the research advances the ST by providing empirical evidence that board attributes that indicate diversity and inclusiveness such as gender diversity are linked with a better-ESGDQ. This justifies the data that boards that represent more varied stakeholder interests are more sensitive to the information requirements on the social and environmental front. These results advance the ST by connecting governance composition with the result of stakeholder engagement as well as the depth and credibility of ESGDQs as a major communication medium between firms and their stakeholders. Lastly, the research contributes to the theory of legitimacy since it demonstrates that the level of ESGDQ serves as a strategic legitimacy mechanism in contexts where there is weak external enforcement. The existence of the positive relationship between governance and independence of the audit committee implies that companies depend on the internal controls to indicate compliance with the societal expectations and regulations. With the placement of the legitimacy-seeking behavior at the firm-level governance structures, the study provides a more detailed explanation of the creation of legitimacy using the ESG reporting in the emerging markets.

5.3 Managerial and Policy Implications

The results of the study provide a number of critical managerial and policy-related implications that can be directly related to the identified links between the corporate governance mechanisms and the quality of the ESGDQs. In managerial terms, the findings point to the strategic significance of the board composition in improving the credibility and richness of the ESG reporting. The firms are invited to ensure that they have sufficiently large boards, which have a mix of diverse skills and views since bigger boards have been observed to relate to a higher level of ESGDQs. BIND and gender diversity in boards should also be given the priority by managers and board nomination committees since the two qualities enhance oversight and enhanced consideration in disclosure practices of wider environmental and social issues. Besides, the adverse impact of CEOD hints that the division of the CEO and board chair roles may enhance transparency and decrease the chances of symbolic or selective ESG reporting. Enhancement of REQ is of critical important since the results indicate that an increase in REQ increases the efficiency of board-level governance systems in converting governance structures to plausible ESGDQs. Policymaking wise, the outcomes give a clear guidance to the regulators and standard setters particularly in the emerging markets like Ghana. The GSE and other related governmental agencies would want to consider strengthening governance issues related to disclosure through BIND, gender, and autonomy of an audit committee as part of the current ESG reporting requirements. Policy changes that facilitate the presence of independent audit committees and discourage duality in the position of CEOs may make ESGDQs across listed companies better and more reliable.

5.4 Limitations and Future Research Agenda

This study has various limitations, which create the opportunity to conduct research in the future despite its contributions. First, the analysis is done on non-financial firms that are traded on GSE which can restrict the generalization of the results on financial institutions or firms in other emerging services markets or in other developed markets. Second, ESG reporting quality is determined by a disclosure index that relies on the disclosed information, and this focal point reflects the degree of disclosure as opposed to the sustainability performance of firms. In this way the findings might not necessarily give a complete picture of the substantive environmental or social performances related to governance practices. Third, despite using sophisticated econometric methods to resolve the endogeneity issue, it is not completely eliminated by surrounding the issue with a probability of other unobserved institutional or cultural factors

that may affect ESGDQ behavior. The studies may be further expanded in future by including cross-country studies or industry-specific studies to determine how strong the relationship between governance and ESGDQ is in different institutions. Additionally, scholars may explore alternative ESG performance measures, including assurance quality or outcome-based sustainability indicators, and examine the dynamic role of other governance mechanisms, such as ownership structure or board expertise, in shaping ESGDQ over time.

Statements and Declarations

Competing Interests

The author declares that there are no financial or non-financial competing interests related to the research, authorship, or publication of this manuscript.

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Ethics Approval and Consent to Participate

This study relies exclusively on secondary data collected from published annual reports, corporate governance disclosures, and sustainability reports of non-financial firms listed on the Ghana Stock Exchange, as well as publicly available institutional databases (World Bank Worldwide Governance Indicators). As no primary data involving human participants, human tissue, or identifiable images were collected and no human subjects were involved in this research, formal ethics committee approval was not required. Consent to participate and consent to publish are not applicable to this study.

Data Availability

The data supporting the findings of this study are publicly available from official sources. Corporate governance, financial, and ESG disclosure data were manually extracted from the annual reports, sustainability reports, and corporate governance reports of non-financial firms listed on the Ghana Stock Exchange (GSE) for the period 2010–2022. These reports are publicly available through the Ghana Stock Exchange Listed Companies portal:

https://gse.com.gh/listed-companies/

Additional annual reports were obtained from the official investor relations pages of the respective listed companies where necessary.

Regulatory Quality (RQ) data were obtained from the World Bank's Worldwide Governance Indicators (WGI) database, available at:

https://databank.worldbank.org/source/worldwide-governance-indicators

All data used in this study are publicly available without restriction.

Author Contributions

This manuscript was solely authored by Abdul Razak Abdulai. The author is responsible for the conception and design of the study, data collection and analysis, and the drafting, revision, and final approval of the manuscript.

Use of Artificial Intelligence (AI) Tools

The author confirms that AI-assisted tools were used exclusively for copy editing purposes specifically for improvements to grammar, spelling, punctuation and readability and not for the generation of original content, analysis or conclusions. The author takes full responsibility for the intellectual content and accuracy of the final manuscript.

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993