

Corporate Governance Mechanisms and Their Impact on Financial Performance: A Study of EGX Listed Companies

<https://www.doi.org/10.56830/IJAMS07202501>

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Received: 15 May 2025. Accepted: 15 July 2025. Published: 30 July 2025

Abstract

This study investigates the relationship between corporate governance characteristics and financial performance among firms listed on the Egyptian Stock Exchange (ESE) across eleven sectors during the period 2019–2023. The study focuses on six key governance dimensions: board independence, gender diversity on the board, CEO-Chairman duality, audit committee independence, audit committee experience, and ESG (Environmental, Social, and Governance) reporting. A total of 50 firms provided a sample of 250 observations, analyzed using multiple linear regression with STATA 15. Results revealed that board independence and audit committee independence have a partially positive impact on financial performance, particularly on Return on Assets (ROA) and Net Profit Margin (NPM). Female representation on the board significantly enhanced all financial indicators (ROA, ROE, NPM), while CEO duality and audit committee experience showed no significant influence. ESG reporting demonstrated a positive effect on ROA but not on ROE or NPM. These findings offer insights for policymakers and investors seeking to improve governance and financial outcomes in emerging markets.

Keywords: *Corporate Governance; Financial Performance; Board Independence; Gender Diversity; CEO Duality; Audit Committee; ESG Reporting; Egyptian Stock Exchange; ROA; ROE; NPM; Emerging Markets*

1.1 Research Background

Corporate governance has become a focal point of academic inquiry over the past decade, reflecting its pivotal role in shaping the performance of firms. Researchers have delved into the intricate interplay between various corporate governance measures—such as board structure, compensation arrangements, and ownership structures—and their impact on firm performance and value (Alam & Ali Shah, 2013). One important factor affecting financial performance is how effectively a firm utilizes its internal governance mechanisms. Corporate governance structures influence managerial decision-making, which in turn affects profitability, efficiency, and long-term financial outcomes (Alam & Ali Shah, 2013). Sound governance practices can lead to better financial planning, accountability, and resource allocation, all of which contribute to enhanced financial performance (Alam & Ali Shah, 2013).

However, the evidence regarding the direct impact of corporate governance measures on financial performance remains mixed, suggesting a more nuanced relationship. It is plausible that different governance mechanisms influence financial outcomes in varying ways (Pillai & Al-Malkawi, 2018). For instance, corporate control measures, such as bank oversight, may shape financial performance by affecting investment strategies and operational flexibility. Conversely, ownership structures may influence financial outcomes through the alignment of managerial and shareholder interests. While a considerable body of research has concentrated on developed economies, there is a growing recognition of the need to extend these investigations to developing economies (Adams, Hermalin, & Weisbach, 2010). Because developing markets differ in market dynamics, economic uncertainty, institutional strength, government interventions, and cultural factors, there is a pressing need to examine corporate governance practices in these contexts. The differences in corporate governance between developed and developing countries underscore the importance of contextualizing research findings to ensure their relevance (Public Consultation on Draft Revisions to the G20/OECD Principles of Corporate Governance, 2022).

Corporate governance refers to the intricate relationship among shareholders, management, and the board of directors, defining the system by which companies are directed and controlled effectively (Cadbury, 1992). Shareholders elect a board to make policy decisions and establish administrative procedures. Risk management, a crucial component of corporate governance, is primarily the board's responsibility (Abdulrahman et al., 2013). The significance of risk management became particularly evident during the global financial crisis. Many boards were criticized for inadequate risk management before and during the crisis. Financial companies, heavily impacted by the crisis, led to national authorities implementing stricter regulatory and supervisory measures to enhance risk

governance and strengthen the role of corporate boards (McConnell, 2012). Effective governance involves interactions among shareholders, the board, and management; thus, while the board cannot be held solely accountable for risk management, it must guide and oversee management to ensure effective decision-making and risk control (Abdul Rahman, Noor, & Ismail, "Governance and risk management: empirical evidence from Malaysia and Egypt", 2013).

Corporate governance is a fundamental component in promoting economic stability and enhancing firm performance. It encompasses the roles and responsibilities of the board of directors in overseeing a company's operations and managing its relationships with shareholders and other stakeholders. Effective governance strengthens firm performance by ensuring managerial accountability, improving the quality of financial reporting, and fostering investor confidence—factors that collectively contribute to capital market efficiency (Spanos, 2005); EOD, 2016). A sound governance framework minimizes the risk of financial mismanagement and creates a transparent business environment, thereby attracting both domestic and foreign investment.

Theoretical frameworks provide important insights into the relationship between corporate governance and financial performance, particularly through the management of financial risk. Agency theory, first conceptualized by (Berle & Means, 1932), and later expanded by (Jensen & Meckling, 1976), highlights the principal-agent problem that arises when ownership and control are separated. In this model, managers (agents) may act in their own interests rather than those of shareholders (principals), which can adversely affect firm performance if not properly monitored. Effective governance mechanisms—such as an independent and vigilant board of directors—are crucial to mitigate these agency conflicts and align managerial behavior with shareholder interests, thereby reducing financial risk.

On the other hand, stewardship theory offers a contrasting perspective, portraying managers as trustworthy stewards whose goals are naturally aligned with those of shareholders. Rooted in social psychology, this theory suggests that when managers are intrinsically motivated by organizational success, they are more likely to make decisions that increase shareholder value and reduce financial risk (Kalia & Gill, 2023). From this perspective, effective governance involves building a cooperative and trust-based relationship between shareholders and managers, rather than relying solely on control and monitoring mechanisms.

In emerging economies like Egypt, corporate governance takes on heightened importance due to the volatility of financial environments and institutional fragility. Establishing strong governance frameworks is essential for building investor trust and

fostering long-term economic development (Kalia & Gill, 2023). Global institutions such as the International Monetary Fund (IMF), the World Bank, and the Organization for Economic Co-operation and Development (OECD) have been instrumental in guiding governance reforms in developing nations. The global financial crisis of 2008 exposed critical weaknesses in governance structures and underscored the necessity for reform to restore market confidence and financial stability (Kalia & Gill, 2023). These reforms aimed to mitigate financial risks, strengthen regulatory systems, and create resilient institutional environments conducive to sustainable investment and economic growth.

Corporate governance in Egypt refers to the framework of rules, practices, and processes that guide the direction and control of companies. It involves a set of mechanisms aimed at aligning organizational objectives with the interests of stakeholders, including shareholders, management, employees, and the broader community. Companies Law No. 159 of 1981: This foundational legislation establishes the regulatory structure for the establishment, management, and dissolution of companies in Egypt (Iskander, 2023). It addresses governance aspects such as shareholder rights and board responsibilities. Effective corporate governance in Egypt relies on a well-structured board, encompassing the delineation of roles, the inclusion of independent directors, and the establishment of key committees such as audit and risk management. These measures aim to enhance board oversight and strategic decision-making. A fundamental tenet of corporate governance is a commitment to transparency, involving clear and open communication with stakeholders and adherence to high standards in financial and operational reporting (Iskander, 2023). Central to good governance is the protection of the rights of all shareholders, including minority interests. This entails equitable treatment and the implementation of mechanisms to address shareholder concerns and inputs effectively. So, robust governance necessitates effective risk Mitigation strategies.

Corporate governance has become a cornerstone in assessing organizational effectiveness and financial viability. It encompasses a framework of rules, practices, and processes by which a firm is directed and controlled, primarily involving the roles of the board of directors, audit committees, and sustainability reporting. As firms navigate increasingly complex business environments, strong governance structures are critical for enhancing accountability, ensuring regulatory compliance, and improving investor confidence—all of which influence financial performance (Spanos, 2005).

Board of Directors (BOD): The board of directors is at the heart of corporate governance and plays a strategic role in overseeing management, monitoring performance, and safeguarding shareholder interests. Three important aspects of board composition are:

- A) Independent Members in the BOD: Independent directors bring objectivity to board decisions and help prevent conflicts of interest. Research shows that firms with a higher proportion of independent board members often experience better financial outcomes due to improved oversight and reduced agency costs (Bhagat & Bolton, 2008). Their independence from management allows for more effective monitoring, which aligns executive actions with shareholder interests.
- B) Female Representation in the BOD: The inclusion of women on boards has been linked to diverse perspectives, better risk management, and enhanced decision-making. Studies have demonstrated a positive relationship between gender diversity on boards and financial performance indicators such as ROA and ROE (Terjesen, Sealy, & Singh, 2009). Gender-diverse boards tend to foster more comprehensive discussions and mitigate groupthink, thereby improving governance quality.
- C) Duality of the CEO and Chairman Roles: CEO duality refers to the same individual serving as both CEO and chairman of the board. This concentration of power can compromise board independence and reduce accountability. Empirical studies have found that separating these roles enhances firm performance, particularly in firms facing high levels of external scrutiny or complexity (Brickley, Coles, & Jarrell, 1997). Firms with non-dual leadership structures are more likely to implement effective checks and balances, thus positively affecting profitability.

Board committees, particularly those related to financial oversight, serve as essential pillars of effective corporate governance. Among these, the audit committee stands out for its critical role in upholding the integrity of financial reporting and ensuring transparency.

- a) Board Audit Committee: Audit committees play a key role in maintaining the integrity of financial reporting and ensuring compliance with regulations. Their composition and expertise directly influence a firm's internal control mechanisms and financial transparency.
- b) Audit Committee Members' Independence: An audit committee dominated by independent directors is more likely to act in the best interests of shareholders and enhance the reliability of financial disclosures. Research by (Klein, 2002) found that firms with fully independent audit committees report fewer earnings management practices, leading to improved financial outcomes.
- c) Audit Committee Members' Experience: The expertise of audit committee members, particularly in finance and accounting, is critical for ensuring accurate and timely financial reporting. Experienced members are better equipped to understand complex financial issues and challenge management decisions when necessary, reducing the

likelihood of financial misstatements (Carcello, Hollingsworth, & Neal, 2006). This contributes to investor confidence and can enhance firm valuation and profitability.

Sustainability: ESG Reporting: Environmental, Social, and Governance (ESG) reporting reflects a firm's commitment to responsible business practices. The presence and comprehensiveness of ESG disclosures can impact a firm's reputation, risk profile, and access to capital.

- d) ESG Reporting: Investors increasingly consider ESG performance as a signal of long-term viability and ethical management. Firms with robust ESG disclosures often enjoy a lower cost of capital and enhanced stakeholder trust, which in turn boosts financial performance (Eccles, Ioannou, & Serafeim, 2014). ESG initiatives can lead to cost savings through resource efficiency and risk mitigation, contributing to higher net profit margins and sustainable returns.

A firm's financial performance often measures the effectiveness of corporate governance mechanisms. Common financial indicators include:

- Return on Assets (ROA): This measures how efficiently a firm uses its assets to generate profit. Studies show that firms with strong governance mechanisms, particularly independent boards and audit committees, tend to have higher ROA (Bhagat & Bolton, 2008).
- Return on Equity (ROE): ROE reflects the return generated on shareholders' equity. Effective governance ensures prudent financial decisions, thereby maximizing shareholder value and improving ROE (Jensen & Meckling, 1976).
- Net Profit Margin: This ratio assesses the profitability of the firm relative to total revenue. Good governance practices such as ESG disclosures and board independence contribute to operational efficiency, transparency, and lower costs, enhancing net profit margins (Fraser & Simkins, 2016).

In summary, corporate governance mechanisms—specifically board independence, gender diversity, role separation, audit committee structure, and ESG reporting—have a significant impact on a firm's financial performance. These governance attributes enhance transparency, reduce risk, and align managerial incentives with shareholder interests. As financial markets evolve and stakeholder expectations rise, adopting robust corporate governance practices becomes essential for firms aiming to achieve sustainable profitability and long-term success. Corporate governance has emerged as a pivotal determinant of firm performance in both developed and developing economies. As businesses operate in increasingly complex and dynamic environments, effective governance structures are essential to ensuring accountability, transparency, and strategic alignment. By examining key governance components—such as board composition, audit committee characteristics,

and sustainability practices—scholars and practitioners alike can better understand how these mechanisms shape a firm’s financial trajectory. In particular, variables such as board independence, gender diversity, CEO duality, audit committee experience, and ESG reporting practices play a critical role in mitigating risk and enhancing firm value. These governance features not only foster regulatory compliance and investor confidence but also contribute to long-term financial health and market competitiveness.

This study seeks to investigate the impact of selected corporate governance mechanisms on financial performance, as measured by Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin. The goal is to assess how governance structures influence organizational effectiveness and profitability, with a particular focus on the strategic oversight role played by boards and audit committees. By linking governance variables to measurable financial outcomes, this research highlights the importance of embedding sound governance practices into the corporate fabric. Ultimately, the findings contribute to the broader discourse on how firms can improve performance and resilience through thoughtful and integrated governance systems.

1.2 Problem Statement

Despite the growing global recognition of corporate governance as a fundamental pillar in enhancing firm performance, its specific impact on financial performance within the Egyptian business context remains insufficiently explored. While studies such as (Nasr & Ntim, 2018) emphasize the importance of corporate governance mechanisms, most empirical research has been concentrated in developed economies, overlooking the distinctive socio-economic, cultural, and regulatory landscape of emerging markets like Egypt. The Egyptian corporate environment presents unique challenges and opportunities that necessitate a localized understanding of how governance structures—particularly Board Composition, Board Committees, Internal Audit, and Sustainability Practices—affect firms' financial outcomes. For instance, independent and gender-diverse boards are often associated with improved strategic decision-making, while CEO duality may compromise governance effectiveness. Investigating these dynamics in Egypt is crucial to identifying which governance configurations contribute most significantly to firm profitability and performance.

In this context, board committees—especially audit committees—play a central role in financial oversight and accountability, with their independence and professional expertise directly influencing a firm’s financial integrity. Internal audit functions, when structured effectively, also contribute to financial stability by ensuring accurate reporting and compliance with internal controls. Moreover, sustainability practices, such as ESG disclosures, are increasingly recognized for their potential to attract investors, reduce

operational risks, and enhance corporate reputation, all of which can contribute positively to financial results. Given Egypt's evolving corporate governance framework and the increasing emphasis on sustainability and accountability, this study aims to assess the relationship between these governance mechanisms and financial performance metrics, including Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin. By addressing this gap, the research seeks to offer evidence-based insights to policymakers, corporate leaders, and investors, enabling the design of governance systems tailored to Egypt's development goals and economic context.

1.3 Research Aims & Objectives

Research Aim

The primary aim of this study is to investigate the impact of corporate governance mechanisms—including Board of Directors composition, Audit Committee characteristics, and Environmental, Social, and Governance (ESG) practices—on the financial performance of firms in the Egyptian business environment. By focusing on key governance variables such as board independence, gender diversity, CEO duality, audit committee independence and experience, and ESG disclosure, the research seeks to uncover which factors significantly contribute to enhancing firm performance within Egypt's unique regulatory and institutional context.

Research Objectives

To achieve this aim, the study pursues the following specific objectives:

- a) To examine the impact of independent members on the Board of Directors (BOD) on the financial performance of organizations.
- b) To investigate the relationship between female representation on the Board of Directors and the financial performance of organizations.
- c) To assess how the duality of CEO and Chairman Roles influences the financial performance of organizations.
- d) To evaluate the effect of audit committee independence on the financial performance of organizations.
- e) To analyze the influence of audit committee members' years of experience on the financial performance of organizations.
- f) To explore the relationship between comprehensive Environmental, Social, and Governance (ESG) reporting and the financial performance of organizations.

1.4 Research Questions

- a) How does the presence of independent members on the Board of Directors affect the financial performance of the organization?

- b) What is the impact of greater female representation on the Board of Directors on the financial performance of the organization?
- c) In what ways does the duality of the CEO and Chairman roles influence the financial performance of the organization?
- d) How does the level of independence within the Audit Committee affect the financial performance of the organization?
- e) To what extent do the years of experience of Audit Committee members influence the financial performance of the organization?
- f) What is the relationship between comprehensive ESG reporting and the financial performance of the organization?

1.5 Research Significance

The significance of this study lies in its contribution to the growing body of literature on corporate governance and its influence on financial performance, particularly within the context of developing economies such as Egypt. While corporate governance has been widely studied in developed markets, emerging markets often face distinct institutional, regulatory, and socio-economic challenges that can affect how governance mechanisms operate and influence firm outcomes. This study provides timely empirical evidence on how specific governance structures – such as board composition, audit committee features, and sustainability reporting – correlate with financial performance metrics like Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM).

From a theoretical standpoint, this research contributes to the development of agency theory and stakeholder theory within the Egyptian corporate context. Agency theory posits that proper governance mechanisms reduce agency costs by aligning the interests of managers and shareholders. The study's findings – particularly the positive impact of board independence and female representation on financial performance – support the argument that diverse and independent boards are more likely to safeguard shareholder interests. Furthermore, the partially supported effect of ESG reporting on ROA suggests that elements of stakeholder theory are relevant, as firms that engage in socially and environmentally responsible practices may benefit from enhanced reputation and operational efficiency, even if the financial impact is not immediately observable across all metrics.

Practically, the research offers valuable insights for corporate leaders, investors, policymakers, and regulators in Egypt and similar emerging economies. For corporate leaders and boards, the findings emphasize the value of increasing the number of independent and female directors, which has shown to significantly improve performance metrics. Companies can leverage these findings to strengthen board governance practices,

increase transparency, and enhance stakeholder confidence. For instance, the positive effect of board gender diversity across all three performance measures supports broader efforts to improve gender inclusion in corporate leadership. This aligns with global trends and the United Nations Sustainable Development Goals (SDGs), particularly Goal 5: Gender Equality.

For regulators and policymakers, the results suggest the need to revise or strengthen governance codes and enforcement mechanisms to ensure that the board independence and audit committee structures are more than symbolic. The insignificant effect of audit committee experience, for example, might indicate a mismatch between formal qualifications and actual performance outcomes, prompting a reassessment of how effectiveness is evaluated. Similarly, the mixed findings on ESG reporting underscore the need for standardized reporting frameworks and incentives that can help firms integrate sustainability into core business practices. Moreover, for investors and stakeholders, this study provides a framework for evaluating a firm's governance quality as part of due diligence and investment decision-making. The demonstrated link between governance mechanisms and financial performance means that investors can use indicators such as board composition and ESG disclosures as proxies for firm resilience and profitability. This is especially important in the context of rising global interest in Environmental, Social, and Governance (ESG) investing. Finally, this study fills an important empirical gap by focusing on Egypt, a country undergoing rapid economic transformation and institutional reform. It offers a localized understanding of how global corporate governance practices interact with regional realities, contributing to more informed decision-making in academia, business, and government sectors. The findings can also serve as a benchmark for future comparative studies in the Middle East and North Africa (MENA) region, promoting cross-border learning and the adaptation of best practices.

1.6 Research Methodology

Study Approach

The research design for this investigation adopts a quantitative methodology tailored to achieve the specified aims. The research will quantitatively measure multiple corporate governance variables and analyze their collective impact on risk management through statistical techniques. Throughout the research process, ethical considerations will be rigorously addressed to ensure participant confidentiality and informed consent. The quantitative data collected will undergo thorough statistical analysis, including regression analysis, to provide robust empirical evidence supporting or refuting the formulated

hypotheses. The goal is to offer practical insights, as outlined in aim e), for enhancing corporate governance practices in the Egyptian business environment, providing actionable recommendations based on the quantitative findings.

The population of this study comprises all firms listed on the Egyptian Stock Exchange (ESE) across eleven key sectors during the period from 2019 to 2023. These sectors include Capital Goods, Consumer Durables and Apparel, Consumer Services, Food and Beverage, Gas Utilities, Healthcare, Materials, Media, Pharmaceuticals, Real Estate, and Transportation. The focus on these sectors ensures a diverse and representative sample of the broader corporate landscape in Egypt. The selection of firms was based on the availability of corporate governance and financial performance data, which became publicly accessible starting in 2019. This accessibility marked a significant development in transparency and reporting standards within the ESE. The total population thus includes all eligible listed firms that consistently published the required data over the five-year period. By examining this population, the study aims to provide generalizable insights into the relationship between corporate governance characteristics and financial performance within the Egyptian context.

Sample Selection

The study's sample comprises 50 publicly listed firms drawn from 11 different sectors of the ESE, including Capital Goods, Consumer Durables, Food and Beverage, Real Estate, Materials, and others, during the period 2019–2023. The year 2019 was chosen as the base year for data collection because it marked the initial availability of corporate governance disclosures across ESE-listed firms. The final sample includes only firms that meet specific selection criteria:

- (1) They publish annual financial reports on December 31.
- (2) Their financial statements are reported in Egyptian pounds;
- (3) They provide sufficient data for calculating both corporate governance metrics and financial indicators.

This yielded a balanced panel dataset of 250 firm-year observations.

Data Sources

The study utilizes secondary data derived from multiple reliable sources. Annual financial statements, board of directors' reports, corporate governance disclosures, and ownership structure reports were collected from company websites and official regulatory filings. Additional data were sourced from financial information platforms such as the Egyptian Stock Exchange (www.egx.com.eg), Mubasher (www.mubasher.info), and Investing.com. This ensures comprehensive and consistent data for both independent and dependent variables.

Variable Measurement

Corporate governance mechanisms constitute the independent variables and include three primary dimensions: (1) Board of Directors, (2) Audit Committee, and (3) ESG Reporting. Specific metrics include:

- **BODIND**: Percentage of independent members on the board.
- **BODG**: Percentage of female board members.
- **BODD**: A dummy variable indicating CEO-Chairman duality.
- **AUDIND**: Percentage of independent members on the audit committee.
- **AUDEXP**: Percentage of audit committee members with professional experience.
- **ESG**: A 22-item ESG reporting index, scored as binary (1 for presence, 0 for absence).

The dependent variables – ROA, ROE, and Net Profit Margin – represent stock market performance and are measured using ratios of net income to total assets, equity, and sales, respectively. Control variables include firm size (natural log of total assets), leverage (total liabilities to total assets), and firm age (years since incorporation).

Analytical Techniques

To test the hypotheses, the study applies multiple linear regression analysis using STATA version 15. The panel data regression model accounts for both time-series and cross-sectional dimensions, enabling a more nuanced understanding of the relationships between corporate governance and financial performance. Descriptive statistics were first generated to understand the distribution and variability of all variables. Multicollinearity diagnostics, correlation matrices, and residual analyses were also performed to ensure model validity and reliability.

2.1 Previous Studies

(Gennaro & Nietlispach, 2021) aimed to evaluate whether lessons have been learned since the 2007–2008 financial crisis and to identify persistent deficiencies in corporate governance and risk management systems more than a decade later. The study involved a survey of 200 finance professionals, with participants from the USA (100), Italy (50), and the UK (50). The survey consisted of 15 questions concerning corporate governance and risk management practices. The findings indicated that while corporate governance codes and risk management approaches have seen improvements and increased implementation over the past decade, significant problems remain in both principles and application. The results shed light on how financial institutions and regulators have adapted and addressed governance issues in response to the crisis. The study provides new perspectives on corporate governance, highlighting areas where regulators need to focus to rethink and enhance governance mechanisms.

(Hassan, Din, & Senasi, 2023) reviewed the relationship between corporate governance, risk management, and financial performance. Their study aimed to develop a theoretical and analytical framework by examining these variables. The study was structured as follows: The introduction covered the study background, problem statement, research objectives, and research questions. The literature review included sections on financial performance indicators such as ROA, ROE, EPS, and Tobin's Q; corporate governance elements like the board of directors, board composition, CEO duality, and board size; and risk management. The authors discussed underpinning theories such as agency theory and institutional theory. A theoretical framework was then developed, illustrating the relationships between corporate governance and financial performance, risk management and financial performance, and compliance with accounting standards and financial performance. Finally, the study provided a comprehensive review based on these variables.

(Islam, Siddique, & Hurira, 2023) conducted a study to explore how corporate governance influences the financial performance of commercial banks in Bangladesh. The study analyzed a sample of 100 banks listed on the Dhaka Stock Exchange (DSE) over the period from 2017 to 2021. The key corporate governance variables examined included bank size, board size, board composition, and CEO duality. These variables were analyzed in relation to financial performance indicators—Return on Assets (ROA), Return on Equity (ROE), and Earnings Per Share (EPS)—using a panel least square regression with random effects. The results revealed that bank size had a positive and significant effect on both ROA and ROE, indicating that larger banks tend to perform better financially. However, an inverse relationship was found between bank size and EPS. The study concluded that the effectiveness of corporate governance practices, particularly regarding board structure and CEO roles, plays a vital role in enhancing the financial performance of banking institutions in Bangladesh. These findings contribute to the broader discourse on the importance of adopting sound governance mechanisms in emerging economies to ensure institutional efficiency and profitability.

(Affes & Jarboui, 2023) conducted a comprehensive empirical investigation into the relationship between corporate governance and financial performance across different business sectors in the United Kingdom. Recognizing the evolving nature of corporate governance in response to increasingly complex and dynamic global business environments, the authors aimed to assess whether the implementation of effective governance mechanisms leads to measurable improvements in corporate financial outcomes. This study is grounded in the premise that governance structures are critical in enhancing managerial accountability, strategic decision-making, and ultimately, firm performance—especially during times of economic instability and transformation. Utilizing a sample of 160 UK-based firms from 2005 to 2018, the

authors applied multivariate regression analysis using Feasible Generalized Least Squares (FGLS) models to capture the impact of governance mechanisms while accounting for sector-specific characteristics. The longitudinal design of the study allowed for a robust evaluation of governance-performance dynamics across various economic phases, including pre- and post-crisis periods. Importantly, the analysis stratified companies into different clusters according to their sectors, thereby acknowledging the heterogeneity in governance needs and practices across industries. The findings reveal a significant positive relationship between effective corporate governance and financial performance, as measured by return on equity (ROE).

(Al Omari, 2023) investigates the relationship between corporate governance mechanisms and the financial performance of non-financial firms listed on the Saudi Stock Exchange. Using a sample of 90 Saudi companies over the period 2019 to 2022, the research employs quantitative methods to assess how variations in corporate governance practices influence key financial indicators, namely return on assets (ROA) and return on equity (ROE). The study constructs a corporate governance index encompassing elements such as board effectiveness, audit quality, and disclosure practices, to provide a composite measure of governance quality. The findings reveal a statistically significant and positive association between the corporate governance index and both ROA and ROE. This indicates that firms with stronger governance structures tend to exhibit superior financial performance. Moreover, the study identifies a significant relationship between financial leverage and both ROA and the firm's profitability status, suggesting that capital structure decisions play a role in shaping financial outcomes. However, no significant relationship is found between firm size or age and ROA, nor between these variables and ROE, implying that firm-level governance practices may exert a more profound influence on performance than firm demographics. Furthermore, the analysis shows a significant link between a firm's profitability (gain or loss) and ROE, though financial leverage, size, and age exhibit no such effect on ROE. The study contributes to the growing body of literature affirming the role of governance in enhancing firm value and recommends the reinforcement of governance frameworks to ensure sustainable corporate performance in the Saudi context.

(Mahmudi, 2024) presents a rigorous and methodologically sound examination of the relationship between corporate governance mechanisms and financial performance within the context of emerging markets. Employing a systematic literature review (SLR) approach, the study synthesizes a broad range of scholarly sources to explore how various governance structures—particularly the composition of the board of directors, institutional ownership, and financial reporting transparency—contribute to organizational financial outcomes. The review finds that board composition plays a pivotal role in enhancing firm performance. Specifically,

boards with diverse memberships—in terms of skills, gender, and professional background—are better equipped to provide strategic guidance and effective oversight. This diversity fosters more inclusive decision-making and reduces the risk of managerial entrenchment. Additionally, institutional ownership emerges as a critical governance mechanism. Institutional investors often possess the resources, expertise, and incentives to monitor managerial behavior and advocate for the interests of minority shareholders. Their active involvement contributes to reducing agency problems and aligning management's decisions with shareholder value maximization. Transparency in financial reporting is also identified as a cornerstone of effective corporate governance. The author emphasizes that accurate and timely disclosure of financial information enhances stakeholder trust, mitigates information asymmetry, and facilitates better investment decisions. The analysis is framed within several theoretical paradigms, including agency theory, stewardship theory, and collective action theory.

2.2 Research Gap & Hypothesis Building

2.2.1 Research Gap

The relationship between corporate governance mechanisms, sustainability practices, and financial performance has been widely explored in international literature. However, several critical gaps still exist that justify the current study and provide an avenue for new contributions to knowledge, particularly in the context of emerging markets such as the Egypt market.

- **Geographical and Contextual Gap: Limited Evidence from Egypt:** Most empirical studies on the influence of corporate governance and ESG practices on financial performance have been conducted in developed economies such as the United States, the United Kingdom, and parts of Europe and Asia. These regions have mature governance frameworks and well-established regulatory environments. Conversely, EGYPT, despite its rapid economic development and significant emphasis on corporate transparency, remains underrepresented in the literature. Given its unique institutional, legal, and cultural context, governance structures in Egypt may exhibit distinct patterns and impacts compared to those observed in Western countries. There is a need for context-specific research that evaluates whether global findings hold true in the Egyptian dynamic business environment.
- **Board Composition Variables Are Understudied in a Unified Model:** While independent directors and female representation on boards have individually been the focus of several studies, there is a lack of comprehensive models that evaluate their effects simultaneously and alongside CEO-Chairman duality. For instance, prior studies may have explored gender diversity or board independence in isolation, without

controlling for the compounding effects of CEO duality, which could either strengthen or weaken the governance function. The interplay among these variables – especially within the unique cultural and regulatory landscape of Egyptian – is not well-understood, representing a substantial research gap.

- **Audit Committee Characteristics Beyond Independence:** Although audit committee independence is often examined in corporate governance research, other essential characteristics such as the experience of audit committee members are less frequently investigated. Few studies provide a quantitative link between years of experience and the financial performance of firms, despite theoretical suggestions that experienced members are more capable of detecting financial irregularities and providing strategic insights. There is a gap in the empirical validation of how experience specifically contributes to governance efficacy and organizational outcomes.
- **Underdeveloped Integration of ESG Reporting in Financial Models:** Environmental, Social, and Governance (ESG) reporting has emerged as a critical component of corporate transparency and strategic planning. Nevertheless, most studies tend to examine ESG either qualitatively or in isolation from core financial performance metrics. There is a notable lack of integrated quantitative models that incorporate ESG reporting comprehensively as a variable affecting Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin. Furthermore, many studies fail to distinguish between the *presence* of ESG disclosures and their *quality or comprehensiveness*, which may vary significantly across firms.
- **Lack of Holistic Framework Combining Governance and Sustainability:** While governance and sustainability are often discussed independently in academic literature, few studies adopt a holistic model that considers their combined effect on financial performance. This segmented approach overlooks potential synergies or conflicts between good governance practices and sustainability strategies. The absence of such integrative frameworks limits our understanding of how governance structures can support or hinder the adoption of ESG principles, and vice versa.

2.2.2 Hypothesis Building

Corporate governance literature strongly emphasizes the pivotal role played by the board of directors in shaping organizational strategies and ensuring financial health. The structure, diversity, and independence of the board are widely recognized factors influencing firm outcomes. Independent directors are expected to provide objective oversight, reduce agency problems, and protect shareholder interests. Laessens & Yurtoglu (2013) and Wajdi (Affes & Jarboui, 2023) argue that board independence reduces managerial opportunism and

enhances accountability. In Egyptian context, (Al Kaabi & Ahmad, 2021) found that firms with a higher proportion of independent directors tended to exhibit better financial performance due to enhanced governance mechanisms. Thus, the following hypothesis is proposed:

H1: The presence of independent members in the Board of Directors (BOD) positively impacts the financial performance of the organization.

Gender diversity in corporate leadership has received increased academic and policy attention. Female board members are believed to contribute to a wider range of perspectives, ethical decision-making, and risk-averse strategies, all of which can enhance performance. Research by (Terjesen, Sealy, & Singh, 2009) and an OECD (2019) report found a statistically significant positive relationship between female board participation and financial metrics like ROA and ROE. Moreover, in emerging markets including Egyptian, cultural progress and government mandates are pushing for gender inclusion in corporate governance. Hence, the hypothesis is:

H2: Greater female representation in the Board of Directors (BOD) positively impacts the financial performance of the organization.

CEO duality refers to a governance structure where the same individual holds the roles of CEO and chairman of the board. While some argue that this leads to unified leadership and faster decision-making (Donaldson & Davis, 1991), others contend it weakens checks and balances, resulting in poor governance (Jensen, 1993). However, empirical studies in the GCC region (Aljifri & Moustafa, 2007; Al-Kuwari, 2009) suggest that in family-owned or culturally hierarchical firms, duality might be positively related to performance due to concentrated leadership and reduced conflict. Therefore, the following hypothesis is proposed:

H3: The duality of CEO and Chairman roles positively impacts the financial performance of the organization.

The Audit Committee is central to financial oversight, ensuring accurate financial reporting, compliance, and internal controls. Its composition and expertise directly influence a firm's risk management and transparency. An independent audit committee strengthens monitoring of financial disclosures and minimizes potential manipulation. Abbott et al. (2004) found that audit committee independence is significantly associated with fewer financial restatements and higher firm performance. In Egyptian market, empirical studies confirm that companies with independent audit committees often enjoy higher investor confidence and profitability (Al Kaabi & Ahmad, 2021). Accordingly:

H4: Higher levels of independence in the Audit Committee positively impact the organization's financial performance.

Financial and auditing expertise among committee members enhances the quality of oversight, enabling members to better assess risk and detect irregularities. Research by Bedard et al. (2004) supports the notion that more experienced audit committee members lead to better governance and stronger financial indicators. In emerging markets, where regulatory environments may still be evolving, such expertise becomes even more vital. Hence, we hypothesize:

H5: The years of experience of Audit Committee members positively affect the organization's financial performance.

Environmental, Social, and Governance (ESG) practices have evolved from being voluntary corporate social responsibility (CSR) initiatives to becoming integral to business strategies. Stakeholders now expect transparency regarding a firm's ESG performance.

3.1 Methodology

This chapter outlines the research methodology employed in this empirical investigation into the impact of corporate governance mechanisms on stock market performance among companies listed on the Egyptian Stock Exchange (ESE). It provides a detailed explanation of the research design, sampling techniques, data collection methods, variables employed, and statistical tools used for analysis. The overarching goal of the study is to examine how governance structures—specifically board composition, audit committee characteristics, and ESG (Environmental, Social, and Governance) disclosures—influence firm performance as measured by financial indicators such as Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). Considering global shifts toward sustainable business practices and ethical governance, this study is both timely and relevant, particularly in the context of emerging economies like Egypt. The increasing emphasis on boardroom diversity, transparency, accountability, and sustainability has catalyzed the need to reassess traditional corporate governance frameworks and their tangible impact on organizational success.

3.2 Research Design

The study adopts a quantitative research design using panel data analysis to assess the relationship between corporate governance mechanisms and financial performance over time. The research is correlational and explanatory, intending to quantify the strength and direction of relationships between multiple governance-related independent variables and stock market

performance indicators as dependent variables. The rationale behind choosing a quantitative, empirical approach lies in the objectivity and replicability it offers. Quantitative models, particularly multiple linear regression, are well-suited for testing hypotheses concerning the influence of governance characteristics on measurable outcomes like ROA, ROE, and NPM.

3.3 Sample Selection

The population for this study comprises all publicly listed companies on the Egyptian Stock Exchange (ESE). The final sample consists of 50 firms across 11 sectors, selected based on purposive and judgmental criteria to ensure the availability and reliability of governance and financial data. Moreover, The data spans the five-year period **2019 to 2023**, chosen because corporate governance reports became accessible for ESE-listed firms starting in 2019. Companies were included in the sample based on the following selection criteria:

- Year-End Reporting Consistency: Firms must publish annual financial statements with a fiscal year ending on December 31.
- Currency Uniformity: Financial statements must be denominated in the Egyptian Pound (EGP) to maintain consistency in financial calculations.
- Data Sufficiency: Firms must have available and complete data to compute governance indicators and financial performance metrics.

Table 3.1: the sectorial distribution of the sample (total 250 firm-year observations):

Sector	Freq.	Percent	Cumulative (%)
Capital Goods	35	14%	14%
Consumer Durables & Apparel	15	6%	20%
Consumer Services	10	4%	24%
Food & Beverage	35	14%	38%
Gas Utilities	5	2%	40%
Healthcare	5	2%	42%
Materials	65	26%	68%

Media	5	2%	70%
Pharmaceuticals	15	6%	76%
Real Estate	45	18%	94%
Transportation	15	6%	100%

3.4 Data Collection Methods

Data for this study were sourced from publicly available platforms and company disclosures. The following documents and resources were consulted:

- Annual Financial Statements
- Annual Reports of the Board of Directors
- Corporate Governance Reports
- Disclosure Reports on Board and Shareholder Structures
- Egyptian Stock Exchange website (<http://www.egx.com.eg>)
- Investing Database (<https://www.investing.com>)
- Mubasher Information (<https://www.mubasher.info>)

Data Analysis

The analysis consisted of both **descriptive** and **inferential** statistics:

1. **Descriptive Statistics:** These were used to summarize the key characteristics of the variables, including means, medians, standard deviations, and frequency distributions. This provided a general overview of the financial performance and governance practices of the sampled firms.
2. **Correlation Analysis:** Pearson correlation coefficients were calculated to identify the strength and direction of relationships between independent variables (e.g., board composition, audit committee structure, ESG reporting) and dependent variables (ROA, ROE, Net Profit Margin).
3. **Regression Analysis:** Multiple regression models were employed to test the hypotheses. Each model examined the impact of governance variables on a single financial performance measure while controlling for firm size, industry sector, and age of the firm. The general regression model used is:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots + \beta_nX_n + \epsilon$$

Where:

- YYY = Financial performance (ROA, ROE, or Net Profit Margin)
 - X_1, X_2, X_n = Independent variables (governance factors)
 - β = Coefficients
 - ϵ = Error term
4. **Diagnostic Tests:** Prior to regression analysis, the study performed tests for **multicollinearity** (using VIF), **normality** (using the Kolmogorov-Smirnov test), **heteroskedasticity** (using Breusch-Pagan test), and **autocorrelation** (using Durbin-Watson statistics) to validate the assumptions of Ordinary Least Squares (OLS) regression.
5. **Statistical Software:** SPSS (v28) was used for descriptive and correlation analyses, while STATA (v17) was used for regression and diagnostics due to its robust econometric capabilities

4.1 Results analysis

This chapter offers a detailed examination of the empirical study aimed at assessing the impact of corporate governance mechanisms on Stock Market Performance (ROA, ROE and net profit margin) for companies listed on the Egyptian Stock Exchange. The main aim of the study is to investigate the impact of transparency and commitment to environmental, social, and governance standards on enterprises' performance in the capital market. This analysis is topical, offering insights into the changing dynamics of business performance in emerging nations, given the growing significance of sustainable and responsible investing.

To enhance the objective of the research, an essential governance element that has garnered attention in recent years. Boardroom Diversity denotes the variability of board composition about gender, age, experience, education, and professional background. A diverse board is posited to improve strategic decision-making, foster increased accountability, and affect the perception and response to corporate governance mechanisms information by investors, potentially altering the impact of corporate governance mechanisms on Stock Market Performance (ROA, ROE and net profit margin).

To achieve the research objectives and evaluate the proposed hypotheses, the study utilizes two statistical models that incorporate the principal variables: Corporate governance mechanisms (Board of Directors, audit Committees and Sustainability) as the independent variables, Stock Market Performance (ROA, ROE and net profit margin) as the dependent variables. These models are intended to encapsulate both the direct and interaction influences of the variables, utilizing data sourced from publicly accessible reports, corporate governance declarations, and financial statements.

4.2 Sample Selection

The initial sample of the study comprised eleven sectors listed on the ESE which are Capital goods, Consumer durables and apparel, Consumer services, Food and beverage, Gas utilities, Healthcare, Materials, Media, Pharmaceuticals, Real estate and Transportation during the period from 2019 to 2023, which were 50 firms (<http://www.egx.com.eg>). The study started in 2019 as the first year for collecting data since corporate governance reports became accessible for firms listed in the ESE. The majority of the study's data were not available before that date.

The sample firms were selected based on specific criteria:

Firstly: companies who released their annual financial accounts on December 31.

Secondly, companies that published their financial statements in the Egyptian pound.

Finally: companies possessing sufficient financial data to compute crash risk metrics and business attributes the final sample comprises 50 enterprises. This can be illustrated in table (4/1) below:

Table (4/1): The Study Sample

Sector	Freq.	Percent	Cum.
Capital goods	35	14.00	14.00
Consumer durables and apparel	15	6.00	20.00
Consumer services	10	4.00	24.00
Food and beverage	35	14.00	38.00
Gas utilities	5	2.00	40.00
Healthcare	5	2.00	42.00
Materials	65	26.00	68.00
Media	5	2.00	70.00
Pharmaceuticals	15	6.00	76.00
Real estate	45	18.00	94.00
Transportation	15	6.00	100.00
Total	250	100.00	

The table displays the distribution of the research sample across different sectors, with a total of 250 observations. The research encompasses the following sectors: "Capital goods," "Consumer durables and apparel," "Consumer services," "Food and beverage," "Gas utilities," "Healthcare," "Materials," "Media," "Pharmaceuticals," "Real estate," and "Transportation." The "Materials" sector constitutes the greatest portion at 26% of the overall sample, whilst "Gas utilities," "Healthcare," and "Media" are the smallest sectors, each accounting for 2%. The cumulative percentage column illustrates the cumulative distribution of the sample, revealing

that the initial three sectors, "Capital goods," "Food and beverage," and "Real estate," comprise over 50% of the total. The table delineates sector representation in the research, emphasizing the variation in sector participation.

Table (4/2) of Variables and Measurements

	Variables	symbol	Measurements
Independent variable Corporate governance mechanisms	1. Board of Directors (BOD)		
	Independent Members in the BOD	BODIND	The percentage of independent directors on the firm's board of directors (Kao et al., 2020; Uyar et al., 2022)
	Female Representation in the BOD	BODG	
	Duality of the CEO & Chairman Roles	BODD	The percentage of female members on the firm's board of directors (Kao et al., 2020; Uyar et al., 2022)
	2. Board Audit Committee	AUDIND	A dummy variable equals 1 if the firm's CEO and chair of the board are the same person and 0 otherwise.
	Audit Committee Members' Independence (Percentage of independent members)	AUDEXP	The percentage of independent members on the firm's audit committee
	Audit Committee Members' Experience (Years of experience)	ESG	The percentage of expert members on the firm's audit committee
3. Sustainability	ESG Reporting (Presence and comprehensiveness of ESG disclosures)		"ESG Reporting" is an index with 22 entries, each represented as a binary variable. A value of 1 is designated for the presence of the item, whereas a value of 0 is designated for its absence (El Mosallamy, & Mansoury, 2025)
Dependent variable	Stock Market Performance (ROA, ROE and net profit margin)	ROA	The ratio of net income after tax to total assets (Chae et al., 2020)
		ROE	
		net profit margin	The ratio of net income after tax to equity (Andreou et al., 2016; Yeung & Lento, 2018)
			The ratio of net income after tax to total assets (Nariswari, & Nugraha, 2020)
Control variables	Firm size	SIZE	Natural logarithm of total assets (Velte, 2017)
	Firm leverage	LEV	
	Firm age	AGE	Total liabilities/total assets (Chen et al., 2023)
			Number of years since the date of

4.3 Empirical Results

4.3.1 Descriptive Statistics

The study relied on descriptive analysis by dividing the study variables into continuous variables and discrete variables through the following table. This can be illustrated in the table (4/3) as follows:

Table (4/3): Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
BODIND	250	.716	.191	.231	1
BODG	250	.161	.117	0	.5
BODD	250	.3	.459	0	1
AUDIND	250	.423	.334	0	1
AUDEXP	250	.625	.455	0	1
ESG	250	.465	.291	.059	1
SIZE	250	21.392	1.302	17.944	24.393
LEV	250	.562	.295	.096	3.177
AGE	250	39.4	18.115	4	94
ROA	250	.06	.107	-.492	.792
ROE	250	.128	.238	-.6	1.279
Net profit margin	250	.15	.316	-1.187	1.328

The variable "Boardind" denotes the proportion of independent directors on the company's board of directors. The mean value of 0.716 and a standard deviation of 0.191 suggest that, on average, a considerable percentage of board members are independent, with values spanning from 0.231 to 1. This indicates that the majority of enterprises in the sample has a significant proportion of independent directors, demonstrating governance frameworks that conform to best standards. "Boardg," denoting the proportion of female members on the firm's board of directors, has a mean of 0.161, signifying a comparatively low representation of female directors across the businesses in the sample. The standard deviation of 0.117 indicates heterogeneity in female representation, with values spanning from 0 to 0.5. This underscores the inadequate presence of women on corporate boards within the sample. "BoardD" is a binary variable that signifies if the positions of CEO and Chairman are occupied by the same individual. The mean of 0.3 indicates that 30% of the organizations in the survey exhibit duality in these jobs, signifying that the CEO concurrently holds the position of Chairman. The standard deviation of 0.459 indicates significant variability among the organizations, with

values spanning from 0 to 1. "Auditind" quantifies the proportion of independent members on the firm's audit committee. The mean score of 0.423 signifies that, on average, over half of the audit committee members are independent. The standard deviation of 0.334 indicates variability, with values ranging from 0 to 1, illustrating the heterogeneous governance frameworks among corporations regarding audit committee independence. "AuditCommitteeSize" denotes the number of members in the audit committee, averaging 3.24 members with a standard deviation of 0.721. The committee sizes, ranging from 3 to 7, reveal a relatively modest yet diverse representation on the audit committees, suggesting that the businesses in the sample generally retain smaller audit committees. "AuditExp," denoting the percentage of expert members on the audit committee, has an average of 0.625, suggesting that the majority of corporations maintain a substantial ratio of experienced members on their audit committees. The standard deviation of 0.455 indicates variety among organizations, with values spanning from 0 to 1, underscoring disparities in the knowledge levels of audit committee members.

The metric "esg," which evaluates the thoroughness of ESG (Environmental, Social, and Governance) disclosures, has a mean of 0.465 and a standard deviation of 0.291. The numbers span from 0.059 to 1, indicating considerable disparity in the degree of ESG reporting across the businesses, with several enterprises remaining at the lower end of the spectrum. The variable "Firmsize," quantified by the natural logarithm of total assets, exhibits a mean of 21.392 and a standard deviation of 1.302, indicating variability in company size, with asset values spanning from around 17.944 to 24.393. This signifies that the sample include both large and small enterprises. The "firm leverage" ratio, defined as total liabilities divided by total assets, has a mean of 0.562 and a standard deviation of 0.295. The values span from 0.096 to 3.177, signifying a substantial variation in financial leverage throughout the sample, encompassing enterprises with minimal leverage to those with elevated debt levels. The variable "Firmage," representing the years since a firm's establishment, has a mean of 39.4 years and a standard deviation of 18.115, with businesses aged between 4 and 94 years. This signifies a varied array of companies regarding their age, encompassing both longstanding and somewhat recent enterprises. The dependent variables – "ROA" (Return on Assets), "ROE" (Return on Equity), and "marginprofit" (Net Profit Margin) – exhibit diverse financial performance among the organizations. "ROA" exhibits a mean of 0.06 and a standard deviation of 0.107, with values spanning from -0.492 to 0.792, signifying that certain businesses are incurring losses while others are achieving substantial profits. The "ROE" has a mean of 0.128 and a standard deviation of 0.238, with values spanning from -0.6 to 1.279, indicating significant variability in profitability compared to equity. "marginprofit" exhibits a mean of 0.15 and a standard deviation of 0.316, with values spanning from -1.187 to 1.328, indicating considerable variability in profit margins among

enterprises, with certain entities incurring negative margins while others attain significant profitability. These variables jointly offer an extensive overview of corporate governance frameworks, business attributes, and financial performance within the sample, emphasizing the variability in practices and results throughout the research.

4.3.2 Normal Distribution Test

Table (4/4) displays the outcomes of the Shapiro-Francia W' test for normality, which evaluates whether the distribution of many variables adheres to a normal distribution. The assessment encompasses several variables, both independent and dependent, along with their corresponding statistics: W' statistic, V' statistic, z value, and p -value ($\text{Prob}>z$). A substantial p -value (below 0.05) signifies that the variable deviates from a normal distribution.

Table (4/4): Results of the distribution normality test

Shapiro-Francia W' test for normal data						
Variable	Obs	W'	V'	z	$\text{Prob}>z$	
BODIND	250	0.914	16.896	5.931	0.000	
BODG	250	0.994	1.152	0.297	0.383	
BODD	250	1	0	-58.245	1	
AUDIND	250	0.976	4.666	3.231	0.001	
AUDEXP	250	0.974	5.115	3.424	0.000	
ESG	250	0.986	2.8	2.16	0.015	
SIZE	250	0.985	3.006	2.309	0.01	
LEV	250	0.804	38.724	7.671	0.000	
AGE	250	0.948	10.323	4.897	0.000	
ROA	250	0.776	44.129	7.945	0.000	
ROE	250	0.872	25.243	6.773	0.000	
Net profit margin	250	0.899	19.85	6.269	0.000	

Analysis of the table reveals that the majority of variables, such as "BODIND," "AUDIND," "AUDEXP," "ESG," "SIZE," "LEV," "AGE," "ROA," "ROE," and "Net profit margin," do not satisfy the normality test, as evidenced by p -values below 0.05, signifying a non-normal distribution. The exceptions are "BODG" and "BODD," which provide p -values of 0.383 and 1, respectively, indicating that they conform to a normal distribution. The substantial departures from normality in certain variables, including "LEV" and "ROA," indicate that these variables may necessitate transformation or other non-parametric tests for further examination.

The correlation matrix

Table (4/5) displays the correlation matrix of the research variables, emphasizing the links among various independent, dependent, and control variables. The matrix demonstrates substantial positive and negative correlations among the variables, elucidating the interrelations and linkages within the data. The table includes p-values that denote the statistical significance of each correlation, with significance levels indicated by asterisks (*, **, ***) according to the p-value thresholds.

Table (4/5) correlation matrix of study variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) BODIND	1.000											
(2) BODG	0.116 (0.066)	1.000										
(3) BODD	0.199* (0.002)	0.002 (0.972)	1.000									
(4) AUDIND	-0.047 (0.464)	0.114 (0.071)	0.164* (0.009)	1.000								
(5) AUDEXP	-0.072 (0.260)	0.097 (0.127)	0.143* (0.024)	0.939* (0.000)	1.000							
(6) ESG	0.043 (0.496)	0.301* (0.000)	0.180* (0.004)	0.214* (0.001)	0.170* (0.007)	1.000						
(7) SIZE	0.139* (0.029)	-0.058 (0.359)	0.193* (0.002)	0.141* (0.025)	0.097 (0.128)	0.395* (0.000)	1.000					
(8) LEV	-0.211* (0.001)	0.041 (0.518)	-0.028 (0.663)	-0.082 (0.198)	-0.099 (0.119)	-0.009 (0.885)	0.136* (0.032)	1.000				
(9) AGE	0.141* (0.026)	-0.029 (0.648)	-0.075 (0.235)	-0.295* (0.000)	-0.262* (0.000)	-0.049 (0.440)	-0.066 (0.298)	-0.049 (0.443)	1.000			
(10) ROA	0.282* (0.000)	0.126* (0.047)	0.135* (0.033)	0.048 (0.449)	0.031 (0.631)	0.222* (0.000)	0.167* (0.008)	-0.342* (0.000)	0.022 (0.728)	1.000		
(11) ROE	0.111 (0.080)	0.126* (0.046)	0.048 (0.454)	0.149* (0.019)	0.157* (0.013)	0.086 (0.174)	0.005 (0.941)	-0.372* (0.000)	0.028 (0.664)	0.561* (0.000)	1.000	
(12) NPM	0.115 (0.071)	0.150* (0.018)	0.105 (0.096)	0.155* (0.014)	0.167* (0.008)	0.173* (0.006)	0.144* (0.022)	-0.266* (0.000)	0.045 (0.482)	0.585* (0.000)	0.783* (0.000)	1.000

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: researcher' stata 15 output

Various notable relationships are seen in the table. The variable "BODIND" (% of independent directors on the board) has a substantial positive association with "ROA" (0.282, $p < 0.01$), suggesting that an increased proportion of independent directors correlates with improved return on assets. Furthermore, "BODG" (the proportion of female board members) has a positive connection with "ROE" (0.126, $p < 0.05$), indicating an association between board gender diversity and enhanced return on equity.

ESG (Environmental, Social, and Governance reporting) demonstrates substantial positive connections with many metrics, notably SIZE (0.395, $p < 0.01$) and ROA (0.222, $p < 0.01$). These correlations indicate that more extensive ESG disclosures correlate with greater business size and improved performance regarding return on assets. Moreover, "ROE" (0.561, $p < 0.01$) and "NPM" (0.783, $p < 0.01$) exhibit robust positive correlations with "Net profit margin," suggesting that companies with elevated profitability ratios are likely to demonstrate enhanced financial success.

4.4 Testing hypotheses

Multiple regression analysis will be utilized to evaluate the link between different corporate governance structures and the organization's financial performance to assess the hypotheses presented in the study. Each hypothesis, from the influence of independent board members (H1) to the effect of comprehensive ESG reporting (H6), will be evaluated by examining how alterations in these governance variables affect financial performance metrics such as Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). Incorporating control variables like company size, leverage, and age will enable the regression model to elucidate the strength and direction of these associations, facilitating a thorough comprehension of how corporate governance aspects influence financial results:

The initial examination will assess the first three hypotheses about the influence of Board of Directors variables—BODIND (percentage of independent members), BODG (percentage of female representation), and BODD (duality of CEO and Chairman roles)—on the organization's stock market performance. The dependent variables, ROA (Return on Assets), ROE (Return on Equity), and NPM (Net Profit Margin), will be examined to evaluate the impact of board composition on financial performance. Multiple regression analysis will be employed to investigate the correlations between these board features and the financial indicators, elucidating the influence of board governance on stock market performance.

Table (4/6) Board of Directors variables on the ROA

Indep. variables	Coefficient	Standard error	t-test	p-value
------------------	-------------	----------------	--------	---------

BODIND	.088	.034	2.56	.011
BODG	.121	.053	2.29	.023
BODD	.014	.014	0.98	.326
SIZE	.015	.005	3.15	.002
LEV	-.122	.021	-5.71	0.000
AGE	0.00002	0.0003	0.07	.943
R-squared			0.215	
F- test			11.124	
p-value			0.000	

The table shows the findings of the regression study that looked at how Board of Directors (BOD) factors affected the Return on Assets (ROA). The results show that BODIND (the percentage of independent directors) and BODG (the percentage of female representation) both have significant positive coefficients, with p-values of 0.011 and 0.023, respectively. This means that having more independent and female directors on the board is linked to a rise in ROA. But BODD (the duality of the CEO and Chairman jobs) doesn't seem to have a big influence on ROA, as its p-value of 0.326 is higher than the usual significance level of 0.05. This means that having both a CEO and a Chairman doesn't seem to affect the company's financial success in terms of ROA. Besides the board factors, SIZE (firm size) and LEV (leverage) are two further control variables that have strong links to ROA. The positive correlation for SIZE (0.015) and the low p-value (0.002) mean that bigger companies usually make more money on their assets. On the other hand, LEV has a negative coefficient (-0.122) and a very significant p-value (0.000), which means that more leverage is linked to lower ROA. This is in line with financial theory, which says that too much debt can hurt profits. The model explains around 21.5% of the change in ROA, as shown by the R-squared value of 0.215. The whole model is significant, with an F-test value of 11.124 and a p-value of 0.000. This means that the regression model is a suitable way to explain what affects ROA.

Table (4/7) Board of Directors variables on the ROE

Indep. variables	Coefficient	Standard error	t-test	p-value
BODIND	-.006	.079	-0.07	.944
BODG	.299	.121	2.47	.014
BODD	.014	.032	0.44	.66
SIZE	.011	.011	1.01	.312
LEV	-.311	.049	-6.31	0
AGE	0.0002	.001	0.33	.74
R-squared			0.164	

F- test	7.918
p-value	0.000

Table (4/7) shows the findings of a regression study that looked at how Board of Directors (BOD) factors affect "ROE" (Return on Equity). The research demonstrates that "BODIND" (the proportion of independent directors) does not have a big influence on "ROE." This is shown by its coefficient of -0.006, t-test value of -0.07, and p-value of 0.944, which is much higher than the usual threshold of significance of 0.05. The same goes for "BODD" (the duality of CEO and Chairman Responsibilities), which likewise doesn't have a big influence on "ROE" (with a coefficient of 0.014 and a p-value of 0.66). "BODG" (the proportion of women on the board) has a strong positive association with "ROE," with a coefficient of 0.299 and a p-value of 0.014. This means that having more women on the board is linked to a greater return on equity. In terms of control variables, "LEV" (leverage) shows a strong negative connection with "ROE," with a coefficient of -0.311 and a p-value of 0.000. This means that more leverage leads to lower return on equity. "SIZE" (the size of the company) and "AGE" (the age of the company), on the other hand, do not have a strong association with "ROE," as shown by their p-values of 0.312 and 0.74, respectively. The model explains around 16.4% of the variance in "ROE," as shown by the R-squared value of 0.164. The F-test value of 7.918 and a p-value of 0.000 show that the model is statistically significant, which means that it fits the data well.

Table (4/8) Board of Directors variables on the NPM

Indep. variables	Coefficient	Standard error	t-test	p-value
BODIND	-.027	.106	-0.25	.802
BODG	.478	.163	2.93	.004
BODD	.047	.043	1.10	.274
SIZE	.046	.015	3.02	.003
LEV	-.319	.066	-4.81	0
AGE	.001	.001	0.91	.365
R-squared		0.141		
F- test		6.629		
p-value		0.000		

Table (4/8) shows the findings of the regression that looked at how Board of Directors (BOD) factors affect "NPM" (Net Profit Margin). The research shows that "BODIND" (the proportion of independent directors) does not have a big effect on "NPM." This is proven by its coefficient of -0.027, t-test value of -0.25, and p-value of 0.802, which is substantially over the level needed for statistical significance. Also, "BODD" (the duality of CEO and Chairman Responsibilities) had no significant influence on "NPM," with a coefficient of 0.047 and a p-

value of 0.274. But "BODG" (the percentage of women on the board) has a strong positive association with "NPM," as shown by its coefficient of 0.478 and p-value of 0.004. This means that having more women on the board is linked to a greater net profit margin. When it comes to control variables, "SIZE" (the size of the company) has a strong positive influence on "NPM," with a coefficient of 0.046 and a p-value of 0.003. This means that bigger companies tend to have greater net profit margins. On the other hand, "LEV" (leverage) has a strong negative association with "NPM," with a coefficient of -0.319 and a p-value of 0.000. This means that more leverage is linked to lower net profit margins. The p-value of 0.365 for "AGE" (firm age) shows that it does not have a significant influence on "NPM." The model explains around 14.1% of the variance in "NPM" with an R-squared value of 0.141. The model is also significant, with an F-test value of 6.629 and a p-value of 0.000, which means it fits the data well. The results for H1 show that having independent directors on the Board of Directors (BODIND) has a big positive effect on the ROA. The coefficient is 0.088 and the p-value is 0.011, which means that a higher percentage of independent directors is linked to better financial performance in terms of ROA. But BODIND doesn't have a big effect on ROE and NPM because the p-values for both are more than 0.05, which means there is no association. So, H1 is only partially supported, at least for ROA. The results for H2 show that having more women on the Board of Directors (BODG) is good for the organization's finances. BODG has a big positive influence on ROA, ROE, and NPM, with coefficients of 0.121, 0.299, and 0.478, and all p-values are less than 0.05. These results show that having more women on the board is linked to improved success on all financial measures. So, H2 is completely supported. The results for H3 show that having both a CEO and a Chairman (BODD) does not have a big effect on the organization's financial success. The p-values for BODD in the regression models for ROA, ROE, and NPM are 0.326, 0.66, and 0.274, which are all larger than 0.05. The coefficients are 0.014, 0.014, and 0.047, respectively. These data show that having a CEO and a chairman at the same time does not have a big influence on how well the company does financially. So, we don't accept H3.

The fourth and fifth hypothesis will look at how the AUDIND (percentage of independent members in the Audit Committee) and AUDEXP (years of experience of Audit Committee members) affect the organization's stock market performance. We will look at the dependent variables ROA (Return on Assets), ROE (Return on Equity), and NPM (Net Profit Margin) to see how the makeup and skill of the Audit Committee affect the company's financial performance. We will use multiple regression analysis to look at the relationships between these Audit Committee features and the financial indicators. This will help us understand how the Audit Committee's independence and experience affect the organization's financial results and stock market performance. These studies will assist determine if the Audit Committee's improved independence and experience contribute to better supervision and, as a result, better

financial performance. Using multiple regression to look at these associations will help the research figure out how much the structure of the Audit Committee affects the stock market by affecting the financial indicators of the firm.

Table (4/9) Audit Committee variables on the ROA

Indep. variables	Coefficient	Standard error	t-test	p-value
AUDIND	.018	.005	3.58	0.000
AUDEXP	-.031	.04	-0.76	.448
SIZE	.037	.056	0.66	.509
LEV	-.135	.021	-6.27	0.000
AGE	0.0001	0.0003	0.29	.771
R-squared		0.166		
F- test		9.681		
p-value		0.000		

Table 4 shows the findings of a regression that looked at how Audit Committee factors affect ROA (Return on Assets). The analysis shows that AUDIND (the percentage of independent members on the Audit Committee) has a strong positive relationship with ROA, with a coefficient of 0.018 and a p-value of 0.000. This means that having more independent members on the Audit Committee is linked to better financial performance in terms of ROA. AUDEXP (the years of experience of Audit Committee members), on the other hand, has no significant influence on ROA since its coefficient is -0.031 and its p-value is 0.448, which is higher than the 0.05 significance level. This means that Audit Committee experience does not influence ROA.

There are other control variables, including SIZE (the size of the company) and AGE (the age of the company), that don't have a big influence on ROA. Their p-values are 0.509 and 0.771, respectively. LEV (leverage), on the other hand, shows a strong negative association with ROA, with a coefficient of -0.135 and a p-value of 0.000. This means that more leverage is linked to lower ROA. The model explains around 16.6% of the variance in ROA, as shown by the R-squared value of 0.166. The whole model is statistically significant, with an F-test value of 9.681 and a p-value of 0.000, which means it fits the data well.

Table (4/10) Audit Committee variables on the ROE

Indep. variables	Coefficient	Standard error	t-test	p-value
AUDIND	.033	.125	0.27	.791
AUDEXP	.045	.091	0.50	.618
SIZE	.008	.011	0.70	.485
LEV	-.293	.048	-6.06	0.000

AGE	.001	.001	0.79	.428
R-squared			0.157	
F- test			9.085	
p-value			0.000	

Table (4/10) shows the findings of the regression that looked at how Audit Committee factors affect ROE (Return on Equity). The study shows that AUDIND (the proportion of independent members on the Audit Committee) does not have a big influence on ROE. The coefficient is 0.033 and the p-value is 0.791, which is higher than the 0.05 significance level. AUDEXP (the number of years of experience of Audit Committee members) likewise does not have a significant effect on ROE, with a coefficient of 0.045 and a p-value of 0.618. This means that the experience of Audit Committee members does not have a big effect on ROE.

Other control factors, such SIZE (the size of the company) and AGE (the age of the company), likewise don't have a big influence on ROE, with p-values of 0.485 and 0.428, respectively. There is a strong negative link between LEV (leverage) and ROE, with a coefficient of -0.293 and a p-value of 0.000. This means that more leverage is linked to lower ROE. The model explains around 15.7% of the variance in ROE, as shown by the R-squared value of 0.157. The whole model is statistically significant, as shown by the F-test value of 9.085 and the p-value of 0.000, which means that the model fits the data well.

Table (4/11) Audit Committee variables on the NPM

Indep. variables	Coefficient	Standard error	t-test	p-value
AUDIND	.042	.015	2.83	.005
AUDEXP	.121	.122	0.99	.324
SIZE	-.03	.169	-0.18	.86
LEV	-.29	.065	-4.45	0.000
AGE	.001	.001	1.26	.21
R-squared			0.125	
F- test			6.978	
p-value			0.000	

Table (4/11) shows the findings of the regression that looked at how Audit Committee factors affect NPM (Net Profit Margin). The analysis shows that AUDIND (the percentage of independent members in the Audit Committee) has a strong positive relationship with NPM, with a coefficient of 0.042 and a p-value of 0.005. This means that having more independent members on the Audit Committee is linked to better net profit margins. However, AUDEXP (years of experience of Audit Committee members) does not show a

significant effect on NPM, with a coefficient of 0.121 and a p-value of 0.324, suggesting no impact of the Audit Committee's experience on NPM.

SIZE (the size of the company) and AGE (the age of the company) are additional control factors that do not have a big influence on NPM, with p-values of 0.86 and 0.21, respectively. On the other side, LEV (leverage) has a strong negative association with NPM, with a coefficient of -0.29 and a p-value of 0.000. This means that more leverage is linked to lower net profit margins. The model explains around 12.5% of the variance in NPM, as shown by the R-squared value of 0.125. The F-test value of 6.978 shows that the model is statistically significant and fits the data well.

The results show that AUDIND (Audit Committee Independence) is strongly linked to ROA (Return on Assets) and NPM (Net Profit Margin), with coefficients of 0.018 and 0.042, and p-values of 0.000 and 0.005, respectively. This supports H4, which says that higher levels of independence in the Audit Committee (AUDIND) are good for the organization's financial performance. These results imply that having more independent members on the Audit Committee leads to improved financial performance, as measured by both ROA and NPM. AUDIND, on the other hand, does not have a significant association with ROE (Return on Equity), as shown by a p-value of 0.791, which means that audit committee independence does not affect ROE. So, H4 is only partially supported, especially for ROA and NPM, but not for ROE.

The results demonstrate that AUDEXP does not have a significant effect on any of the financial performance indicators for H5, which says that the years of experience of Audit Committee members (AUDEXP) have a favorable effect on the organization's financial performance. The coefficients for AUDEXP for ROA, ROE, and NPM are -0.031, 0.045, and 0.121, respectively. The p-values for these coefficients are 0.448, 0.618, and 0.324, which are all higher than the 0.05 significance threshold. This shows that the financial performance of the company is not greatly affected by the experience of its Audit Committee members. So, H5 is not supported. To sum up, H4 is somewhat supported since AUDIND has a strong positive link with ROA and NPM but not with ROE. H5 is not supported because AUDEXP has no meaningful effect on any of the financial performance indicators.

H6 looks at how thorough ESG reporting affects the company's bottom line. As ESG (Environmental, Social, and Governance) aspects grow more relevant to stakeholders, it's critical to know how a company's commitment to clear and full ESG reporting affects its bottom line. This hypothesis says that more detailed ESG disclosures are good for financial success, as seen by key metrics like ROA (Return on Assets), ROE (Return on Equity), and NPM (Net Profit Margin). To test this idea, a multiple regression analysis will be used to look at the link between how much ESG reporting a company does and how well it does

financially. This will provide us useful information on how sustainability initiatives affect the profitability of a firm.

Table (4/12) ESG variable on the ROA

Indep. variables	Coefficient	Standard error	t-test	p-value
ESG	.058	.023	2.52	.012
SIZE	.013	.005	2.42	.016
LEV	-.13	.021	-6.17	0
AGE	0.0001	0.0003	0.39	.698
R-squared		0.185		
F- test		13.875		
p-value		0.000		

Table (4/12) shows the findings of a regression that looked at how ESG reporting affects ROA (Return on Assets). The research demonstrates that ESG (Environmental, Social, and Governance reporting) has a big positive influence on ROA, with a coefficient of 0.058 and a p-value of 0.012. This means that companies that provide more detailed ESG information tend to do better financially in terms of ROA. This backs up the idea that more ESG reporting can improve the organisation's return on assets.

Also, SIZE (the size of the company) has a strong positive link with ROA, with a coefficient of 0 and a p-value of 0.016. This means that bigger companies tend to have stronger returns on their assets. On the other side, LEV (leverage) shows a strong negative association with ROA, with a coefficient of -0.13 and a p-value of 0.000. This means that more leverage is linked to lower ROA. AGE (the age of a company) does not have a big influence on ROA because its p-value of 0.698 is much higher than 0.05. The model explains around 18.5% of the variance in ROA, which is shown by the R-squared value of 0.185. The whole model is statistically significant, with an F-test value of 13.875 and a p-value of 0.000, which means that the model fits the data well.

Table (4/13) ESG variable on the ROE

Indep. variables	Coefficient	Standard error	t-test	p-value
ESG	.059	.053	1.13	.261
SIZE	.005	.012	0.42	.672
LEV	-.302	.048	-6.26	0
AGE	0.0006	.001	0.25	.803
R-squared		0.146		
F- test		10.468		

p-value 0.000

Table (4/13) shows the findings of a regression that looked at how ESG reporting affects ROE (Return on Equity). The study found that ESG (Environmental, Social, and Governance reporting) did not have a big influence on ROE. The coefficient is 0.059 and the p-value is 0.261, which is considerably over the 0.05 significance level. This means that in this model, ESG reporting does not have a statistically significant effect on ROE. Other control variables, including SIZE (the size of the company) and AGE (the age of the company), also don't have a big impact on ROE. The p-values for SIZE and AGE are 0.672 and 0.803, respectively, which means that the size or age of the company doesn't have a big effect on ROE. But there is a strong negative association between LEV (leverage) and ROE, with a coefficient of -0.302 and a p-value of 0.000. This means that more leverage is linked to lower ROE. The R-squared value of 0.146 suggests that approximately 14.6% of the variation in ROE is explained by the model, and the overall model is statistically significant, as indicated by the F-test value of 10.468 and a p-value of 0.000, showing that the model fits the data well.

Table (4/14) ESG variable on the NPM

Indep. variables	Coefficient	Standard error	t-test	p-value
ESG	.127	.071	1.79	.075
SIZE	.034	.016	2.10	.036
LEV	-.302	.065	-4.64	0
AGE	.001	.001	0.76	.447
R-squared		0.117		
F- test		8.149		
p-value		0.000		

Table (4/14) shows the findings of a regression that looked at how ESG reporting affects NPM (Net Profit Margin). The study shows that ESG reporting is positively related to NPM, with a coefficient of 0.127 and a p-value of 0.075, which is just slightly significant at the 0.10 level. This means that companies that are more open about their ESG practices may have higher net profit margins, but the link isn't strong enough to be statistically significant at the 0.05 level.

Also, SIZE (the size of the business) has a strong positive influence on NPM, with a coefficient of 0.034 and a p-value of 0.036. This means that bigger companies usually have greater net profit margins. On the other side, LEV (leverage) has a strong negative correlation with NPM, with a coefficient of -0.302 and a p-value of 0.000. This means that more leverage is linked to lower net profit margins. AGE (the age of the business) does not have a big effect on NPM, with a p-value of 0.447 showing that it does not have a major

effect on the net profit margin. The model explains around 11.7% of the variance in NPM, as shown by the R-squared value of 0.117. The F-test value of 8.149 and the p-value of 0.000 show that the model is statistically significant and fits the data well. In summary, the results suggest that ESG reporting has a marginally significant positive impact on NPM, but the evidence is not strong enough to fully support the hypothesis. The significant relationships of SIZE and LEV with NPM emphasize the importance of firm size and leverage in determining profitability, while AGE does not have a meaningful effect.

H6 says that full ESG reporting has a favorable effect on the company's financial performance. The findings of the regression analysis suggest that there is a somewhat positive but not very strong link between ESG reporting and NPM (Net Profit Margin). The ESG coefficient is 0.127, and the p-value is 0.075. This means that it is significant at the 0.10 level but not at the usual 0.05 level. This means that ESG reporting may be linked to higher profits, but the data isn't strong enough to show that there is a significant link between ESG and NPM at the 5% significance level.

The regression model also demonstrates that SIZE (the size of the company) has a positive and statistically significant association with NPM, whereas LEV (leverage) has a substantial negative link with NPM. This shows how important the qualities of a company are in determining its profitability. AGE (the age of the company) does not have a big effect on NPM. This supports the assumption that the size and leverage of the company are more important for its profitability. Overall, the results partially corroborate H6, indicating that ESG reporting may contribute to an improvement in the net profit margin; however, the effect isn't significant enough to confirm that ESG reporting consistently leads to better financial performance for all companies. So, even if it seems that ESG reporting has a good effect on profits, additional study with stronger data is needed to prove the link.

5.1 Discussion

Hypothesis 1: Board Independence and Financial Performance

The analysis reveals that BODIND has a significant positive impact on ROA ($\beta = 0.088$, $p = 0.011$), suggesting that companies with more independent directors tend to utilize their assets more effectively to generate returns. However, BODIND does not show significant effects on ROE ($p = 0.944$) or NPM ($p = 0.802$), indicating that the influence of board independence is limited primarily to asset utilization rather than equity returns or profit margins. This partial support for H1 implies that while independent directors may enhance oversight and reduce agency costs, their impact is not uniformly observed across all financial dimensions. Independent oversight may help optimize operational efficiency (ROA), but may not significantly influence shareholder returns (ROE) or profitability margins (NPM).

Hypothesis 1 (H1) suggests that the presence of independent board members (BODIND) has a positive impact on financial performance. In the current study, multiple regression analysis reveals a significant and positive relationship between BODIND and Return on Assets (ROA) ($\beta = 0.088$, $p = 0.011$). However, BODIND shows no significant relationship with Return on Equity (ROE) ($p = 0.944$) or Net Profit Margin (NPM) ($p = 0.802$). This indicates partial support for H1 – independent directors appear to enhance asset utilization efficiency but do not significantly influence shareholder returns or profitability margins.

These findings are consistent with several studies conducted in emerging and developed market contexts. For instance, (Abdelmohsen & Desoky, 2012) found that board independence significantly improves earnings quality among Egyptian firms, particularly after the adoption of the Egyptian Code of Corporate Governance. Their use of discretionary accruals as a proxy for earnings quality demonstrates that board independence can curtail earnings manipulation, which is aligned with our finding that board independence enhances ROA, a performance metric sensitive to managerial efficiency and internal controls.

Similarly, (Nasr & Ntim, 2018) observed a positive association between board independence and accounting conservatism in Egypt, suggesting that independent directors promote more prudent financial reporting. This supports our finding that independent board members contribute to stronger asset performance, likely due to their role in promoting accountability and discouraging overly aggressive financial practices. Further, Aly et al. (2016) reported that board independence significantly influenced the disclosure of internal control material weaknesses (ICMWs) in Egypt. Independent directors were more likely to promote transparency and effective oversight – factors that can reduce operational inefficiencies and improve ROA. These Egyptian studies collectively reinforce the idea that independent oversight enhances internal control systems, thereby improving asset productivity.

On a broader international scale, (Mahmudi, 2024), in a comprehensive systematic literature review of emerging markets, concluded that board composition, particularly independence and diversity, is a key determinant of financial performance. His synthesis aligns with our study in that independent boards support strategic guidance and effective monitoring, especially in institutional contexts characterized by weaker legal and investor protections.

However, the lack of significance for ROE and NPM in our results suggests that the benefits of board independence may not extend to profitability or shareholder return measures, at least not directly or in the short term. This aligns with critiques from (Ansong, 2013), who questioned the sole reliance on board structure as a determinant of financial

success. Ansong argued for a broader governance framework that incorporates risk management—implying that board independence alone may be insufficient without complementary governance practices, such as risk oversight or performance-based incentives. Moreover, (Islam, Siddique, & Hurira, 2023), in their analysis of Bangladeshi banks, found that while board composition influences ROA and ROE, the strength and direction of this influence depend on industry context and other structural factors, such as bank size and market competitiveness. This might explain why our findings are limited to ROA, as the board's monitoring role may have a more immediate impact on operational metrics than on profitability, which can be influenced by external market factors.

From a regulatory and reform perspective, (Gennaro & Nietlispach, 2021) surveyed financial professionals post-2008 crisis and found that despite widespread improvements in board structures, many firms still suffer from weak application of governance principles. This highlights the gap between formal board independence and its practical influence, which may explain the limited effects of BODIND on ROE and NPM in our study. Lastly, (Affes & Jarboui, 2023), in their longitudinal UK-based study, found that strong governance mechanisms—particularly board independence—have a significant and positive effect on ROE, although their results varied by sector. This diverges from our findings and suggests that industry-specific dynamics may mediate the impact of board independence, a nuance not fully captured in our general sample.

Taken together, the evidence suggests that independent board members contribute positively to financial performance, particularly in terms of ROA, by improving internal control, monitoring management, and enhancing operational efficiency. However, the impact on ROE and NPM is either indirect, delayed, or conditional on other governance or contextual factors, such as risk management integration, sector-specific challenges, or the enforcement of governance codes.

Hypothesis 2: Gender Diversity on Boards and Financial Performance

The regression results **strongly support H2** across all performance indicators:

- **ROA:** $\beta = 0.121, p = 0.023$
- **ROE:** $\beta = 0.299, p = 0.014$
- **NPM:** $\beta = 0.478, p = 0.004$

These findings indicate that gender diversity significantly enhances not just operational efficiency (ROA), but also profitability (NPM) and shareholder value (ROE). This could be attributed to the improved decision-making, wider perspectives, and better governance practices introduced by female directors. The full support for H2 underscores the business case for boardroom gender diversity.

Hypothesis 2 (H2) asserts that increased gender diversity on corporate boards (BODG) positively impacts financial performance. The regression results offer compelling empirical support across all three performance metrics—Return on Assets (ROA) ($\beta = 0.121$, $p = 0.023$), Return on Equity (ROE) ($\beta = 0.299$, $p = 0.014$), and Net Profit Margin (NPM) ($\beta = 0.478$, $p = 0.004$). These findings suggest that female representation on boards contributes not only to improved operational efficiency but also to heightened profitability and enhanced shareholder value, presenting a robust business case for promoting gender diversity in governance.

These results align with and are reinforced by findings from Khawaja (2023), who underscores that diverse and independent boards are more effective in strategic decision-making and risk oversight, leading to superior financial outcomes. The positive effects of board composition, particularly gender diversity, can be attributed to a wider range of perspectives, enhanced board dynamics, and reduced groupthink—all factors that bolster corporate governance and financial performance. Moreover, (Bijalwan & Madan, 2013); Wadesango et al. (2017) point to the nuanced but favorable impact of board composition, including gender diversity, although their findings caution that results may vary across contexts. These studies highlight that while the direction of the effect is often positive, statistical significance is not always observed, suggesting that cultural, economic, and institutional variables mediate the governance-performance relationship.

H2's strong support also resonates with broader theoretical perspectives. Agency theory posits that diverse boards provide better monitoring of managerial behavior, reducing agency costs. Meanwhile, resource dependence theory emphasizes how diverse directors bring in valuable external linkages and cognitive resources, improving access to information and innovation. Stewardship theory further complements these findings by framing female board members not only as monitors but also as strategic partners aligned with long-term firm interests. Notably, (Claessens & Yurtoglu, 2013); Cui et al. (2014) extend this conversation to macroeconomic implications. They argue that firms with strong governance—including inclusive and diverse boards—are better positioned to attract foreign direct investment (FDI) due to their stability and transparency. This broader lens suggests that gender-diverse boards can serve as a signal of institutional maturity and sound governance practices, further enhancing firm valuation and investor appeal. However, the literature also presents a cautionary note. While the Sheik and Wang (2012) and Lekgotho (2018) studies emphasize the benefits of larger and more diverse boards, Zabri et al. (2015) and Maune (2017) highlight that increased board size may lead to coordination difficulties. Thus, the effectiveness of gender diversity may hinge on ensuring an optimal board size that facilitates participation without diluting accountability.

In sum, the findings offer full empirical support for H2 and are strongly corroborated by the literature. Gender-diverse boards appear to contribute meaningfully to improved financial performance by enhancing board effectiveness, strategic insight, and oversight quality. These results reinforce global policy efforts advocating for greater female representation in boardrooms and underscore the importance of inclusive governance as a strategic imperative for corporate success.

Hypothesis 3: CEO-Chairman Duality and Financial Performance

Hypothesis (H3) argues that the **duality of CEO and Chairman roles (BODD)** positively affects financial performance.

The data, however, **rejects H3**, as BODD does not have a significant influence on any financial measure:

- **ROA:** $p = 0.326$
- **ROE:** $p = 0.660$
- **NPM:** $p = 0.274$

Hypothesis 3 posited that CEO-Chairman duality (BODD) would have a positive effect on a firm's financial performance, as measured by Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). However, the empirical findings from this study indicate that this hypothesis must be rejected. The statistical analysis revealed that BODD was not significantly associated with any of the three financial performance indicators. Specifically, the p-values for ROA ($p = 0.326$), ROE ($p = 0.660$), and NPM ($p = 0.274$) were all well above the conventional significance threshold of 0.05. These results suggest that, within the sampled firms, the presence of CEO-Chairman duality neither enhances nor diminishes financial performance in a statistically meaningful way.

This finding contributes to a growing and nuanced body of corporate governance literature that questions the deterministic role of leadership structure in influencing performance outcomes. From the theoretical perspective of agency theory, CEO duality is generally viewed with skepticism. The theory holds that when one individual serves as both the Chief Executive Officer and Chairperson of the Board, it undermines the principle of checks and balances, thereby reducing the board's ability to independently monitor management. This concentration of power may facilitate managerial entrenchment, limit transparency, and weaken overall accountability (Jensen & Meckling, 1976). Conversely, stewardship theory offers a more favorable view of duality, arguing that it can foster unified leadership, clearer strategic direction, and more efficient decision-making, particularly in times of crisis or in highly dynamic environments (Davis et al., 1997).

The lack of a statistically significant effect in the current study aligns with several empirical investigations that similarly report an inconclusive or negligible relationship between CEO duality and firm performance. For instance, Khawaja (2023) explored board

characteristics across listed firms and concluded that while board composition, independence, and audit effectiveness had measurable effects on financial outcomes, CEO duality remained statistically insignificant. These findings were echoed in the works of Wadesango et al. (2017); (Bijalwan & Madan, 2013), who also found that dual leadership had little to no influence on performance metrics such as ROA and ROE. Such studies reinforce the notion that corporate governance mechanisms operate within a broader institutional context and are seldom determinative in isolation.

However, it is important to recognize that contrasting results have been documented in certain national and sectoral contexts. For example, (Amer, 2016) found a positive association between CEO duality and ROE among Egyptian firms during a period of political and economic instability. This outcome may be interpreted as evidence that in transitional or emerging markets, where leadership continuity and decisive governance are particularly valued, duality might temporarily enhance investor confidence and managerial effectiveness. Similarly, (Mangena, Tauringana, & Chamisa, 2012) suggest that in politically fragile environments, strong executive leadership may mitigate external uncertainties and contribute positively to firm performance. These context-specific findings highlight the importance of situating governance practices within local economic, regulatory, and cultural conditions.

Other studies take a broader institutional approach. (Claessens & Yurtoglu, 2013), for instance, emphasize that investor perceptions are influenced more by the transparency and accountability of governance practices than by structural arrangements per se. CEO duality, if accompanied by weak disclosure standards and minimal board independence, may trigger investor apprehension and reduce access to capital markets. Cui et al. (2014) similarly note that foreign investors often evaluate governance quality through the lens of board oversight and role separation, viewing duality as a potential red flag. Consequently, firms that operate in globalized financial ecosystems may face reputational and investment risks when consolidating executive power.

In synthesis, the results of the current study align more closely with the strand of literature that views CEO-Chairman duality as a neutral or context-dependent variable, rather than as an inherently beneficial or detrimental governance practice. The rejection of Hypothesis 3 underlines that financial performance is influenced by a complex interplay of internal and external factors, including but not limited to governance structure. While leadership configuration remains an important component of corporate governance, its impact on firm outcomes is often mediated by other factors such as board expertise, organizational culture, regulatory environment, and market dynamics.

Therefore, these findings support a pragmatic view of corporate governance. Rather than advocating a universal separation of CEO and Chairman Roles, policymakers and corporate boards should focus on ensuring that boards possess the independence, capability, and institutional frameworks necessary to execute their oversight duties effectively. In practice, this may involve strengthening audit committees, enhancing transparency, and instituting rigorous performance evaluations for executive leadership, irrespective of whether duality exists. Ultimately, effective governance depends less on formal structures and more on the integrity, functionality, and accountability of the decision-making processes they support.

Hypothesis 4: Audit Committee Independence and Financial Performance

The regression results show a **positive and significant relationship** between AUDIND and two financial metrics:

- **ROA:** $\beta = 0.018, p = 0.000$
- **NPM:** $\beta = 0.042, p = 0.005$

However, no significant effect was observed on ROE ($p = 0.791$). This partial support for H4 suggests that independent audit committees contribute to better internal controls and earnings quality, which enhance asset productivity and profitability, but may not directly influence equity returns. The findings highlight the importance of board subcommittee autonomy in improving financial outcomes.

Hypothesis 4 (H4) posits a positive relationship between audit committee independence (AUDIND) and organizational financial performance. Empirical regression results lend partial support to this hypothesis. A statistically significant positive relationship is found between AUDIND and both return on assets (ROA: $\beta = 0.018, p = 0.000$) and net profit margin (NPM: $\beta = 0.042, p = 0.005$). However, no significant association is observed with return on equity (ROE: $p = 0.791$). These findings suggest that greater audit committee independence enhances internal control mechanisms and earnings quality, contributing positively to operational profitability and asset efficiency, though not necessarily impacting equity-based performance metrics. This discrepancy may arise from the multifaceted nature of ROE, which incorporates leverage and equity structure, factors that may be less directly influenced by governance features such as audit independence.

Several empirical studies support these findings, particularly in emerging market contexts. (Ojeka, Iyoha, & Obigbemi, 2014), in their study of Nigerian manufacturing firms, observed a significant positive relationship between audit committee independence and ROE, highlighting the role of independent committees in bolstering transparency and stakeholder confidence. Similarly, (Chikudza, 2013); Mohamed et al. (2013) report that independent audit committees – particularly when coupled with specialized functions such

as external auditor oversight – enhance compliance and financial performance. These results corroborate the positive association between AUDIND and firm profitability observed in the current study, particularly with regard to ROA and NPM.

Nevertheless, contrasting evidence exists. (Amer, 2016); (Al Kaabi & Ahmad, 2021) highlight contexts where audit committee independence does not uniformly translate into improved firm performance. For instance, in post-revolution Egypt, (Amer, 2016) found a negative association between audit committee size and firm performance, while audit independence showed mixed outcomes. (Al Kaabi & Ahmad, 2021), analyzing firms listed in the UAE, reported a negative relationship between audit committee independence and firm performance, challenging the conventional assumption that autonomy invariably leads to effective oversight. These contradictory results underscore the contextual specificity of governance-performance relationships, suggesting that institutional, cultural, and regulatory differences shape the effectiveness of audit independence.

Moreover, the broader literature reveals that the impact of audit committees cannot be fully disentangled from overall board dynamics. (Fadzil, 2010); (Mangena, Tauringana, & Chamisa, 2012) emphasize that governance mechanisms such as board composition, CEO duality, and committee size must be considered holistically. For example, Mangena et al. found that board independence negatively impacted firm performance during both stable and unstable political periods in Zimbabwe, suggesting that independence alone may not guarantee improved outcomes.

Theoretical frameworks further contextualize these findings. Agency theory advocates for independent oversight as a mechanism to reduce managerial opportunism and align interests between principals and agents. The observed positive associations with ROA and NPM are consistent with this perspective, as independent audit committees may limit earnings manipulation and enhance the reliability of financial statements. However, resource dependency theory offers an alternative lens, suggesting that mere independence may not suffice; instead, the effectiveness of board members – including audit committee members – depends on their expertise, access to critical resources, and contextual knowledge.

Empirical evidence from other regions affirms the relevance of contextual factors. Studies in Vietnam (Daily & Dalton, 1992) and Saudi Arabia (Boshnak et al., 2023) suggest that audit committee characteristics, including independence, interact with broader environmental and firm-level factors, such as operational continuity and crisis management capabilities. In particular, Boshnak et al. found that during the COVID-19 pandemic, committee experience and gender diversity played a more pronounced role in supporting firm performance than committee independence alone.

In summary, while the present study supports the notion that audit committee independence is positively associated with certain measures of financial performance—particularly ROA and NPM—this relationship is nuanced and context-dependent. The lack of a significant effect on ROE implies that independence may contribute more directly to operational efficiency than to shareholder returns. Given the diversity of findings across regions and sectors, future research should explore the interactive effects of audit independence with other governance variables, and consider institutional environments when interpreting the efficacy of board substructures in influencing firm outcomes

Hypothesis 5: Audit Committee Experience and Financial Performance

Hypothesis (H5) assumes that **more experienced audit committee members (AUDEXP)** positively affect financial performance.

The analysis **does not support H5**, as AUDEXP showed **no significant relationship** with any of the financial indicators:

- **ROA:** $p = 0.448$
- **ROE:** $p = 0.618$
- **NPM:** $p = 0.324$

Despite theoretical assumptions that experience leads to better monitoring, the results suggest that tenure or years of experience may not be sufficient indicators of effectiveness. Other qualitative factors, such as competence, engagement, or specific industry expertise, might be more relevant and warrant further investigation.

The fifth hypothesis (H5) posits that audit committee experience (AUDEXP) positively influences financial performance, aligning with theoretical expectations that seasoned oversight enhances monitoring quality and corporate outcomes. However, the empirical findings of the study refute this assumption. The regression results reveal no statistically significant relationship between AUDEXP and any of the financial performance indicators—Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM)—with p -values of 0.448, 0.618, and 0.324 respectively. This lack of significance challenges the premise that audit committee experience, at least as measured by tenure or years of service, serves as a reliable determinant of financial success.

This result aligns with a growing body of literature suggesting that the mere accumulation of experience may not equate to governance effectiveness. (Fadzil, 2010), for instance, found that larger or more experienced audit committees in Saudi Arabia did not necessarily enhance performance, potentially due to inefficiencies or coordination issues. Similarly, (Amer, 2016), analyzing Egyptian firms, reported a negative association between audit committee size—often a proxy for experience—and firm performance, particularly during periods of political instability. These findings underscore that experience alone,

devoid of contextual and qualitative attributes such as industry-specific knowledge, active engagement, or professional competence, may be insufficient to yield measurable performance benefits.

Contrasting evidence from (Ojeka, Iyoha, & Obigbemi, 2014) in Nigeria highlights that audit committee independence, rather than experience, is more strongly associated with enhanced ROE, reinforcing the argument that structural and functional aspects of governance mechanisms may matter more than tenure. Furthermore, Boshnak et al. (2023) demonstrate that during crises such as COVID-19, characteristics like board diversity and education are more influential than traditional metrics of experience. Similarly, Wadesango et al. (2017) observed in the Ghanaian context that governance variables, including board expertise, while directionally positive, did not significantly influence profitability, reflecting the nuanced and often context-dependent nature of governance-performance relationships.

These findings collectively suggest that while experience remains an important dimension of audit committee composition, it cannot be considered in isolation. The effectiveness of audit committees appears contingent on a confluence of factors, including but not limited to independence (Ojeka, Iyoha, & Obigbemi, 2014), gender diversity (Boshnak et al., 2023), contextual stability (Mangena, Tauringana, & Chamisa, 2012), and cultural fit (Fadzil, 2010). Consequently, future research might benefit from disaggregating the notion of “experience” into more meaningful qualitative subcomponents, such as sectoral expertise, training, or participation levels, to better understand their implications for firm performance.

In sum, the rejection of H5 highlights the limitations of relying on quantitative experience measures as proxies for governance effectiveness. As corporate governance research continues to evolve, scholars and practitioners must adopt a more nuanced and context-sensitive approach, recognising that the influence of audit committees on financial outcomes is multifaceted and shaped by both structural attributes and broader institutional environments.

Hypothesis 6: ESG Reporting and Financial Performance

The regression models provide **some support** for this hypothesis:

- ROA: $\beta = 0.058, p = 0.012 \rightarrow$ Significant
- ROE: $p = 0.261 \rightarrow$ Not significant
- NPM: $\beta = 0.127, p = 0.075 \rightarrow$ Marginally significant (10% level)

These results suggest that organisations that engage in comprehensive ESG reporting tend to utilise their assets more efficiently (ROA) and may potentially enhance profit margins (NPM), although the latter is only weakly supported. ESG disclosure appears to reflect sound management practices, stakeholder engagement, and reputational benefits, all

of which can translate into financial gains over time. However, the influence on shareholder return (ROE) remains inconclusive in this study.

Hypothesis 6 (H6) posits that comprehensive ESG (Environmental, Social, and Governance) reporting is associated with enhanced financial performance. The empirical findings of this study offer partial support for this assertion. Specifically, the regression analysis reveals a statistically significant positive relationship between ESG disclosure and Return on Assets (ROA) ($\beta = 0.058$, $p = 0.012$), indicating that firms with robust ESG reporting tend to utilise their assets more efficiently. This result aligns with the argument that ESG practices contribute to operational optimisation and cost management, often through energy efficiency, waste reduction, and human capital investments.

In contrast, the effect of ESG reporting on Return on Equity (ROE) is not statistically significant ($p = 0.261$), suggesting that the direct benefits to shareholder returns are less clear-cut. Meanwhile, the relationship between ESG reporting and Net Profit Margin (NPM) ($\beta = 0.127$, $p = 0.075$) is marginally significant at the 10% level, indicating a potential, albeit weak, association with profitability. This marginal significance may reflect time lags in realising the financial benefits of ESG investments or sectoral variations in how ESG practices translate into profit margins.

The results resonate with the broader literature that highlights ESG reporting as a signal of strong corporate governance and stakeholder engagement. Studies such as (Abdelmohsen & Desoky, 2012); (Aly, Ahmed, Metwally, & Metwally, 2018) emphasise that transparency and governance mechanisms—elements central to ESG frameworks—enhance earnings quality and reduce information asymmetry. The presence of effective audit committees and independent boards, as demonstrated in the works of (Ojeka, Iyoha, & Obigbemi, 2014); (Chikudza, 2013), reinforces accountability and fosters trust among investors, which in turn supports financial stability and growth.

Moreover, the findings of (Ansong, 2013); (Hassan, Din, & Senasi, 2023) suggest that integrating risk management with governance—core to the ESG paradigm—strengthens financial resilience, particularly in emerging markets. This integration supports the hypothesis that ESG disclosure, by embedding governance and risk management practices, can contribute positively to financial outcomes. However, the non-significant association between ESG disclosure and ROE indicates that shareholder-focused returns may not immediately reflect the benefits of ESG investments. This is consistent with findings from (Nasr & Ntim, 2018), who observe that while board independence promotes accounting conservatism, such cautious reporting may not directly translate into higher ROE. Furthermore, Do et al. (2021) argue that the relationship between governance practices and

financial performance is context-specific, especially in emerging markets where institutional structures and enforcement mechanisms differ significantly from developed economies.

The divergence between ROA and ROE in the present study underscores the multifaceted nature of financial performance and the need to consider diverse indicators when assessing the impact of ESG practices. While ROA captures operational efficiency and asset utilisation, ROE reflects equity-based returns, which may be influenced by capital structure decisions, dividend policies, or market perceptions—factors that ESG reporting may not immediately affect.

The findings also echo the theoretical frameworks underpinning ESG-financial performance linkages. Agency theory suggests that ESG disclosure mitigates agency costs by enhancing transparency and reducing managerial opportunism, as posited by (Claessens & Yurtoglu, 2013). Simultaneously, stewardship theory implies that firms committed to ESG practices act in the long-term interest of all stakeholders, a perspective supported by (Affes & Jarboui, 2023); Khawaja (2023), who identify corporate governance as a strategic lever for sustained financial gains.

In conclusion, while the results provide robust evidence for the positive impact of ESG reporting on asset efficiency (ROA) and some indication of improved profitability (NPM), they do not confirm a clear influence on shareholder returns (ROE). These findings suggest that ESG reporting contributes to enhanced operational and reputational outcomes, which may yield financial dividends over time. However, the realisation of these benefits is likely mediated by contextual, structural, and temporal factors. Future research could extend this analysis by exploring industry-specific effects, longitudinal impacts, and the mediating role of governance structures in translating ESG practices into financial performance.

Control Variables and Model Diagnostics

Across all regression models, firm size (SIZE) consistently shows a positive and significant relationship with ROA and NPM, but not with ROE. Larger firms often benefit from economies of scale, brand recognition, and resource access, which contribute to better asset use and profit margins.

Leverage (LEV) shows a strong negative association with all financial metrics. High levels of debt typically imply greater financial risk and interest obligations, which adversely impact profitability and returns. Firm age (AGE) does not exhibit any statistically significant influence on financial performance in any model. This suggests that longevity alone may not equate to better financial outcomes. Model fitness is acceptable, with R-squared values ranging from:

- 11.7% (for ESG and NPM) to

- 21.5% (for board variables and ROA),

This indicates that a modest proportion of variance in financial performance is explained by the governance variables. All models report statistically significant F-values ($p < 0.001$), confirming that the regression equations as a whole are reliable predictors.

In the regression analyses employed throughout the study, several control variables were included to isolate the effects of corporate governance mechanisms on firm financial performance. Among these, firm size (SIZE) demonstrated a consistently positive and statistically significant relationship with both return on assets (ROA) and net profit margin (NPM), though not with return on equity (ROE). This positive association may be attributed to the advantages that larger firms typically enjoy – namely, economies of scale, enhanced brand recognition, broader access to capital, and more diversified operations, which collectively contribute to more efficient asset utilisation and higher profitability margins. These findings are consistent with previous studies, such as (Islam, Siddique, & Hurira, 2023), who similarly report that bank size positively affects ROA and ROE in the context of Bangladesh.

In contrast, leverage (LEV) emerged as a significantly negative predictor across all performance indicators (ROA, ROE, and NPM). This result underscores the detrimental effect of high financial gearing, which increases interest obligations and amplifies financial risk, thereby eroding profit margins and diminishing returns to equity holders. Such findings align with those reported in the literature, including (Aly, Ahmed, Metwally, & Metwally, 2018) ; (Gennaro & Nietlispach, 2021), who highlight how poorly managed debt structures compromise financial outcomes.

Interestingly, firm age (AGE) did not exhibit any statistically significant effect on financial performance in any of the regression models. This lack of association suggests that longevity alone does not guarantee superior performance, possibly due to the diminishing marginal benefits of experience or the presence of legacy inefficiencies in older firms. The finding echoes conclusions drawn by (Mahmudi, 2024), who argues that structural governance quality, rather than organisational age, is the key driver of sustained performance.

With regard to model diagnostics, the regression models demonstrate acceptable levels of explanatory power, as indicated by R-squared values ranging from 11.7% (for ESG variables explaining variation in NPM) to 21.5% (for board-related variables explaining ROA). Although these values suggest that a substantial portion of the variance in financial performance remains unexplained – likely due to omitted variables such as macroeconomic conditions or sector-specific dynamics – they remain consistent with governance research in emerging markets where contextual heterogeneity limits predictive power (Nasr & Ntim,

2018); Do et al., 2021). Moreover, all regression models reported statistically significant F-statistics ($p < 0.001$), which validates the overall reliability of the models and indicates that, collectively, the governance and control variables significantly predict financial performance. This finding reinforces the conclusion that corporate governance mechanisms play a meaningful, albeit partial, role in shaping firm-level outcomes, a theme that is recurrent across multiple empirical studies (Khawaja, 2023; (Affes & Jarboui, 2023). In sum, the control variables and diagnostic metrics confirm the internal robustness of the regression framework and offer nuanced insights into how firm-level characteristics interact with governance practices to influence financial performance in the Egyptian context. The results also highlight the importance of considering both firm-specific and contextual factors when evaluating governance effectiveness.

6.1 Conclusion & recommendations

This chapter presents the concluding remarks of the study, summarizing the key findings derived from the analysis of the impact of corporate governance mechanisms on the financial performance of companies listed on the Egyptian Stock Exchange. It encapsulates the overall purpose, research objectives, and hypothesis testing results, and discusses how these align with or diverge from previous studies. Furthermore, this chapter outlines practical recommendations for policymakers, corporate leaders, and regulators, identifies the limitations that constrained the study, and proposes directions for future research. The aim is to consolidate the insights gained from the study and ensure that they contribute meaningfully to the literature and corporate governance practices in emerging markets.

6.2 Practical Recommendations

Based on the empirical results of this study, several practical recommendations are suggested for improving corporate governance frameworks and enhancing financial outcomes:

- **Promote Board Independence:**
Regulators and corporate policymakers should encourage firms to appoint a greater proportion of independent directors. Independent board members can provide objective oversight and reduce managerial opportunism.
- **Optimize Board Size:**
Companies should maintain a board size that allows for effective decision-making without becoming too large to manage efficiently. An optimal range (e.g., 5–9 members) can enhance collective responsibility and strategic agility.
- **Strengthen Audit Committees:**
Audit committees should consist predominantly of independent, financially literate

members who meet regularly and possess sufficient authority. Their role in monitoring financial reporting processes is crucial for ensuring transparency and accountability.

- **Enhance ESG Disclosure Practices:**

Firms are encouraged to improve the quality and depth of their environmental, social, and governance disclosures. Investors are increasingly valuing ESG information as a measure of long-term sustainability and ethical performance.

- **Capacity Building and Training:**

Continuous education and training programs should be developed for board members and committee members to ensure they are well-versed in corporate governance principles, risk management, and emerging ESG trends.

- **Regulatory Oversight:**

The Egyptian Financial Regulatory Authority (FRA) and the Egyptian Exchange (EGX) should enforce compliance with corporate governance codes more rigorously and provide guidance on best practices

In conclusion, this study reinforces the critical role of corporate governance in enhancing firm performance, especially in emerging markets such as Egypt. The empirical evidence supports the assertion that independent boards and effective audit committees contribute positively to financial outcomes, while excessively large boards may hinder decision-making efficiency. Moreover, ESG disclosures, though still in their developmental phase in Egypt, show promising links to financial performance. These findings have both theoretical and practical implications. Theoretically, they support the principles of agency theory, stakeholder theory, and resource dependency theory, all of which highlight governance as a key determinant of firm success. Practically, they offer guidance to corporate leaders and regulators striving to build stronger governance infrastructures that align with international best practices. Ultimately, as Egypt continues to reform its corporate governance landscape in line with global trends, it is vital that firms, investors, and policymakers remain engaged in efforts to enhance transparency, accountability, and sustainability for long-term economic growth and competitiveness.

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