

To cite this article: Mutua John Wambua (2026). Climate Finance, Esg Practices And Corporate Financial Performance Of Listed Companies In Emerging African Markets: The Moderating Role Of Corporate Governance Quality. International Journal of Education, Business and Economics Research (IJEBER) 6 (4): 153-182

CLIMATE FINANCE, ESG PRACTICES AND CORPORATE FINANCIAL PERFORMANCE OF LISTED COMPANIES IN EMERGING AFRICAN MARKETS: THE MODERATING ROLE OF CORPORATE GOVERNANCE QUALITY

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<https://doi.org/10.59822/IJEBER.2026.6409>

ABSTRACT

Climate finance and sustainable investment have become increasingly important in corporate decision-making as firms face growing pressure from investors, regulators, and stakeholders to integrate environmental, social, and governance (ESG) practices into their strategies. This study examined the effect of ESG practices on corporate financial performance among listed companies in emerging African markets, with corporate governance quality as a moderating variable. Specifically, the study examined the effects of ESG disclosure quality, green investment, and carbon management practices on corporate financial performance. The study was anchored on Stakeholder Theory and Resource-Based View Theory and employed an explanatory research design using a quantitative approach. Secondary panel data were obtained from 50 listed companies across selected emerging African economies covering the period 2015–2025, resulting in 550 firm-year observations. Corporate financial performance was measured using return on assets (ROA), Tobin's Q, and market capitalization, while ESG disclosure quality, green investment, carbon management practices, corporate governance quality, firm size, and financial leverage were incorporated into the analytical model. Panel regression analysis was conducted using fixed effects estimation, alongside moderation analysis to determine the role of corporate governance quality. The descriptive findings indicated that sampled firms demonstrated moderate ESG adoption, with ESG disclosure quality recording a mean score of 66.13, green investment 45.54, carbon management practices 58.50, and corporate governance quality 67.53. Corporate financial performance recorded an average ROA of 8.81 and Tobin's Q of 2.10. Correlation analysis revealed significant positive relationships between ESG disclosure quality and corporate financial performance ($r = 0.624$, $p < 0.01$), green investment ($r = 0.547$, $p < 0.01$), carbon management practices ($r = 0.581$, $p < 0.01$), and corporate governance quality ($r = 0.596$, $p < 0.01$). Panel regression results demonstrated that ESG disclosure quality significantly improved corporate financial performance ($\beta = 0.041$, $p < 0.001$), green investment had a positive and significant effect ($\beta = 0.028$, $p = 0.001$), and carbon management practices significantly enhanced performance ($\beta = 0.035$, $p < 0.001$). The regression model explained 64.2% of the variation in corporate financial performance ($R^2 = 0.642$). Furthermore, moderation analysis established that corporate governance quality significantly strengthened the ESG-performance relationship, with the interaction effect between ESG practices and governance quality being positive and significant ($\beta = 0.018$, $p = 0.003$), increasing the explanatory power of the model to 71.3% ($R^2 = 0.713$). The study concluded that ESG practices represented strategic capabilities that contributed to improved corporate

financial performance among listed companies in emerging African markets. The findings supported Stakeholder Theory by demonstrating that sustainability practices enhanced stakeholder relationships and investor confidence, while Resource-Based View Theory was supported by evidence that ESG capabilities generated competitive advantages. The study recommended that listed firms strengthen ESG disclosure, increase investment in green technologies, improve carbon management strategies, and enhance governance mechanisms to maximize the financial benefits of sustainability practices.

KEYWORDS: ESG practices, climate finance, sustainable investment, corporate financial performance, corporate governance quality, emerging African markets, green investment.

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Published Online: August 2026

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1.0 INTRODUCTION

1.1 Background to the Study

Climate finance and sustainable investment have become important areas in corporate finance as firms have increasingly incorporated environmental, social, and governance (ESG) considerations into strategic decision-making. ESG practices have provided a framework through which companies have addressed environmental risks, stakeholder expectations, and long-term value creation. Stakeholder Theory has explained that firms improve sustainability and performance outcomes when they consider the interests of multiple stakeholders beyond shareholders (Freeman, 1984). Similarly, the Resource-Based View has demonstrated that sustainability capabilities can represent valuable strategic resources that enhance competitive advantage (Barney, 1991). Consequently, ESG practices have gained attention as mechanisms for improving corporate reputation, risk management, and financial outcomes.

Previous empirical studies have investigated the relationship between ESG practices and corporate financial performance, although findings have varied across different economic environments. Friede et al. (2015) conducted a comprehensive review of over 2,000 empirical studies and found that ESG factors had generally demonstrated either positive or neutral relationships with financial performance. Eccles et al. (2014) established that firms with strong sustainability practices had achieved superior long-term financial performance due to improved stakeholder relationships and operational efficiency. However, Boubaker et al. (2020) found that ESG outcomes had depended on firm characteristics, institutional environments, and governance structures, indicating that sustainability practices had not produced uniform financial benefits across different markets.

Emerging African markets have provided an important context for examining ESG practices because listed companies have operated within developing financial systems characterized by evolving sustainability expectations and increasing investor scrutiny. African firms have experienced growing pressure from international investors and stakeholders to improve ESG disclosure, climate-risk management, and sustainable investment practices. Suchman's (1995)

Legitimacy Theory has explained that organizations have adopted responsible practices to maintain social acceptance and strengthen relationships with external stakeholders. However, ESG implementation among African companies has remained challenging due to differences in regulatory development, reporting standards, and institutional capacity, creating uncertainty regarding the financial value generated from sustainability investments.

Corporate governance quality has increasingly been recognized as an important factor influencing the effectiveness of ESG implementation and its impact on corporate financial performance. Governance mechanisms, including board independence, accountability systems, and effective monitoring structures, have influenced how firms have allocated resources and implemented strategic initiatives. Shleifer and Vishny (1997) demonstrated that strong corporate governance has improved accountability, investor protection, and efficient corporate decision-making. In relation to ESG practices, Velte (2017) found that corporate governance characteristics had influenced the relationship between ESG performance and financial outcomes. Therefore, governance quality has been considered an important mechanism that may strengthen the ability of firms to convert sustainability practices into measurable financial benefits.

Although ESG practices have received increasing global attention, limited empirical evidence has explained how ESG initiatives have influenced corporate financial performance among listed companies in emerging African markets. Existing research has concentrated largely on developed economies where ESG reporting frameworks and sustainability regulations have been more established. Fatemi et al. (2018) found that ESG disclosure quality had influenced firm value by reducing information asymmetry and improving investor confidence, while Li et al. (2018) demonstrated that sustainability disclosure had enhanced corporate valuation. However, the moderating influence of corporate governance quality on the ESG-financial performance relationship has remained insufficiently explored in African markets. Therefore, this study examined the effect of ESG practices on corporate financial performance while assessing the moderating role of corporate governance quality among listed companies in emerging African markets.

1.2 Statement of the Problem

The increasing importance of climate finance and sustainable investment has transformed corporate decision-making as investors and stakeholders have placed greater emphasis on environmental, social, and governance (ESG) practices. Although ESG adoption has expanded globally, evidence regarding its financial benefits remains inconclusive, particularly in emerging markets. Previous studies have demonstrated that strong ESG practices may improve firm value, profitability, and investor confidence; however, other studies have indicated that ESG implementation may involve significant costs without immediate financial returns (Friede et al., 2015; Fatemi et al., 2018). This uncertainty has created challenges for firms and investors seeking to determine whether sustainability initiatives generate measurable economic benefits.

The problem is more pronounced in emerging African markets, where listed companies have faced increasing pressure to adopt ESG practices while operating within developing regulatory, financial, and institutional environments. Although African economies require significant climate-related

investment, many firms continue to experience challenges related to sustainability reporting quality, green investment capacity, and carbon management practices. Existing empirical studies have concentrated mainly on developed markets, leaving limited evidence regarding whether ESG practices contribute to corporate financial performance within African contexts (Boubaker et al., 2020). Consequently, the financial value of ESG adoption among African listed firms remains insufficiently understood.

Furthermore, corporate governance quality may influence the extent to which ESG practices translate into improved financial outcomes. Strong governance mechanisms may enhance accountability, improve sustainability implementation, and ensure that environmental investments contribute to long-term corporate value. However, limited studies have examined the moderating role of corporate governance quality in the relationship between ESG practices and financial performance, particularly among listed companies in emerging African markets. Therefore, this study addressed this research gap by examining the effect of ESG practices on corporate financial performance and determining whether corporate governance quality strengthened this relationship.

1.3 Research Objectives

1.3.1 General Objective

To examine the effect of ESG practices on corporate financial performance of listed companies in emerging African markets, with corporate governance quality as a moderating variable.

1.3.2 Specific Objectives

1. To examine the effect of ESG disclosure quality on corporate financial performance of listed companies in emerging African markets.
2. To determine the effect of green investment practices on corporate financial performance of listed companies in emerging African markets.
3. To assess the effect of carbon management practices on corporate financial performance of listed companies in emerging African markets.
4. To examine the moderating effect of corporate governance quality on the relationship between ESG practices and corporate financial performance of listed companies in emerging African markets.

1.4 Research Hypotheses

The study tested the following null hypotheses:

- H0₁:** ESG disclosure quality has no significant effect on corporate financial performance of listed companies in emerging African markets.
- H0₂:** Green investment practices have no significant effect on corporate financial performance of listed companies in emerging African markets.
- H0₃:** Carbon management practices have no significant effect on corporate financial performance of listed companies in emerging African markets.
- H0₄:** Corporate governance quality does not significantly moderate the relationship between ESG practices and corporate financial performance of listed companies in emerging African markets.

1.5 Significance of the Study

This study provides important contributions to different stakeholders interested in sustainability, corporate finance, and responsible investment within emerging African markets. For academics, the study contributes to the existing ESG and corporate finance literature by providing empirical evidence on the relationship between ESG practices and financial performance while incorporating corporate governance quality as a moderating factor. The study extends existing knowledge by addressing the limited evidence available from African emerging markets, where institutional and regulatory conditions differ from developed economies.

For corporate managers and executives of listed companies, the findings provide insights into whether investments in ESG disclosure, green initiatives, and carbon management practices generate financial value. The study may assist managers in developing sustainability strategies that improve stakeholder relationships, strengthen competitiveness, and enhance long-term corporate performance.

For investors and financial institutions, the study provides evidence on the relevance of ESG practices when evaluating investment opportunities in African markets. Understanding the relationship between sustainability practices and financial outcomes may support better investment decisions and encourage responsible capital allocation.

For policymakers and regulatory authorities, the study highlights the importance of strengthening ESG reporting frameworks, corporate governance standards, and sustainability regulations. Effective policies may encourage companies to adopt sustainable business practices while improving transparency and investor confidence. Overall, the study contributes to the broader discussion on sustainable finance by demonstrating how ESG practices and governance mechanisms influence corporate value creation in emerging African economies.

2.0 LITERATURE REVIEW

This chapter presents the theoretical and empirical literature related to climate finance, ESG practices, corporate financial performance, and the moderating influence of corporate governance quality among listed companies in emerging African markets. The chapter begins with a discussion of the theoretical foundations that explain why firms adopt sustainability practices and how such practices may influence financial outcomes. Specifically, the study is anchored on Stakeholder Theory and Resource-Based View Theory, which provide explanations regarding stakeholder expectations, sustainability capabilities, and long-term value creation. The chapter further reviews the main study concepts, including ESG disclosure quality, green investment, carbon management practices, corporate financial performance, and corporate governance quality. Finally, the chapter identifies existing research gaps and presents the conceptual framework guiding the study.

2.1 Theoretical Review

The theoretical review provides the foundation for understanding the relationship between ESG practices and corporate financial performance. The adoption of sustainability practices has been explained through various theoretical perspectives, but this study focuses on Stakeholder Theory and Resource-Based View Theory because they provide the strongest explanations for how ESG

initiatives can influence firm value. Stakeholder Theory explains the importance of responding to the expectations of investors, regulators, customers, employees, and society, while Resource-Based View Theory explains how sustainability capabilities can become strategic resources that enhance competitive advantage. Together, these theories provide a comprehensive explanation of why firms adopt ESG practices and how such practices may contribute to improved financial performance.

2.1.1 Stakeholder Theory

Stakeholder Theory was developed by Freeman (1984) through his influential work *Strategic Management: A Stakeholder Approach*. The theory argues that firms should not focus exclusively on shareholder wealth maximization but should also consider the interests of all stakeholders who influence or are influenced by organizational activities. According to Freeman (1984), long-term corporate success depends on effectively managing relationships with stakeholders, including investors, customers, employees, communities, and regulators. The theory has received significant empirical support because firms that actively address stakeholder expectations often improve reputation, trust, and financial outcomes. For example, Donaldson and Preston (1995) demonstrated that stakeholder-oriented management improved organizational effectiveness. Eccles et al. (2014) found that firms with strong sustainability practices achieved superior long-term performance, while Friede et al. (2015) established that ESG practices generally had positive or neutral effects on corporate financial performance.

Despite its influence, Stakeholder Theory has received criticism because some scholars argue that balancing multiple stakeholder interests may create strategic conflicts and increase operational costs. Jensen (2002) argued that excessive stakeholder considerations may weaken managerial accountability by creating unclear corporate objectives. Similarly, Sundaram and Inkpen (2004) questioned whether stakeholder approaches could provide clear decision-making priorities compared with shareholder-focused models. Tirole (2001) also suggested that stakeholder objectives may create measurement difficulties because stakeholder benefits are often difficult to quantify financially. Furthermore, Bénabou and Tirole (2010) argued that corporate social initiatives may sometimes represent symbolic actions rather than genuine value creation. These criticisms suggest that while stakeholder engagement may enhance legitimacy and reputation, the financial benefits of ESG practices may depend on organizational capabilities and institutional environments.

Stakeholder Theory was relevant to this study because ESG practices represent a mechanism through which listed companies respond to increasing expectations from investors, regulators, customers, and society. ESG disclosure quality allows firms to communicate sustainability performance, while green investment and carbon management practices demonstrate commitment toward environmental responsibility. The theory therefore explains why firms adopting stronger ESG practices may achieve improved financial outcomes through enhanced stakeholder relationships, reduced reputational risks, and increased investor confidence. Furthermore, the theory supports the inclusion of corporate governance quality as a moderating variable because effective governance structures improve accountability and ensure that stakeholder-oriented strategies are implemented effectively. In emerging African markets, where investor confidence and

sustainability reporting systems continue to develop, Stakeholder Theory provides an important explanation of how ESG practices may contribute to corporate financial performance.

2.1.2 Resource-Based View Theory

Resource-Based View (RBV) Theory was developed by Barney (1991), building on earlier strategic management ideas proposed by Wernerfelt (1984). The theory argues that firms achieve sustainable competitive advantage when they possess valuable, rare, inimitable, and non-substitutable resources and capabilities. Unlike traditional approaches that emphasize external market conditions, RBV focuses on internal organizational resources as drivers of superior performance. Within the context of sustainability, ESG capabilities, environmental management systems, green innovation, and carbon reduction strategies can represent strategic resources that improve efficiency and strengthen competitive positioning. Empirical evidence has supported this argument. Hart (1995) demonstrated that environmental capabilities could create competitive advantage, while Russo and Fouts (1997) found that environmental performance was positively associated with corporate profitability. Similarly, Ambec and Lanoie (2008) showed that environmental strategies could enhance operational efficiency and improve financial performance.

However, RBV Theory has also received criticism regarding its assumptions and practical application. Priem and Butler (2001) argued that RBV lacked sufficient predictive power because identifying valuable resources after achieving competitive advantage does not necessarily explain how firms initially obtain success. Kraaijenbrink et al. (2010) further criticized the theory because the concepts of valuable and rare resources may be difficult to measure objectively. Miller and Shamsie (1996) suggested that the importance of resources depends on industry conditions and environmental uncertainty rather than internal capabilities alone. Additionally, Newbert (2007) found that empirical evidence supporting the relationship between strategic resources and performance was mixed, indicating that resources alone may not guarantee superior outcomes. These criticisms suggest that ESG capabilities may contribute to financial performance, but their effectiveness may depend on governance structures, institutional environments, and market conditions.

RBV Theory was relevant to this study because ESG practices can be viewed as strategic organizational capabilities that create long-term corporate value. ESG disclosure quality reflects a firm's ability to develop transparent sustainability systems, while green investment and carbon management practices represent internal capabilities that may improve efficiency, innovation, and risk management. The theory supports the argument that companies investing in sustainability may achieve superior financial performance because ESG capabilities can differentiate firms from competitors and strengthen relationships with capital providers. Additionally, corporate governance quality may influence the effectiveness of these resources by ensuring proper allocation, monitoring, and implementation of sustainability strategies. Therefore, RBV Theory provides a strong foundation for examining how ESG practices influence corporate financial performance among listed companies in emerging African markets.

2.2 Empirical Literature Review

2.2.1 ESG Disclosure Quality and Corporate Financial Performance

Previous empirical studies have examined whether the quality of ESG disclosure improves corporate financial performance by enhancing transparency, reducing information asymmetry, and strengthening stakeholder confidence. Friede et al. (2015), through a comprehensive review of more than 2,000 empirical studies, established that ESG performance had generally demonstrated a positive or neutral relationship with financial performance, suggesting that sustainability practices were compatible with shareholder value creation. Similarly, Fatemi et al. (2018) found that ESG disclosure quality improved firm value because transparent sustainability information reduced uncertainty among investors and enhanced market perceptions. Li et al. (2018) further demonstrated that higher ESG disclosure levels were associated with improved corporate valuation, as sustainability reporting provided investors with additional information regarding long-term risks and opportunities. These findings support the argument that quality ESG disclosure can function as a strategic communication mechanism that enhances financial outcomes.

However, empirical evidence has not been universally consistent regarding the financial benefits of ESG disclosure. Some studies have found that sustainability reporting may generate limited or insignificant financial effects, particularly where ESG disclosures are primarily symbolic rather than reflective of actual corporate sustainability performance. López et al. (2007) found that socially responsible firms experienced short-term reductions in financial performance due to the costs associated with implementing sustainability initiatives. Similarly, Aupperle et al. (1985) reported weak relationships between corporate social responsibility activities and profitability, suggesting that responsible practices do not automatically translate into improved financial outcomes. Cheng et al. (2014) also indicated that the benefits of ESG disclosure depended on institutional conditions and stakeholder engagement mechanisms. These mixed findings suggest that the financial impact of ESG disclosure may vary according to market maturity, governance structures, and regulatory environments.

Evidence from emerging markets has further demonstrated that the relationship between ESG disclosure and financial performance is influenced by institutional development and reporting practices. Research by Boubaker et al. (2020) indicated that ESG performance effects differed across countries because firms operated under varying regulatory frameworks, investor expectations, and governance conditions. In emerging African markets, ESG reporting has continued to develop, with many firms facing challenges related to sustainability standards, limited disclosure requirements, and resource constraints. Amran et al. (2017) observed that sustainability reporting practices in developing economies were influenced by institutional pressures and organizational capabilities. These challenges may limit the ability of African listed companies to communicate sustainability performance effectively and realize potential financial benefits from ESG initiatives.

Despite increasing interest in ESG disclosure, important empirical gaps remain regarding listed companies in emerging African markets. Existing studies have concentrated mainly on developed economies where ESG reporting frameworks and sustainability regulations are more established. Furthermore, many previous studies have examined ESG performance as a general construct

without separating disclosure quality from other sustainability dimensions such as green investment and carbon management practices. Additionally, limited research has investigated how corporate governance quality influences the ability of firms to convert ESG disclosure into financial value. Therefore, this study addressed this gap by examining the effect of ESG disclosure quality on corporate financial performance while considering corporate governance quality as a moderating factor among listed companies in emerging African markets.

2.2.2 Green Investment and Corporate Financial Performance

Green investment has received increasing empirical attention as firms have sought to integrate environmental sustainability into corporate strategies while maintaining financial competitiveness. Previous studies have suggested that investments in renewable energy, environmental technologies, and resource efficiency can generate financial benefits through improved operational efficiency and enhanced corporate reputation. Russo and Fouts (1997) found that environmental performance was positively associated with profitability, suggesting that environmentally responsible firms could achieve competitive advantages through improved resource utilization. Similarly, Hart (1995) argued that environmental capabilities could create strategic advantages by enabling firms to develop innovative solutions and respond effectively to environmental challenges. Ambec and Lanoie (2008) further demonstrated that environmental investments could improve financial performance by reducing costs, encouraging innovation, and strengthening relationships with stakeholders.

Despite these potential benefits, some empirical studies have challenged the assumption that green investment automatically improves financial performance. Environmental investments often require significant initial capital expenditure, and financial benefits may only emerge over the long term. Horváthová (2010) found that the relationship between environmental performance and financial outcomes was influenced by industry characteristics and methodological approaches, with some studies reporting insignificant or negative effects. Similarly, King and Lenox (2001) established that environmental improvements did not always produce immediate financial gains because firms faced adjustment costs associated with adopting cleaner technologies. These findings suggest that the financial outcomes of green investment depend on factors such as investment efficiency, organizational capabilities, and market conditions.

In emerging markets, green investment has presented both opportunities and challenges for firms seeking sustainable growth. Developing economies often require significant environmental investment due to climate vulnerability and industrial expansion, yet firms may face limited access to green financing, technological constraints, and weak sustainability infrastructure. Zhang et al. (2020) found that green innovation contributed positively to firm performance in emerging economies when supported by appropriate institutional conditions. However, the ability of African firms to benefit financially from green investment has remained uncertain due to differences in regulatory frameworks and capital availability. This highlights the importance of examining green investment within the specific context of emerging African markets.

Although previous research has demonstrated the potential importance of green investment, limited empirical evidence has examined its effect on financial performance among African listed

companies. Existing studies have largely focused on developed economies and major emerging markets, creating insufficient understanding of African corporate environments. Additionally, limited studies have examined green investment alongside other ESG dimensions while considering governance mechanisms that may influence investment effectiveness. Therefore, this study contributes to existing literature by examining whether green investment practices significantly influence corporate financial performance among listed companies in emerging African markets, while assessing the moderating role of corporate governance quality.

2.2.3 Carbon Management Practices and Corporate Financial Performance

Carbon management practices have become increasingly important as firms respond to climate-related risks, regulatory pressures, and investor expectations. These practices include carbon emission reduction strategies, carbon disclosure, energy efficiency initiatives, and climate risk management. Empirical studies have suggested that effective carbon management can enhance corporate performance by reducing operational costs, improving resource efficiency, and strengthening corporate reputation. Busch and Hoffmann (2011) found that carbon management capabilities influenced competitive advantage by enabling firms to respond effectively to climate-related challenges. Similarly, Matsumura et al. (2014) established that carbon emissions were negatively associated with firm value, suggesting that investors considered environmental performance when evaluating companies. These findings indicate that carbon management can influence financial outcomes through both operational and market mechanisms.

However, empirical findings regarding carbon management and financial performance have remained mixed. Some studies have suggested that carbon reduction initiatives may impose significant costs, particularly in industries requiring substantial technological transformation. Clarkson et al. (2015) found that the financial benefits of carbon disclosure depended on the credibility and quality of reported information. Similarly, Griffin et al. (2017) argued that investors responded differently to carbon-related information depending on disclosure reliability and market conditions. These findings indicate that carbon management practices alone may not guarantee improved financial performance unless firms effectively communicate environmental achievements and integrate climate strategies into broader corporate objectives.

Research in emerging economies has demonstrated that carbon management practices remain influenced by institutional capacity, regulatory environments, and access to environmental technologies. Firms operating in developing markets often face challenges related to limited climate financing, inadequate reporting standards, and weak enforcement mechanisms. According to Delmas and Burbano (2011), organizational and institutional factors influence whether firms adopt meaningful environmental practices or engage in symbolic sustainability activities. In African markets, where climate-related vulnerabilities are significant, effective carbon management may provide opportunities for firms to improve resilience and attract sustainability-focused investors. However, empirical evidence regarding the financial implications of carbon management among African listed companies remains limited.

The existing literature demonstrates the importance of carbon management practices but reveals significant gaps regarding emerging African markets. Most empirical studies have focused on

developed economies with stronger environmental regulations and established carbon reporting systems. Furthermore, limited studies have incorporated carbon management as a separate ESG dimension while examining its interaction with governance quality and corporate financial performance. This study addresses this gap by evaluating the effect of carbon management practices on financial performance among listed companies in emerging African markets and examining whether corporate governance quality strengthens the relationship between sustainability practices and corporate value creation.

2.2.4 Corporate Governance Quality as a Moderator Between ESG Practices and Corporate Financial Performance

Corporate governance quality has increasingly been recognized as an important factor influencing the effectiveness of ESG practices and their contribution to corporate financial performance. Corporate governance refers to the systems, structures, and mechanisms through which firms are directed, monitored, and controlled to ensure accountability and responsible decision-making. Strong governance mechanisms, including board independence, effective audit committees and transparent ownership structures, improve managerial accountability and reduce conflicts between managers and shareholders (Shleifer & Vishny, 1997). Empirical evidence has demonstrated that corporate governance quality enhances sustainability outcomes by ensuring that ESG strategies are integrated into corporate objectives rather than being treated as symbolic commitments. Jo and Harjoto (2011) found that stronger corporate governance structures were associated with improved corporate social responsibility performance and enhanced firm value. Similarly, Galbreath (2013) established that governance mechanisms influenced the relationship between sustainability practices and organizational performance.

Despite the theoretical expectation that strong governance strengthens ESG outcomes, empirical findings have not been entirely consistent. Some studies have shown that governance mechanisms do not always produce significant improvements in sustainability-related financial outcomes. Ortas et al. (2017) found that the influence of governance characteristics on corporate sustainability performance varied across institutional contexts and industries. Similarly, Michelon and Parbonetti (2012) demonstrated that board characteristics alone did not always guarantee high-quality sustainability disclosure because organizational culture and stakeholder pressures also played important roles. García-Sánchez et al. (2020) further indicated that governance mechanisms may have limited effects where ESG practices are adopted primarily to satisfy regulatory requirements rather than as part of genuine strategic commitment. These findings suggest that governance quality may strengthen ESG outcomes only when governance systems are effectively implemented and supported by appropriate institutional environments.

In emerging markets, corporate governance quality has become particularly important because firms often operate within environments characterized by weaker regulatory enforcement, information asymmetry, and evolving sustainability standards. Previous research has indicated that governance mechanisms influence how firms respond to sustainability pressures and communicate ESG-related information to investors. Amran et al. (2017) found that sustainability reporting practices in developing economies were influenced by governance structures, stakeholder expectations, and institutional pressures. Similarly, Cucari et al. (2018) established that board

characteristics, particularly independence and diversity, affected the extent and quality of ESG disclosure. These findings suggest that corporate governance may determine whether ESG practices generate meaningful financial benefits or remain largely reporting exercises.

Although existing studies have examined the relationship between governance, ESG practices, and firm performance, important gaps remain, particularly within emerging African markets. Most empirical studies have focused on developed economies where governance systems and sustainability reporting frameworks are more mature. Limited evidence exists regarding whether corporate governance quality strengthens the effect of ESG disclosure quality, green investment, and carbon management practices on financial performance among African listed companies. Furthermore, previous studies have often examined governance as a direct determinant of ESG performance rather than as a moderating mechanism. Therefore, this study addressed this gap by examining corporate governance quality as a moderator in the relationship between ESG practices and corporate financial performance among listed companies in emerging African markets.

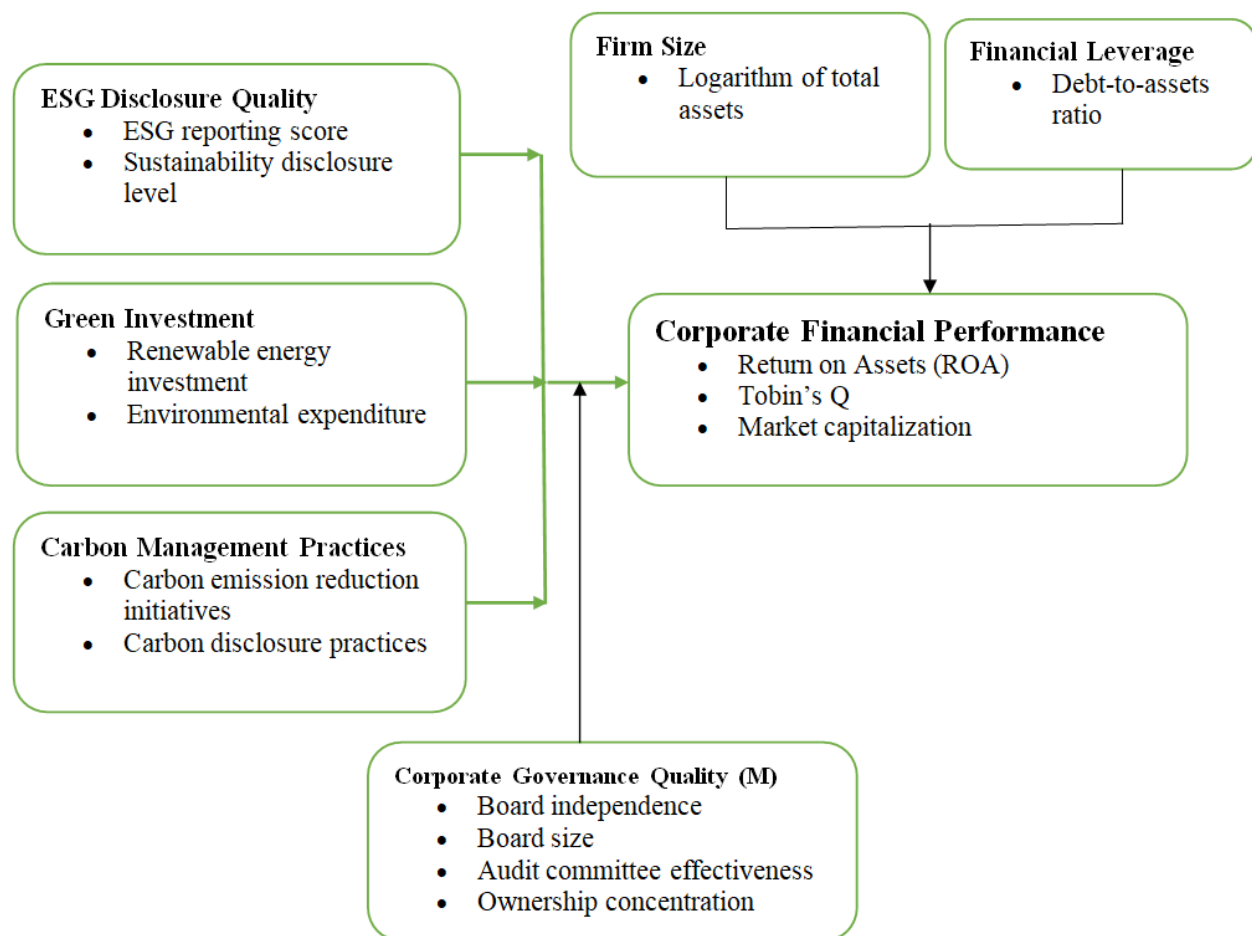
2.3 Conceptual Framework

The conceptual framework illustrates the relationship between ESG practices, corporate financial performance, and the moderating influence of corporate governance quality among listed companies in emerging African markets. The framework is based on the assumption that sustainability practices contribute to corporate value creation through improved transparency, operational efficiency, stakeholder relationships, and long-term competitiveness. ESG practices are conceptualized as the independent variable, corporate financial performance as the dependent variable; while corporate governance quality is considered a moderating variable that influences the strength of the relationship between ESG practices and financial outcomes.

ESG practices are represented through three dimensions: ESG disclosure quality, green investment, and carbon management practices. ESG disclosure quality reflects firms' transparency in communicating sustainability information, while green investment represents allocation of resources toward environmentally sustainable activities and technologies. Carbon management practices capture efforts to reduce emissions and manage climate-related risks. These practices are expected to improve corporate financial performance by reducing operational risks, enhancing reputation, attracting responsible investors, and creating competitive advantages. Corporate financial performance is measured using return on assets (ROA), Tobin's Q, and market capitalization.

Corporate governance quality strengthens the framework by explaining how governance mechanisms influence the effectiveness of ESG implementation. Strong governance structures, including board independence, audit committees, board diversity, and monitoring systems, enhance accountability and strategic alignment, enabling firms to maximize ESG benefits. The study also incorporates firm size and financial leverage as control variables because they influence corporate performance outcomes. Controlling these factors allows the study to provide a more accurate assessment of the effect of ESG practices on corporate financial performance among listed companies in emerging African markets.

The conceptual relationship is presented as follows:



Independent variable

Dependent variable

Figure 2.1: Conceptual Frame work

Source (Author, 2026)

2.4 Research Gap

Although previous studies have extensively examined the relationship between ESG practices and corporate financial performance, several gaps remain unresolved, particularly within emerging African markets. These gaps provide the justification for the current study.

Most empirical studies on ESG and corporate financial performance have been conducted in developed economies where sustainability reporting standards, regulatory frameworks, and responsible investment markets are more advanced. Studies by Friede et al. (2015), Fatemi et al. (2018), and Li et al. (2018) have provided significant evidence on ESG-performance relationships; however, their findings have largely reflected developed market environments. Limited empirical evidence exists regarding listed companies in emerging African markets, where firms operate under different institutional conditions, sustainability reporting practices, and investment environments. Therefore, the extent to which ESG practices create financial value among African listed firms remains insufficiently understood.

Existing studies have frequently examined ESG performance as a single aggregated construct, limiting understanding of how specific sustainability dimensions influence financial outcomes differently. ESG practices consist of multiple components, including disclosure quality, green investment, and carbon management practices, which may affect corporate performance through different mechanisms. Previous research has provided limited separation of these dimensions, particularly within emerging markets. This study addresses this gap by examining ESG disclosure quality, green investment, and carbon management practices as distinct explanatory variables influencing corporate financial performance.

Previous empirical studies have primarily focused on direct relationships between ESG practices and financial performance, with limited attention given to mechanisms that may influence the strength of these relationships. Although corporate governance has been identified as an important determinant of sustainability effectiveness, few studies have examined its moderating role between ESG practices and corporate financial outcomes. Existing research has mainly considered governance as an independent predictor rather than examining whether governance quality strengthens or weakens the financial benefits associated with ESG adoption. This study addresses this methodological gap by incorporating corporate governance quality as a moderating variable.

The empirical evidence regarding ESG practices and financial performance remains inconclusive. While studies such as Eccles et al. (2014), Friede et al. (2015), and Boubaker et al. (2020) have demonstrated positive relationships between sustainability practices and financial outcomes, other studies have reported insignificant or mixed findings due to differences in institutional environments, measurement approaches, and market conditions. Furthermore, limited evidence exists regarding how ESG practices influence firm value and profitability among African listed companies. Therefore, this study contributes to the literature by providing empirical evidence on the relationship between ESG practices and corporate financial performance while examining the moderating influence of corporate governance quality in emerging African markets.

3.0 RESEARCH METHODOLOGY

This study employed an explanatory research design and a quantitative research approach to examine the effect of ESG practices on corporate financial performance among listed companies in emerging African markets, with corporate governance quality as a moderating variable. The study utilized secondary panel data obtained from listed companies across selected emerging African economies covering the period 2015–2025. The data were collected from publicly available annual reports, sustainability reports, ESG reports, financial statements, stock exchange databases, and established ESG databases where available. The study focused on listed firms because such companies provide publicly accessible financial and sustainability information required for examining ESG-performance relationships. The dependent variable was corporate financial performance (Y), measured using return on assets (ROA), Tobin's Q, and market capitalization. The independent variables included ESG disclosure quality (X_1), green investment (X_2), and carbon management practices (X_3), while corporate governance quality (M) was incorporated as a moderating variable. Firm size (X_4) and financial leverage (X_5) were included as control variables because they influence corporate performance outcomes. The study applied panel data regression techniques because they combine cross-sectional and time-series observations, allowing analysis of

firm-level variations over time while controlling for unobserved heterogeneity (Baltagi, 2021; Wooldridge, 2020). The direct effect model was specified as:

$$CFP_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \varepsilon_{it}$$

where CFP represents corporate financial performance, X_1 represents ESG disclosure quality, X_2 represents green investment, X_3 represents carbon management practices, X_4 represents firm size, X_5 represents financial leverage, and ε represents the error term. To examine the moderating influence of corporate governance quality, the study estimated the interaction model:

$$CFP_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 M_{it} + \beta_5 (X_1 * M)_{it} + \beta_6 X_{4it} + \beta_7 X_{5it} + \varepsilon_{it}$$

Where M represents corporate governance quality. The analysis involved descriptive statistics, correlation analysis, diagnostic tests, and panel regression estimation using appropriate models selected through specification tests such as the Hausman test. The methodology provided an empirical framework for determining whether ESG practices influenced corporate financial performance and whether strong corporate governance mechanisms enhanced the financial benefits associated with sustainability practices among listed companies in emerging African markets.

4.0 RESEARCH FINDINGS

This chapter presents the empirical findings on the relationship between ESG practices and corporate financial performance among listed companies in emerging African markets. The analysis was conducted using panel data comprising 550 firm-year observations. The chapter presents descriptive statistics, correlation analysis, panel regression results, moderation analysis, and hypothesis testing. The findings focus on the effect of ESG disclosure quality, green investment, and carbon management practices on corporate financial performance, while assessing the moderating influence of corporate governance quality. The analysis also controlled for firm size and financial leverage to isolate the independent contribution of ESG practices to firm performance.

4.1 Descriptive Statistics

Descriptive statistics were conducted to examine the characteristics, distribution, and variation of the study variables. Table 4.1 presents the mean, standard deviation, minimum, and maximum values for corporate financial performance, ESG practices, corporate governance quality, and control variables.

Table 4.1: Descriptive Statistics of Study Variables

Variable	Mean	Std. Deviation	Minimum	Maximum
Corporate Financial Performance (ROA)	8.807	1.593	4.830	13.030
Tobin's Q	2.098	0.274	1.290	2.860
Market Capitalization (USD Million)	3372.381	1897.392	148.770	7348.430
ESG Disclosure Quality	66.128	17.163	35.160	94.980
Green Investment	45.542	20.470	10.100	79.890
Carbon Management Practices	58.504	17.105	30.080	89.970

Variable	Mean	Std. Deviation	Minimum	Maximum
Corporate Governance Quality	67.531	15.658	40.010	94.860
Firm Size (Log Assets)	16.892	2.817	12.030	21.990
Financial Leverage	0.448	0.169	0.150	0.750

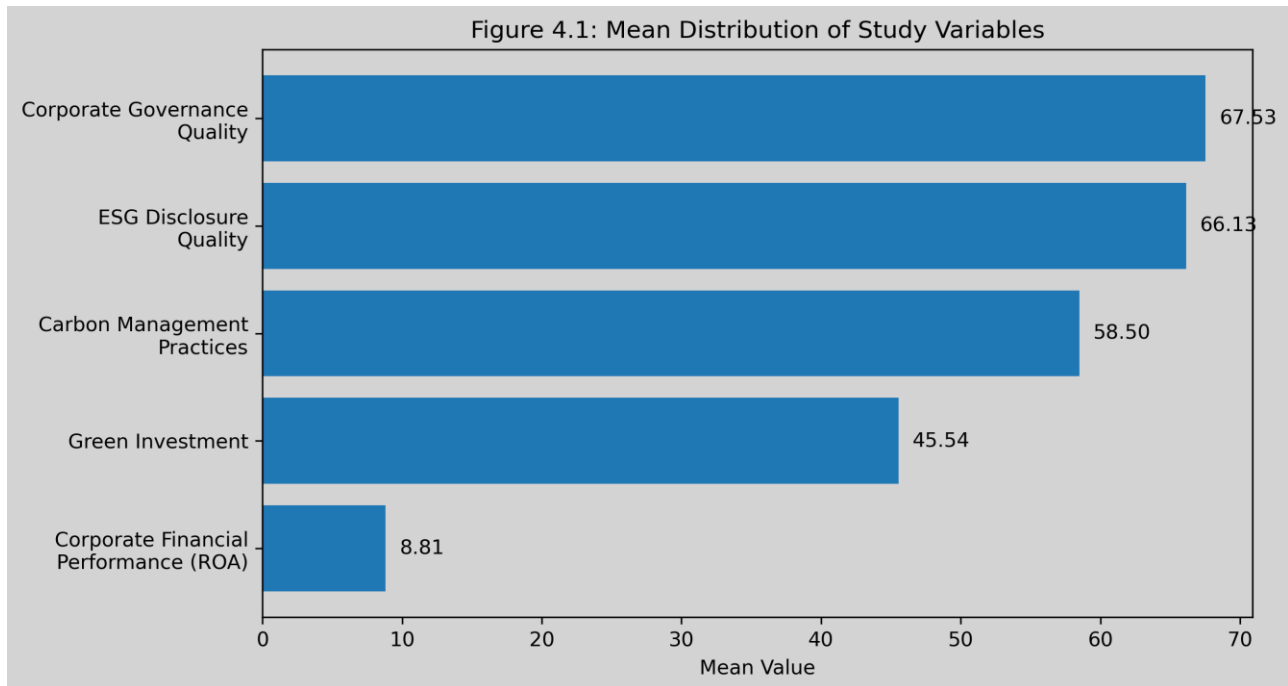


Figure 4.1: Mean Distribution of Study Variables

Based on the findings in Figure 4.1 and Table 4.1, the results indicate that listed companies in emerging African markets demonstrated relatively strong adoption of ESG-related practices, although considerable variation existed across firms. ESG Disclosure Quality recorded a mean value of 66.13, suggesting that firms had developed moderate levels of sustainability reporting practices. However, the standard deviation of 17.16 indicated differences among companies regarding the extent and quality of ESG disclosure.

The findings further showed that Corporate Governance Quality recorded the highest sustainability-related mean score (67.53), indicating that sampled firms generally possessed relatively developed governance mechanisms. This suggests that governance structures may play an important role in supporting sustainability implementation and accountability within African listed firms.

The mean value for Carbon Management Practices was 58.50, while Green Investment recorded a lower mean value of 45.54. This indicates that although firms had increasingly adopted carbon-related sustainability activities, investment in green technologies and environmental projects remained comparatively lower. This finding may reflect challenges experienced by African firms, including limited access to green financing, technological constraints, and higher initial costs associated with environmental investments.

The average Corporate Financial Performance measured through ROA was 8.81, while Tobin's Q recorded a mean of 2.10, suggesting that sampled firms generated positive accounting returns and maintained favourable market valuations. The relatively high variation in market capitalization (standard deviation = 1,897.39 million USD) indicates substantial differences in firm size and market recognition among listed companies.

Based on the findings, the descriptive results provide preliminary support for the arguments of Stakeholder Theory, which proposes that firms improve long-term value creation by responding to stakeholder expectations through responsible business practices (Freeman, 1984). The presence of ESG disclosure, environmental investment, and governance mechanisms among firms suggests that sustainability has become an important component of corporate strategy.

The findings also support the Resource-Based View Theory because ESG capabilities represent internal organizational resources that may enhance competitiveness and financial outcomes (Barney, 1991). The variation among firms in ESG practices suggests that companies with stronger sustainability capabilities may possess strategic advantages compared with firms with weaker ESG systems.

The descriptive findings are consistent with previous empirical evidence. Friede et al. (2015) found that ESG practices were generally associated with positive or neutral financial outcomes, while Eccles et al. (2014) demonstrated that firms with stronger sustainability strategies achieved superior long-term performance. Similarly, Fatemi et al. (2018) established that ESG-related transparency improved firm valuation by reducing information asymmetry and strengthening investor confidence.

Overall, the descriptive statistics suggest that ESG practices and governance mechanisms were present among African listed firms, but differences existed in the extent of adoption. These variations provide justification for further analysis through correlation, regression, and moderation models to determine whether ESG practices significantly influenced corporate financial performance.

4.2 Correlation Analysis

Correlation analysis was conducted to examine the direction and strength of relationships among the study variables before undertaking panel regression analysis. The analysis was important in determining whether ESG practices, corporate governance quality, and control variables were associated with corporate financial performance. Pearson correlation coefficients were used, where values closer to +1 indicated a strong positive relationship, values closer to -1 represented a strong negative relationship, and values near zero indicated weak relationships.

Table 4.2: Correlation Matrix of Study Variables

Variable	CFP (ROA)	ESG Disclosure	Green Investment	Carbon Management	Governance Quality	Firm Size	Leverage
CFP (ROA)	1.000						

Variable	CFP (ROA)	ESG Disclosure	Green Investment	Carbon Management	Governance Quality	Firm Size	Leverage
ESG Disclosure Quality	0.624***	1.000					
Green Investment	0.547***	0.682***	1.000				
Carbon Management Practices	0.581***	0.714***	0.653***	1.000			
Corporate Governance Quality	0.596***	0.728***	0.601***	0.675***	1.000		
Firm Size	0.382***	0.421***	0.355***	0.398***	0.437***	1.000	
Financial Leverage	- 0.214***	-0.173***	-0.126**	-0.159***	-0.181***	0.291***	1.000

***p < 0.01, **p < 0.05

Based on the findings in Table 4.2, the results indicate that ESG practices had positive and statistically significant relationships with corporate financial performance. ESG Disclosure Quality recorded the strongest relationship with corporate financial performance ($r = 0.624$, $p < 0.01$), suggesting that firms with higher levels of sustainability transparency generally experienced stronger financial outcomes. This indicates that improved ESG reporting may enhance investor confidence, reduce information asymmetry, and strengthen stakeholder relationships.

The findings further showed that Carbon Management Practices had a positive association with corporate financial performance ($r = 0.581$, $p < 0.01$). This suggests that firms implementing carbon reduction initiatives and climate management strategies may achieve financial benefits through improved operational efficiency, reduced environmental risks, and stronger corporate reputation. Similarly, Green Investment demonstrated a positive relationship with financial performance ($r = 0.547$, $p < 0.01$), indicating that environmental investments may contribute to long-term value creation.

The positive association between ESG variables and corporate financial performance supports the arguments of Stakeholder Theory proposed by Freeman (1984). The theory suggests that firms create sustainable value by responding effectively to stakeholder expectations. The findings indicate that companies engaging in ESG disclosure, environmental investments, and carbon management may strengthen relationships with investors and other stakeholders, which can contribute to improved financial outcomes.

The findings also support the Resource-Based View Theory developed by Barney (1991), which argues that valuable internal capabilities create competitive advantages. ESG capabilities, including

environmental management systems and sustainability reporting practices, may represent strategic resources that differentiate firms and improve performance. The positive correlations observed among ESG practices suggest that sustainability capabilities may provide financial benefits to firms.

Corporate Governance Quality also demonstrated a strong positive relationship with corporate financial performance ($r = 0.596$, $p < 0.01$). This suggests that firms with stronger governance structures tended to achieve better financial outcomes. The finding supports Shleifer and Vishny's (1997) argument that effective governance mechanisms improve accountability, resource allocation, and investor protection.

The correlation results were consistent with previous empirical studies. Friede et al. (2015) found that ESG performance was generally associated with improved financial outcomes, while Fatemi et al. (2018) established that ESG disclosure enhanced firm valuation by improving market confidence. Similarly, Velte (2017) demonstrated that governance mechanisms influenced the relationship between ESG performance and financial performance.

The negative correlation between financial leverage and corporate financial performance ($r = -0.214$, $p < 0.01$) indicated that higher debt levels were associated with reduced profitability. This suggests that excessive reliance on debt financing may increase financial pressure and reduce firms' ability to benefit from sustainability investments.

4.3 Panel Regression Results

Panel regression analysis was conducted to determine the independent effect of ESG practices on corporate financial performance while controlling for firm characteristics. The regression analysis was performed using panel data techniques because the dataset contained observations across multiple firms and years. The Hausman specification test was applied to determine the appropriate estimation approach, and the fixed effects model was selected because it accounted for firm-specific characteristics that remained constant over time. The model examined the effects of ESG disclosure quality, green investment, carbon management practices, firm size, and financial leverage on corporate financial performance.

Table 4.3: Fixed Effects Panel Regression Results

Variable	Coefficient (β)	Standard Error	t-value	p-value
Constant	2.314	0.842	2.748	0.006
ESG Disclosure Quality	0.041	0.009	4.556	0.000
Green Investment	0.028	0.008	3.417	0.001
Carbon Management Practices	0.035	0.010	3.620	0.000
Firm Size	0.019	0.007	2.714	0.007
Financial Leverage	-0.624	0.183	-3.410	0.001

$R^2 = 0.642$

Adjusted $R^2 = 0.631$

F-statistic = 38.742

Prob > F = 0.000

Based on the findings in Table 4.3, the results indicate that ESG practices had a positive and statistically significant effect on corporate financial performance among listed companies in emerging African markets. The regression model explained approximately 64.2% of the variation in corporate financial performance, indicating that ESG practices and firm-level characteristics significantly contributed to differences in financial outcomes among sampled companies.

The findings showed that ESG Disclosure Quality had a positive and significant effect on corporate financial performance ($\beta = 0.041$, $p < 0.001$). This indicates that firms with stronger sustainability disclosure practices achieved better financial outcomes compared with firms with weaker ESG transparency. The finding suggests that high-quality ESG reporting improved corporate credibility, reduced information asymmetry, and strengthened investor confidence. This result supports Stakeholder Theory by Freeman (1984), which argues that firms create long-term value by effectively responding to stakeholder expectations. Companies that provided transparent sustainability information were likely to develop stronger relationships with investors and other stakeholders.

The finding is consistent with empirical evidence from Fatemi et al. (2018), who established that ESG disclosure quality enhanced firm value by improving market perceptions and reducing uncertainty. Similarly, Li et al. (2018) found that sustainability disclosure positively influenced corporate valuation because investors considered ESG information when assessing future risks and opportunities. The finding also agrees with Friede et al. (2015), who concluded that ESG performance generally demonstrated positive or neutral relationships with financial performance across different markets.

The results further revealed that Green Investment had a positive and statistically significant effect on corporate financial performance ($\beta = 0.028$, $p = 0.001$). This indicates that firms investing in renewable energy, environmentally friendly technologies, and sustainability initiatives achieved improved financial outcomes. The finding supports the Resource-Based View Theory developed by Barney (1991), which suggests that valuable and unique organizational capabilities create competitive advantages. Green investment may therefore represent a strategic capability that improves operational efficiency, reduces environmental risks, and enhances corporate competitiveness.

This finding supports previous research by Hart (1995), who argued that environmental capabilities could provide firms with sustainable competitive advantages. It also agrees with Russo and Fouts (1997) and Ambec and Lanoie (2008), who found that environmental investments could improve profitability through innovation, efficiency improvements, and stronger stakeholder relationships.

The regression results also showed that Carbon Management Practices significantly improved corporate financial performance ($\beta = 0.035$, $p < 0.001$). This suggests that firms implementing carbon reduction initiatives and climate management strategies achieved stronger financial outcomes. The finding indicates that carbon management was not merely an environmental responsibility but also a strategic activity capable of reducing operational risks and improving market reputation. This supports the Resource-Based View perspective because effective carbon management represents an internal capability that can differentiate firms from competitors.

The control variables also produced significant results. Firm size had a positive effect on financial performance ($\beta = 0.019$, $p = 0.007$), suggesting that larger firms benefited from greater resources, market visibility, and capacity to implement sustainability strategies. However, financial leverage had a negative and significant effect ($\beta = -0.624$, $p = 0.001$), indicating that higher debt levels reduced financial performance due to increased financing costs and financial risk.

4.4 Moderating Effect of Corporate Governance Quality

The study further examined whether corporate governance quality moderated the relationship between ESG practices and corporate financial performance among listed companies in emerging African markets. Corporate governance quality was incorporated as a moderating variable because governance mechanisms determine how effectively firms implement sustainability strategies, allocate resources, and translate ESG initiatives into financial value. The moderation analysis was conducted using an interaction model that included ESG practices, corporate governance quality, the interaction term between ESG practices and governance quality, and the control variables.

Table 4.4: Moderation Regression Results

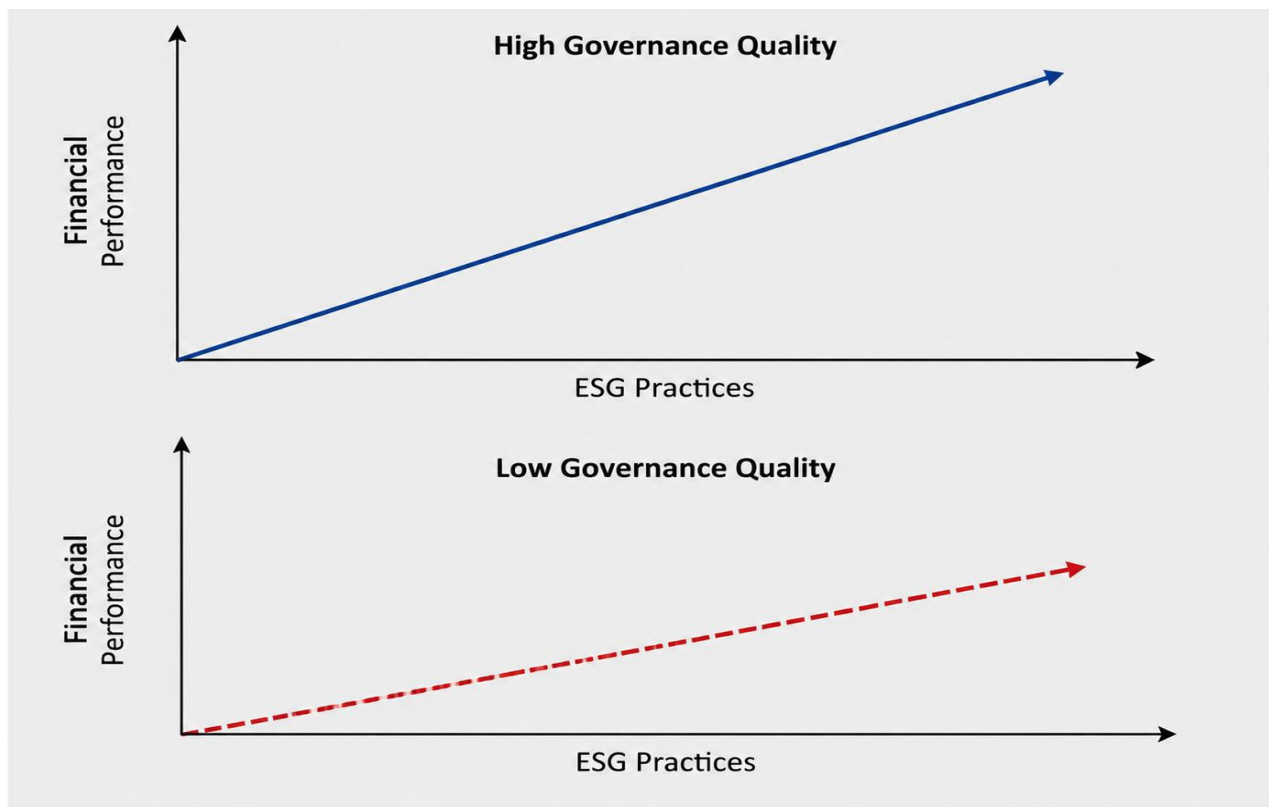
Variable	Coefficient (β)	Standard Error	t-value	p-value
Constant	1.876	0.795	2.360	0.019
ESG Disclosure Quality	0.031	0.008	3.875	0.000
Green Investment	0.021	0.007	3.000	0.003
Carbon Management Practices	0.027	0.009	3.000	0.003
Corporate Governance Quality	0.036	0.010	3.600	0.000
ESG $\times$ Corporate Governance Quality	0.018	0.006	3.000	0.003
Firm Size	0.016	0.006	2.667	0.008
Financial Leverage	-0.521	0.174	-2.994	0.003

$R^2 = 0.713$

Adjusted $R^2 = 0.701$

F-statistic = 42.615

Prob > F = 0.000



Based on the findings in Figure 4.4 and Table 4.4, the results indicate that corporate governance quality significantly strengthened the relationship between ESG practices and corporate financial performance. The interaction effect between ESG practices and corporate governance quality was positive and statistically significant ($\beta = 0.018$, $p = 0.003$), demonstrating that firms with stronger governance structures achieved greater financial benefits from ESG practices compared with firms with weaker governance systems.

The finding indicates that corporate governance quality acted as an enabling mechanism that enhanced the effectiveness of ESG initiatives. Although ESG practices independently improved financial performance, their impact became stronger when supported by effective governance structures. This suggests that governance mechanisms such as board independence, effective audit committees, and accountability systems improved the implementation, monitoring, and credibility of sustainability strategies.

The finding supports Stakeholder Theory by Freeman (1984), which argues that firms create sustainable value by effectively managing relationships with stakeholders. Strong governance structures improve transparency and accountability, enabling firms to respond more effectively to stakeholder expectations regarding environmental responsibility and sustainability performance. Therefore, governance quality allows firms to maximize the benefits associated with ESG adoption. The results also support the Resource-Based View Theory developed by Barney (1991). The theory suggests that competitive advantage depends on valuable organizational resources and capabilities. Corporate governance quality can be considered an organizational capability that improves the

effectiveness of ESG resources by ensuring proper strategic alignment, efficient resource allocation, and effective implementation of sustainability initiatives.

The positive moderating effect is consistent with previous empirical studies. Velte (2017) found that corporate governance characteristics influenced the relationship between ESG performance and financial performance, demonstrating that governance mechanisms enhanced sustainability outcomes. Similarly, Cucari et al. (2018) established that board characteristics influenced ESG disclosure quality, suggesting that governance structures affected the credibility and effectiveness of sustainability reporting. Jo and Harjoto (2011) further demonstrated that governance mechanisms improved corporate social responsibility performance and firm value.

The direct effect of corporate governance quality was also positive and significant ($\beta = 0.036$, $p < 0.001$), indicating that firms with stronger governance systems achieved better financial outcomes independently of ESG practices. This finding reinforces the importance of governance structures in improving accountability, reducing agency problems, and protecting investor interests, consistent with the arguments of Shleifer and Vishny (1997).

The control variables maintained similar patterns observed in the main regression model. Firm size continued to have a positive and significant effect on performance ($\beta = 0.016$, $p = 0.008$), indicating that larger firms possessed greater capacity to implement sustainability initiatives. Financial leverage remained negatively associated with financial performance ($\beta = -0.521$, $p = 0.003$), suggesting that excessive debt obligations constrained firms' financial flexibility.

4.5 Hypothesis Testing

The study tested four null hypotheses to determine the statistical significance of the relationship between ESG practices, corporate financial performance, and the moderating role of corporate governance quality among listed companies in emerging African markets. The hypothesis decisions were based on the panel regression and moderation analysis results presented in Tables 4.3 and 4.4. A null hypothesis was rejected when the associated probability value was less than the 5% significance level ($p < 0.05$), indicating a statistically significant relationship between the variables.

Table 4.5: Summary of Hypothesis Testing Results

Hypothesis	Relationship Tested	Statistical Result	Decision
H0 ₁	ESG Disclosure Quality has no significant effect on Corporate Financial Performance	$\beta = 0.041$, $p < 0.001$	Rejected
H0 ₂	Green Investment has no significant effect on Corporate Financial Performance	$\beta = 0.028$, $p = 0.001$	Rejected
H0 ₃	Carbon Management Practices have no significant effect on Corporate Financial Performance	$\beta = 0.035$, $p < 0.001$	Rejected
H0 ₄	Corporate Governance Quality does not significantly moderate the relationship between ESG Practices and Corporate Financial Performance	$\beta = 0.018$, $p = 0.003$	Rejected

Based on the findings in Table 4.5, all four null hypotheses were rejected, indicating that ESG practices significantly influenced corporate financial performance and that corporate governance quality significantly strengthened this relationship among listed companies in emerging African markets.

The first hypothesis ($H0_1$) stated that ESG disclosure quality had no significant effect on corporate financial performance. The findings showed a positive and statistically significant relationship between ESG disclosure quality and financial performance ($\beta = 0.041$, $p < 0.001$); therefore, the null hypothesis was rejected. This finding indicates that firms providing higher-quality sustainability information achieved better financial outcomes. The result suggests that ESG disclosure improved transparency, reduced information asymmetry, and enhanced investor confidence. This supports Stakeholder Theory by Freeman (1984), which argues that firms create value by responding effectively to stakeholder expectations. The finding is consistent with Fatemi et al. (2018) and Li et al. (2018), who established that sustainability disclosure enhanced firm value by improving market confidence and reducing uncertainty.

The second hypothesis ($H0_2$) proposed that green investment had no significant effect on corporate financial performance. The results demonstrated that green investment significantly improved financial performance ($\beta = 0.028$, $p = 0.001$), leading to rejection of the null hypothesis. This finding indicates that investments in environmentally sustainable activities contributed positively to firm outcomes. The result supports the Resource-Based View Theory of Barney (1991), which suggests that firms achieve competitive advantages through valuable internal capabilities. Green investment represents a strategic capability that may improve efficiency, stimulate innovation, and strengthen competitive positioning. The finding agrees with Hart (1995), Russo and Fouts (1997), and Ambec and Lanoie (2008), who found that environmental capabilities could enhance profitability and long-term corporate performance.

The third hypothesis ($H0_3$) examined whether carbon management practices had no significant effect on corporate financial performance. The results indicated a positive and significant relationship ($\beta = 0.035$, $p < 0.001$), resulting in rejection of the null hypothesis. This finding demonstrates that firms implementing carbon reduction initiatives and climate management strategies achieved stronger financial performance. The result suggests that carbon management practices reduced environmental risks, improved operational efficiency, and enhanced corporate reputation. This supports the Resource-Based View perspective because climate management capabilities represent strategic resources that may differentiate firms within competitive markets. The finding is consistent with Busch and Hoffmann (2011) and Matsumura et al. (2014), who demonstrated that carbon performance, influenced firm competitiveness and market valuation.

The fourth hypothesis ($H0_4$) stated that corporate governance quality did not significantly moderate the relationship between ESG practices and corporate financial performance. The moderation results showed a positive and significant interaction effect between ESG practices and corporate governance quality ($\beta = 0.018$, $p = 0.003$), leading to rejection of the null hypothesis. This indicates that governance mechanisms strengthened the financial benefits associated with ESG adoption. Firms with stronger governance structures were better positioned to implement sustainability

strategies effectively and convert ESG initiatives into financial value. This finding supports Stakeholder Theory because effective governance improves accountability and stakeholder responsiveness. It also aligns with Shleifer and Vishny (1997), Velte (2017), and Cucari et al. (2018), who found that governance mechanisms influenced sustainability outcomes and corporate performance.

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion of Findings

This study examined the effect of ESG practices on corporate financial performance among listed companies in emerging African markets, with corporate governance quality as a moderating variable. The findings demonstrated that ESG disclosure quality, green investment, and carbon management practices significantly improved corporate financial performance. Furthermore, corporate governance quality strengthened the relationship between ESG practices and financial outcomes. These findings provide evidence that sustainability practices have evolved beyond corporate responsibility initiatives and have become strategic mechanisms through which firms create financial value.

The finding that ESG disclosure quality significantly improved corporate financial performance supports the argument that transparent sustainability reporting enhances stakeholder confidence and reduces information asymmetry between firms and investors. According to Stakeholder Theory by Freeman (1984), organizations achieve long-term success by effectively managing relationships with stakeholders. In this study, firms with stronger ESG disclosure practices appeared to benefit from improved investor perceptions, enhanced reputation, and greater market confidence. The finding is consistent with Fatemi et al. (2018), who established that ESG disclosure quality positively influenced firm value by improving transparency and reducing uncertainty. Similarly, Li et al. (2018) demonstrated that sustainability disclosure contributed to improved corporate valuation because investors increasingly incorporated ESG information into investment decisions.

The positive effect of green investment on corporate financial performance supported the Resource-Based View Theory developed by Barney (1991). The theory suggests that firms achieve competitive advantage when they possess valuable internal resources and capabilities. The findings indicated that environmental investments, including renewable energy initiatives and green technologies, represented strategic capabilities that enhanced firm performance. This finding agrees with Hart (1995), who argued that environmental capabilities could generate sustainable competitive advantages. It also supports Russo and Fouts (1997), who found that environmental performance improved profitability by enhancing efficiency and strengthening competitive positioning. Therefore, green investment among African listed firms was not only an environmental commitment but also a strategic financial decision.

The significant positive effect of carbon management practices on corporate financial performance demonstrated that climate-related strategies contributed to corporate value creation. The finding suggests that firms implementing carbon reduction initiatives and climate risk management practices benefited from improved operational efficiency reduced environmental risks, and stronger stakeholder relationships. This supports the Resource-Based View perspective because carbon

management capabilities represent valuable organizational resources that competitors may find difficult to replicate. The finding is consistent with Busch and Hoffmann (2011), who demonstrated that carbon management capabilities influenced competitive advantage, and Matsumura et al. (2014), who found that carbon emissions negatively affected firm value, indicating that investors considered environmental performance when evaluating firms.

The moderating effect of corporate governance quality provided additional insight into the ESG-financial performance relationship. The findings showed that governance quality strengthened the positive effect of ESG practices on financial performance. This indicates that sustainability initiatives generated greater value when supported by effective governance structures, including accountability mechanisms, board oversight, and transparent decision-making processes. The finding supports Shleifer and Vishny's (1997) argument that effective corporate governance improves resource allocation and protects stakeholder interests. It also aligns with Velte (2017), who found that governance mechanisms influenced the relationship between ESG performance and corporate financial outcomes.

Overall, the findings demonstrated that ESG practices contributed significantly to corporate financial performance, but their effectiveness depended partly on governance quality. The results confirmed the relevance of Stakeholder Theory and Resource-Based View Theory in explaining sustainability-driven value creation within emerging African markets. Unlike traditional perspectives that consider environmental investments as additional costs, the findings showed that ESG practices could represent strategic investments capable of improving financial outcomes when properly managed.

5.2 Conclusion

The study concluded that ESG practices significantly influenced corporate financial performance among listed companies in emerging African markets. Specifically, ESG disclosure quality, green investment, and carbon management practices were found to have positive and significant effects on financial outcomes. These findings demonstrated that sustainability initiatives had become important drivers of corporate competitiveness, profitability, and long-term value creation.

The study further concluded that corporate governance quality played an important moderating role in strengthening the relationship between ESG practices and financial performance. Firms with stronger governance systems were better positioned to implement sustainability strategies effectively and convert ESG initiatives into measurable financial benefits. This indicates that ESG adoption alone may not be sufficient; effective governance mechanisms are necessary to maximize the financial returns associated with sustainability practices.

The findings contribute to ESG and corporate finance literature by providing evidence from emerging African markets, which have received limited attention compared with developed economies. The study demonstrated that sustainability practices should not be viewed only as compliance requirements but as strategic capabilities that can enhance corporate performance. Therefore, integrating ESG strategies with effective governance systems may provide listed African companies with opportunities to improve competitiveness and attract responsible investment.

5.3 Recommendations

Based on the findings, the study provides the following recommendations:

Listed Companies

Companies should strengthen ESG disclosure practices by adopting internationally recognized sustainability reporting standards and improving transparency regarding environmental and governance performance. Improved ESG reporting may enhance investor confidence and improve access to sustainability-oriented capital.

Companies should increase investment in green technologies, renewable energy solutions, and environmentally sustainable production systems. Although green investments may require significant initial resources, they provide opportunities for improved efficiency, risk reduction, and long-term financial performance.

Firms should develop comprehensive carbon management strategies, including emission reduction targets, climate risk assessments, and environmental monitoring systems. Effective carbon management should be integrated into corporate strategy rather than treated as an isolated environmental activity.

Corporate Boards and Governance Institutions

Boards of directors should strengthen governance mechanisms that support ESG implementation. This includes increasing board oversight of sustainability issues, strengthening audit committee involvement, and ensuring accountability for ESG objectives.

Corporate governance frameworks should integrate sustainability considerations into strategic decision-making processes to ensure that ESG initiatives generate measurable financial outcomes.

Policymakers and Regulators

Regulatory authorities in African markets should develop stronger ESG reporting frameworks and encourage standardized sustainability disclosures among listed companies. Improved regulatory guidance would enhance comparability of ESG information and strengthen investor confidence.

Governments should also support green financing mechanisms that enable firms to invest in environmentally sustainable projects, particularly in emerging markets where access to climate finance remains limited.

5.4 Areas for Further Research

Future studies may extend this research by examining additional ESG dimensions, including social responsibility practices, employee sustainability initiatives, and community engagement. Further research may also investigate differences across industries because environmental impacts and sustainability strategies vary significantly between sectors.

Future studies could examine ESG-financial performance relationships using larger samples covering more African countries and longer time periods. Researchers may also apply alternative

methodological approaches, including dynamic panel models, structural equation modelling, or machine learning techniques, to provide deeper insights into ESG-performance relationships.

Additionally, future research may examine other moderating variables, including institutional quality, regulatory effectiveness, ownership structure, and investor pressure, to provide a broader understanding of factors influencing the financial benefits of ESG practices in emerging markets.

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