Journal of Finance and Investment Analysis, Vol. 15, No. 4, 2026, 23-45
ISSN: 2241-0988 (print version), 2241-0996(online)
https://doi.org/10.47260/jfia/1542
Scientific Press International Limited

Corporate Governance and Performance of Firm: Evidence from Firms Listed at the Nairobi Securities Exchange, Kenya

Abdirizak Aden Noor[1], Prof. Duncan Elly Ochieng[2] and Prof. Kennedy Okiro[3]

Abstract

The performance of firms listed on the Nairobi Securities Exchange (NSE) remains important to economic growth, investor confidence, and capital market stability. However, empirical findings on the relationship between corporate governance and firm performance remain inconclusive. This study examined the effect of corporate governance on the performance of firms listed on the NSE. Guided by a positivist research philosophy and descriptive-correlational research design, the study analysed panel secondary data from 63 firms with complete data covering 2014–2025, obtained from published annual reports and reputable financial databases. Firm performance was measured using Tobin's Q, while corporate governance was assessed using board size and board independence. Firm size, financial leverage, and firm age were included as control variables. Panel regression techniques, including pooled ordinary least squares, random-effects, and fixed-effects models, were estimated, with the Hausman specification test guiding model selection. The findings revealed that corporate governance had a positive and statistically significant effect on firm performance. The study recommends that listed firms strengthen corporate governance mechanisms to enhance performance, while policymakers and regulators promote effective oversight and accountability. The study contributes empirical evidence to the corporate governance and firm performance literature in the context of the Kenyan capital market.

Keywords: Corporate Governance, Firm Performance, Board Size, Board Independence, Tobin's Q, Nairobi Securities Exchange.

[1] PhD candidate, Department of Finance and Accounting, Faculty of Business and Management Sciences, University of Nairobi, Kenya
[2] Senior Lecturer Department of Finance and Accounting, Faculty of Business and Management Sciences, University of Nairobi, Kenya
[3] Senior Lecturer Department of Finance and Accounting, Faculty of Business and Management Sciences, University of Nairobi, Kenya

Article Info: *Received:* October 5, 2026. *Revised*: October 31, 2026.
Published online: November 3, 2026.

1. Introduction

Corporate governance provides the framework through which firms are directed, controlled, and held accountable, with important implications for organizational performance and profit maximization. The quality of governance arrangements can influence how decisions are made, how managerial actions are monitored, and how organizational resources are utilized. Understanding the relationship between corporate governance and firm performance is therefore important, particularly among firms operating within the capital market environment (Guluma, 2021).

Stewardship theory, advanced by Donaldson and Davis (1991, 1993), provides the anchor theory for this study. The theory views managers as stewards whose interests match with those of shareholders and who are motivated to pursue the success of the organization. From this perspective, effective managerial stewardship can contribute to improved organizational outcomes and strengthen the relationship between corporate governance and performance of firm. Agency theory, developed by Ross (1973) and Jensen and Meckling (1976), provides a complementary perspective by recognizing potential conflicts of interest between principals and agents. Such conflicts create a need for appropriate monitoring and oversight mechanisms to safeguard organizational resources and shareholder interests, with implications for firm performance.

Firms listed on the Nairobi Securities Exchange (NSE) have experienced continuing challenges relating to performance and sustainability, with weak corporate governance identified among the factors associated with these difficulties (Onguka et al., 2020). Governance assessments have also identified continuing compliance deficiencies (Kamau, 2023), including instances where board directors were classified as independent non-executives and delays in the submission of audited financial statements beyond the statutory timeline (NSE, 2024). In addition, the number of firms listed on the NSE declined from 67 in 2016 to 63 in 2025 (CMA, 2025). The collapse, delisting, or restructuring of firms including Uchumi Supermarkets, Mumias Sugar, Kenya Airways, ARM Cement, CMC Holdings, and National Bank of Kenya further illustrates the performance and sustainability difficulties experienced by some listed firms (Nyatichi et al., 2020).

1.1.1 Corporate Governance

Corporate governance represents the mechanisms and processes through which a firm is directed and its resources are managed to accomplish organizational objectives. It involves decisions concerning the identification and assessment of financing sources, the distribution of financial resources, and the effective management of available assets and other resources (Liu, 2024). Effective corporate governance enables firms to operate efficiently, manage potential risks, implement appropriate internal controls, prevent mismanagement, and maintain access to capital, thereby creating conditions that support organizational growth. It also encompasses the efficient deployment of resources, reliability and quality of financial reporting, compliance with relevant legal and regulatory requirements,

and protection of corporate resources (Garzón, 2021).
Corporate governance does not have a universally accepted single measure. Researchers have variously assessed governance quality through composite indices or examined specific governance characteristics. These characteristics include foreign ownership, family participation, CEO duality, executive size, independent auditors, specialized committees, capital structure, and the frequency of board meetings (Dao & Le, 2022). In the present study, corporate governance was operationalized using board size and board independence. Board size was determined by the total number of members serving on the board, whereas board independence was calculated as the proportion of independent directors relative to the total number of board directors. These measures were adopted because they can be consistently quantified across the firms under study and directly reflect aspects of board oversight that are relevant to firm performance. Their use is also consistent with measures applied in related empirical research, including Utama et al. (2020).

1.1.2 Performance of Firm

Firm performance reflects the extent to which an organization achieves desirable outcomes across areas such as profitability, growth, capital base, shareholder returns, customer satisfaction, and stakeholder perceptions. Performance of firm is the effective deployment of a firm's financial resources to enhance revenue generation and profitability (Mansikkamäki, 2023). It is an important consideration for a wide range of stakeholders, including investors, managers, suppliers, and other interested parties. Consequently, firm performance provides a basis for assessing the overall condition of an organization by capturing different dimensions of its operations and indicating its capacity to remain viable and succeed in a competitive environment (Ibrahimov et al., 2025).
The continued existence of a firm is closely associated with its ability to achieve satisfactory performance. A fundamental objective of a firm is to enhance the prosperity of its owners through the careful and effective use of organizational resources, with profit maximization representing an important objective (Maher & Andersson, 2000). Financial performance is consequently essential to business continuity, avoidance of bankruptcy, and preservation of shareholder confidence. Firms also seek to improve their profitability and social image. Measures of firm performance may therefore encompass employment levels, turnover, profitability, productivity, innovation, and the length of time a firm has been in operation, among other indicators (Zahra et al., 2025).
Firm performance may be evaluated using a variety of measures, including return on sales (ROS) and return on assets (ROA) (Younas, 2022). Assessment may also incorporate non-financial dimensions that shape how a firm is perceived by the public, including corporate social responsibility (CSR), environmental protection activities, social welfare initiatives, gender equality, regional balance, and work ethics (Bagh et al., 2025). In this study, firm performance was measured using Tobin’s Q. The measure was selected because it incorporates both market value and

asset information, providing an indicator of performance of firm that reflects these dimensions. Its application is also supported by previous studies, including Bhatia and Kumari (2026).

1.1.3 Firms Listed at Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE) had 63 listed firms during the study period, drawn from a range of sectors such as agriculture, banking, energy and petroleum, telecommunications, and technology. The listed firms differed in their corporate governance arrangements, including variations in the composition of boards with executive and non-executive directors, foreign and women directors, as well as differences in board age and board size (Kapkarich & Laiboni, 2026). During the period from 2014 to 2025, the NSE recorded an overall reduction in its listed-firm base, as the pace of new listings weakened while some existing firms left the market following financial difficulties or acquisition. Notable exits included KenolKobil in 2019, National Bank of Kenya in 2021, and Kurwitu Ventures in 2023, with the latter having been insolvent since its initial listing (NSE, 2023).

The challenges facing listed firms were also reflected in regulatory actions and market activity. By 2020, more than a dozen companies, including Uchumi and Kenya Power, had been identified by regulators as potential candidates for delisting. Moreover, the lack of major new admissions during the 2022/2023 financial year indicated reduced market appeal (CMA, 2023). Over the same period, annual equity turnover decreased from KSh 175.7 billion to below KSh 100 billion, while market capitalization declined by approximately KSh 840 billion between 2021 and 2023 (NSE, 2023). Credit conditions also presented challenges in some sectors, as bad loans in the manufacturing sector reached 21.5% by late 2023, while delinquencies in the trade sector exceeded KSh 127.5 billion (Nzuki & Njoka, 2021). Reduced investor participation and growing concentration around a small number of large issuers further highlighted structural weaknesses in the market (Ubul & Kithandi, 2025).

1.2 Research Problem

Corporate governance is widely recognized as an important determinant of firm performance; however, empirical evidence on the nature of this relationship remains inconclusive, particularly in emerging markets such as Kenya. Although effective governance structures are generally expected to promote accountability, enhance oversight, and support better organizational outcomes, evidence of weak performance among firms operating within established regulatory frameworks raises questions about the extent to which corporate governance translates into improved performance of firm. This continuing inconsistency creates a need for further empirical examination of the relationship between corporate governance and firm performance among listed firms in emerging capital markets.

In Kenya, firms listed on the Nairobi Securities Exchange operate within governance requirements overseen and enforced by the Capital Markets Authority.

Nevertheless, persistent governance and performance challenges have continued to emerge despite the existence of these regulatory frameworks (Oino & Kithandi, 2025). Express Kenya accumulated losses of KSh 606.5 million, while Sanlam Kenya recorded cumulative losses of KSh 2.28 billion over four years. Uchumi Supermarkets also faced a governance investigation concerning audits that had remained outstanding for seven years (Nyatichi et al., 2020). During the 2022/2023 fiscal year, the CMA imposed fines exceeding Sh8 million on directors and auditors for violations of trading rules, while enforcement-related earnings increased eight-fold to Sh10 million. In addition, investor confidence weakened, with the NSE's market capitalization declining by 28 percent, equivalent to KSh777.83 billion, between January and September 2022, partly attributed to the poor performance of listed firms (Ndirangu & Mwenda, 2025). These documented governance concerns, financial difficulties, regulatory sanctions, delayed audits, and reductions in market value demonstrate the continuing performance challenges within the listed-firm sector and reinforce the need to examine the relationship between corporate governance and firm performance.

Theoretical perspectives also provide different explanations of how corporate governance may influence performance of a firm. Stewardship Theory assumes that managers can act as responsible stewards whose interests match those of shareholders, suggesting that effective stewardship can contribute to improved organizational outcomes. In contrast, Agency Theory emphasizes the possibility of divergent interests between managers and shareholders, whereby agency costs arising from managers pursuing personal interests may undermine organizational performance (Younas, 2022). The coexistence of these perspectives provides a basis for empirical investigation of the corporate governance and performance of firm relationship among firms listed on the Nairobi Securities Exchange. Accordingly, the study sought to answer the following research question: What is the effect of corporate governance on performance of firm among firms listed on the Nairobi Securities Exchange?

2. Literature Review

2.1 Theoretical Literature

2.1.1 Stewardship Theory

Stewardship Theory was introduced by Donaldson and Davis (1991) and subsequently developed further in 1993. The theory is founded on the principles of trust and managers' intrinsic motivation to act in the interests of the organization (Capella et al., 2025). Rather than viewing managers primarily as self-interested individuals, the theory considers them stewards who are naturally inclined to pursue actions that advance the interests of shareholders (Saxena et al., 2024). Managers are regarded as committed organizational actors whose achievements are closely connected to the success of the firm as a whole (Watanabe, 2026). Their motivation arises partly from the satisfaction associated with making a meaningful contribution to the achievement of organizational objectives (Jasir et al., 2023).

Within the context of this study, Stewardship Theory provides an explanation for the expected positive relationship between corporate governance and performance of firm (Hussein & Mwangi, 2026). The theory suggests that sound corporate governance can contribute substantially to organizational success because managers, when acting as stewards, are expected to pursue organizational interests rather than prioritize personal benefits (Watanabe, 2026). It therefore emphasizes cooperation between managers and other organizational stakeholders, with relationships built around trust, shared interests, and common organizational objectives (Haider & Raza, 2026).

Despite its relevance, Stewardship Theory has limitations. Its central assumption that managers are inherently trustworthy and committed to organizational interests may not hold in all circumstances. Jensen and Meckling (1976), for instance, challenged this assumption by emphasizing the possibility of divergent interests between managers and shareholders (Naeem, 2026). The considerable reliance placed on managerial integrity may also create weaknesses in accountability, potentially encouraging board complacency and inadequate oversight (Tröger, 2026). Nevertheless, the theory is relevant to this study because it provides a basis for expecting effective corporate governance practices to be associated with improved organizational outcomes (Muswere & Dube, 2022). Thus, the theory supports the examination of how corporate governance structures, particularly board characteristics, relate to the performance of firms listed on the Nairobi Securities Exchange.

2.1.2 Agency Theory

Agency Theory, formulated by Jensen and Meckling (1976), examines the contractual relationship between owners of a firm and its management and offers an important perspective for understanding corporate governance and performance of firm. Within this relationship, shareholders represent the principals, while managers act as agents responsible for managing the organization on behalf of the owners. The relationship may, however, give rise to an agency problem when the interests and objectives of the two parties are not aligned (Tornikoski et al., 2026). While shareholders generally seek to maximize their wealth, managers may make decisions that advance their own interests without necessarily contributing to improved performance of firm. Such divergence of interests constitutes a central concern of Agency Theory and may reduce the effectiveness of corporate governance mechanisms in achieving desirable organizational outcomes (Setyanto et al., 2024).

The theory further suggests that agency costs may limit the contribution of corporate governance to firm performance when managers place their personal interests ahead of those of investors (Hafez et al., 2026). The resulting conflicts can manifest through operational inefficiencies, higher costs, inappropriate allocation of organizational resources, and failure to capitalize on investment opportunities, ultimately weakening competitiveness and profitability (Kwarto et al., 2025).

Agency Theory therefore emphasizes the importance of governance arrangements that strengthen accountability and bring managerial decisions into closer alignment with shareholder interests. Effective monitoring and control can reduce agency-related inefficiencies, enhance operational effectiveness, and contribute to improved long-term performance of firm (Minikin, 2026).

Agency Theory is subject to several criticisms. Its depiction of managers as predominantly self-interested actors may give insufficient consideration to ethical conduct, organizational loyalty, and social responsibility (Singh, 2025). This assumption contrasts with the position advanced by Donaldson and Davis (1991, 1993), who contend that managers can act as stewards of the organization and may naturally seek to advance shareholder interests. The theory also assumes that investors are primarily concerned with wealth maximization, thereby giving limited attention to shareholders who may pursue other objectives, including long-term sustainability and ethical considerations (Helal et al., 2026). Furthermore, mechanisms established to address agency problems can involve extensive monitoring and oversight costs, and such mechanisms may not always achieve their intended effectiveness (Mbhalati, 2026).

Agency Theory is pertinent to the present study because it explains how conflicts between shareholders and managers may affect the relationship between corporate governance and firm performance. In particular, agency costs may reduce the benefits expected from effective governance arrangements. The theory consequently emphasizes stronger monitoring and oversight as means of improving accountability and governance effectiveness (Machado & Santos, 2024). This may include identifying situations associated with higher agency costs and strengthening governance arrangements through measures such as increasing the representation of independent directors, encouraging greater shareholder activism, and applying stricter regulatory oversight (Al-Faryan, 2024). Agency Theory therefore provides a theoretical foundation for examining the extent to which corporate governance practices influence the performance of firms listed on the Nairobi Securities Exchange.

2.2 Empirical Literature

2.2.1 Corporate Governance and Firm Performance

Kijkasiwat et al. (2022) investigated the association between corporate governance and firm performance using data from 2,568 companies drawn from Europe and the USA. The analysis employed a two-step dynamic panel estimation technique. Firm performance was assessed using return on assets (ROA), whereas corporate governance was represented by board size, defined as the total number of board members, and board independence, calculated as the proportion of independent directors relative to the total board membership. The study reported that corporate governance exerted a strong influence on firm performance. However, its coverage was restricted to developed economies and did not encompass developing countries, creating a contextual gap. The present study extends the evidence by examining

firms listed on the Nairobi Securities Exchange within a developing-country setting. Mustafa et al. (2022) investigated corporate governance and firm performance among the top 100 listed companies in Malaysia. The study assessed corporate governance using board size, board independence, executive compensation, and CEO duality, while return on equity (ROE) served as the measure of performance of firm. Descriptive analysis and the Kolmogorov–Smirnov test was employed to examine the distribution of the data and relationships among the study variables. The findings demonstrated that board independence had a statistically significant positive effect on performance of firm. Nevertheless, restricting the analysis to the top-performing listed companies excluded other firms from the population. The Malaysian context also differs from emerging African markets. The present study responds to these limitations by employing a balanced panel of firms listed on the Nairobi Securities Exchange over the 2014–2025 period, thereby providing wider coverage of the listed-firm population.

Hermuningsih et al. (2020) assessed the effect of corporate governance on firm performance among manufacturing firms listed on the Indonesia Stock Exchange between 2014 and 2016. From an initial sample of 144 firms, 110 were retained for the final analysis. Corporate governance was represented by the board of commissioners, board of directors, independent commissioners, audit committee, and institutional ownership. Firm performance was measured using sales, total assets, and equity capital, with generalized linear models (GLM) applied in the estimation. The results indicated a strong and statistically significant positive relationship between corporate governance and performance of firm. The study, however, concentrated on a single industry and covered only three years, resulting in both an industry-specific limitation and a time-period gap. The current study addresses these limitations by covering firms from all sectors through a balanced panel dataset spanning twelve years, from 2014 to 2025, among firms listed on the Nairobi Securities Exchange.

Gošnik et al. (2023) examined corporate governance and performance-related variables among 3,007 SMEs in Slovenia, with secondary data obtained from a sample of 163 SMEs. The study found that SMEs exhibiting better performance also demonstrated good corporate governance practices. Financial performance was evaluated using return on assets (ROA), economic value added (EVA), and return on equity (ROE), while credit rating (CR) represented the non-financial measure. Structural equation modelling (SEM) was used to analyse the data. Despite its contribution, the study concentrated on SMEs rather than listed companies, resulting in a contextual gap. Further investigation is therefore warranted to establish whether the relationship observed among Slovenian SMEs is also evident among firms listed on the Nairobi Securities Exchange.

2.3 Conceptual Framework

Figure 1 illustrates the conceptual relationship between corporate governance and firm performance. Corporate governance is the independent variable, operationalized through board size and board independence, while firm performance is the dependent variable, measured using Tobin's Q (Gherghina, 2021). Board size is measured by the total number of board members, whereas board independence is measured as the ratio of independent directors to the total number of board members. Firm characteristics operationalized through firm size, financial leverage, and firm age were included as control variables because they may also influence firm performance. The conceptual framework therefore illustrates the expected relationships between corporate governance and firm performance, while accounting for the potential effects of the control variables.

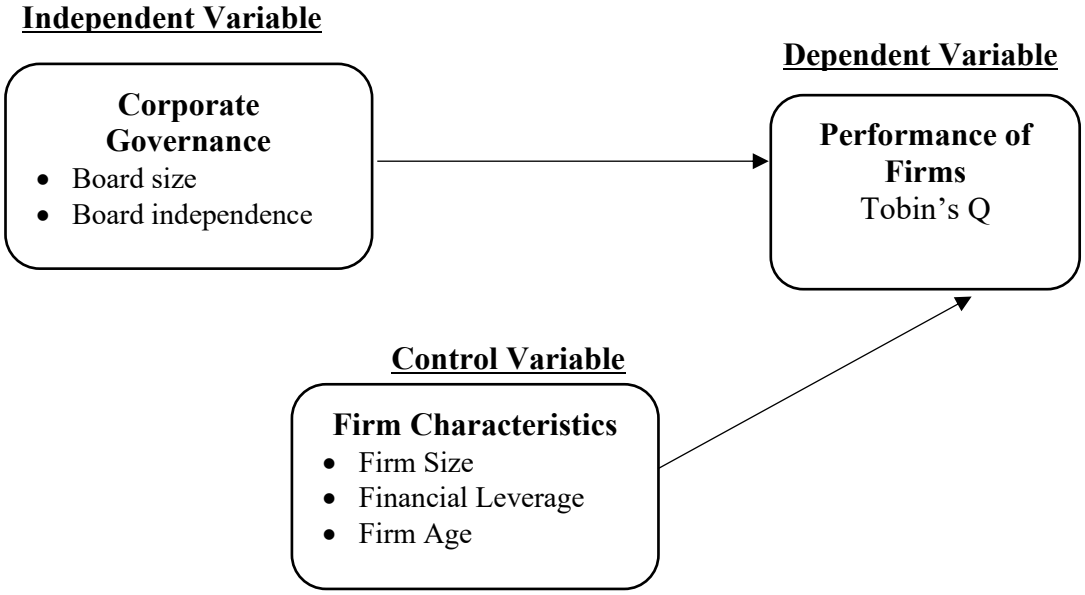


Figure 1: Conceptual Model (Author, 2026)

3. Research Methodology

The study employed a positivist research philosophy and a descriptive-correlational research design within a quantitative research framework. Positivism is based on the view that reality exists independently of individual perceptions and can be examined objectively through observable, measurable, and quantifiable evidence using systematic scientific procedures (Lim, 2023). The descriptive aspect of the design enabled the study to present and summarize the characteristics of the study variables, while the correlational aspect was used to establish the statistical association between corporate governance and performance of firm. The design was considered suitable for determining the direction and strength of the relationship between the variables. The panel structure of the dataset further enabled the analysis to account for variations across firms over the period. Panel regression models and diagnostic tests were employed to analyse the data, assess the validity of the results, and strengthen the reliability of the findings (Ayinde et al., 2015).

The study covered 63 firms listed on the Nairobi Securities Exchange (NSE) that had complete financial and corporate governance records for the twelve-year period from 2014 to 2025. The analysis was based entirely on secondary information obtained from reputable and verifiable sources. Data relating to corporate governance, specifically board size and board independence, were extracted from firms' published annual reports and audited financial statements available through the NSE and Capital Markets Authority (CMA) databases. Financial information used to determine performance of firm was obtained from audited financial statements and NSE records. Market capitalization and share price information required for the computation of Tobin's Q and the data for the control variables were obtained from the NSE database and supplemented by firm-level financial reports. Data retrieval followed a systematic multi-source process, whereby the information collected was compiled into a structured database and consistently formatted for analysis. A structured data collection sheet was used to organize and code the information uniformly across firms and study years. The use of secondary data was appropriate because it provided accessible historical information and facilitated longitudinal analysis, consistent with Gherghina (2021).

The analysis is based on a balanced panel of 63 firms with complete financial and corporate governance records for 2014–2025. Firms that were delisted, suspended, restructured, or listed during the study period were therefore excluded. Because the sample retains only firms that survived the full period, the results may be affected by survivorship bias and may not generalise to distressed or exiting firms. The findings should be interpreted as applying specifically to continuously listed firms.

4. Descriptive Statistics

Table 1*:* Descriptive Statistics of Study Variables

Variable	Indicator	N	Mean	Std. Dev.	CV (%)	Skewness	Kurtosis
Firm Performance	Tobin's Q	756	1.485	0.382	25.72	0.44	2.65
Corporate Governance	Board Size	756	8.210	2.945	35.87	0.82	3.14
	Board Independence	756	0.742	0.174	23.45	−0.51	2.88
Firm Characteristics	Firm Size (ln Total Assets in KES '000)	756	15.654	2.110	13.48	0.18	2.42
	Financial Leverage (Total Debt / Total Equity)	756	1.142	0.854	74.78	1.35	4.12
	Firm Age (Years since Incorporation)	756	42.600	24.310	57.07	0.58	2.18

Source: Research Data (2026)

The descriptive statistics show that the firms had an average board size of 8.21 members (SD = 2.94; CV = 35.87%), indicating variation in board size across the study observations. Board independence recorded a mean of 0.74 (SD = 0.174; CV = 23.45%), implying that independent directors constituted approximately 74.2% of board membership on average. The coefficient of variation indicates that board independence exhibited less relative variation than board size. For firm performance, the mean Tobin's Q was 1.48 (SD = 0.382; CV = 25.72%), indicating that, on average, the market valuation of the firms was higher than the measured value of their assets. The coefficient of variation suggests a moderate degree of dispersion in firm performance across the study observations.

Regarding firm characteristics, firm size recorded a mean of 15.65 (SD = 2.110; CV = 13.48%), indicating comparatively low relative variation across the observations. Financial leverage had a mean of 1.14 (SD = 0.854; CV = 74.78%), showing the greatest relative variation among the study variables. This suggests substantial differences in financial leverage across the firms and study observations. Firm age recorded a mean of 42.60 years (SD = 24.310; CV = 57.07%), indicating considerable variation in the length of time firms had been incorporated. In terms of distribution, financial leverage exhibited positive skewness of 1.35 and kurtosis of 4.12, suggesting a right-skewed distribution with relatively heavy tails. Board independence was negatively skewed (−0.51), while the other variables had positive skewness values.

Overall, the descriptive statistics demonstrate variation in corporate governance,

firm performance, and firm characteristics across the 756 observations, providing a basis for the subsequent correlation and panel regression analyses.

4.1 Overview of Trend Analysis

Trend analysis was conducted to assess changes and directional movements in the key study variables over the 12-year period from 2014 to 2025. Examining these patterns over time provides insight into the evolution of corporate governance and performance of firm, including notable changes, fluctuations, and turning points observed during the study period. The analysis therefore provides a basis for understanding the temporal patterns in corporate governance and performance of firm among firms listed on the Nairobi Securities Exchange.

4.1.1 Trends in Corporate Governance among firms listed on the Nairobi Securities Exchange (NSE)

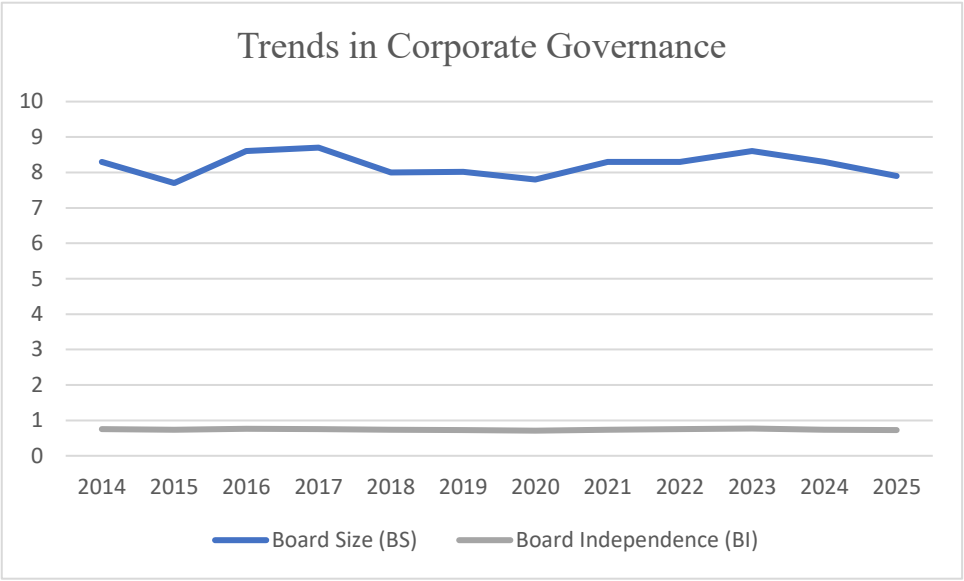


Figure 2: Trends in Corporate Governance - board size (BS) and board independence (BI) among firms listed on the Nairobi Securities Exchange (NSE) from 2014 to 2025.

Board size fluctuated over the study period, declining from approximately 8.3 in 2014 to 7.7 in 2015 before increasing to about 8.6 in 2016 and 8.7 in 2017. It subsequently declined to approximately 8.0 in 2018 and remained relatively stable through 2019, before falling slightly to 7.8 in 2020. Board size then increased to approximately 8.3 in 2021 and remained stable in 2022, before rising to 8.6 in 2023. It declined to approximately 8.3 in 2024 and 7.9 in 2025. Overall, these fluctuations suggest that board size varied over time, with a peak in 2017 and 2023 and a lower level at the end of the study period.

Board independence remained relatively stable throughout the period, with only minor fluctuations around 0.71–0.77. This stability suggests that the proportion of independent board members changed relatively little compared with board size. The contrasting patterns indicate that changes in board composition were more pronounced in board size than in board independence. Overall, the trends highlight variation in board size alongside relatively consistent board independence among NSE-listed firms during 2014–2025.

4.1.2 Trends in Firm Performance



Figure 3: Trend in Firm performance among Firms Listed at the Nairobi Securities Exchange

The average Tobin's Q varied over the 2014–2025 period, indicating changes in the market valuation of firms relative to the replacement cost of their assets. The ratio declined slightly from 1.54 in 2014 to 1.47 in 2015 before reaching a twelve-year high of 1.63 in 2016. This increase may reflect improved earnings expectations and enhanced operational efficiency. Tobin's Q subsequently decreased to 1.56 in 2017 and 1.43 in 2018, potentially reflecting investor caution associated with governance concerns, increased competition, and firm-level operational challenges. The ratio recovered to 1.50 in 2019, which may have been associated with strategic repositioning and operational improvements.

In 2020, Tobin's Q declined to a twelve-year low of 1.36, coinciding with the COVID-19 period and the disruptions experienced by firms. The ratio subsequently recovered to 1.52 in 2021, reflecting improved firm resilience and adaptation following the disruption. Tobin's Q then declined slightly to 1.48 in 2022 before shifting to 1.44 in 2023, indicating an adjustment in the market valuation of firms

relative to the replacement cost of their assets. In 2024, Tobin's Q decreased slightly to 1.40, suggesting a modest decline in market valuation. However, the ratio increased to 1.49 in 2025, indicating a recovery in firm valuation and potentially reflecting renewed investor confidence in firms' strategic direction, market positioning, and long-term profitability prospects.

Overall, the trend in Tobin's Q was characterized by fluctuations throughout the study period, with the highest value recorded in 2016 and the lowest in 2020. The observed movements indicate that firm performance varied considerably over time, highlighting changes in the valuation and performance of firms listed on the Nairobi Securities Exchange.

4.2 Correlation Analysis

Table 2: Pearson Correlation Matrix

Variables	Tobin's Q	Board Size	Board Independence	Firm Size (FS)	Financial Leverage	Firm Age
Tobin's Q	1.0000					
Board Size	0.3241*	1.0000				
Board Independence	0.4125*	0.1845*	1.0000			
Firm Size (FS)	0.1542*	0.4852*	0.1120*	1.0000		
Financial Leverage	−0.2104*	0.0954	−0.0412	0.3145*	1.0000	
Firm Age	0.0841	0.1412*	0.0654	0.2241*	−0.1042*	1.0000

Source: Research Data (2026).

Note: * indicates statistical significance at the 0.05 level. Firm size (FS) is operationalized as the natural logarithm of total assets expressed in KES thousands.

The Pearson correlation results indicate that board size and board independence were positively and statistically significantly associated with firm performance, measured by Tobin's Q. Board size had a correlation coefficient of 0.32 while board independence had a coefficient of 0.41. These results suggest that firms with larger boards and a higher proportion of independent directors tended to have higher Tobin's Q values. Board independence exhibited a stronger positive association with firm performance than board size. Among the control variables, firm size was positively and significantly associated with Tobin's Q ($r = 0.1542$, $p < 0.05$), while financial leverage had a negative and significant association ($r = -0.2104$, $p < 0.05$). Firm age had a positive but statistically insignificant association with firm performance ($r = 0.0841$).

The correlation matrix also shows that board size was positively and significantly correlated with board independence ($r = 0.1845$, $p < 0.05$) and firm size ($r = 0.4852$, $p < 0.05$). The remaining significant relationships among the control variables

included a positive correlation between firm size and financial leverage ($r = 0.3145$, $p < 0.05$), a positive correlation between firm size and firm age ($r = 0.2241$, $p < 0.05$), and a negative correlation between financial leverage and firm age ($r = -0.1042$, $p < 0.05$). Although these relationships indicate associations among some explanatory variables, none of the reported pairwise correlation coefficients exceeds the commonly used threshold of 0.85. This suggests that severe multicollinearity is unlikely based on the correlation matrix alone. However, further assessment using variance inflation factors (VIF) is appropriate before drawing a definitive conclusion about multicollinearity. Overall, the correlation results provide preliminary evidence of positive associations between the two corporate governance mechanisms and firm performance, supporting further examination through panel regression analysis.

4.3 Specification and Panel Diagnostic Tests

Table 3: Specification and Panel Diagnostic Tests

Test Procedure	Statistical Metric	Value	p-value	Econometric Decision / Implication
Breusch–Pagan LM test	χ^2	184.62	< 0.001*	Reject the null of no panel-level random effects; pooled OLS may be inappropriate relative to random effects.
Hausman specification test	χ^2	42.18	< 0.001*	Reject the null that random effects are consistent; fixed effects are generally preferred over random effects, subject to the test assumptions.
Variance Inflation Factor (VIF)	Mean VIF	1.48	—	Suggests no serious multicollinearity if all individual VIF values are acceptably low.

Source: Research Data (2026)

Note: *Correlation is significant at the 0.05 level, Diagnostic tests are evaluated based on a panel observation matrix of N = 756.

The Breusch–Pagan Lagrange Multiplier (LM) test produced a statistic of 184.62 with a p-value below 0.05, leading to the rejection of the null hypothesis of no panel-level random effects. This result indicates that unobserved differences across firms are relevant to the analysis, suggesting that pooled ordinary least squares (OLS) may be less appropriate than a panel-data model. The Hausman specification test yielded a statistic of 42.18 with a p-value below 0.05, leading to the rejection of the null hypothesis that the random-effects estimator is consistent. This finding supports the use of the fixed-effects model over the random-effects model, subject to the assumptions underlying the Hausman test. Accordingly, the fixed-effects model is generally preferred for examining the relationship between corporate

governance mechanisms and firm performance while accounting for unobserved, time-invariant firm-specific characteristics.

The multicollinearity assessment reported a mean Variance Inflation Factor (VIF) of 1.48, suggesting a low average level of multicollinearity among the explanatory variables. This value is below commonly used screening thresholds, indicating that multicollinearity may not be a serious concern in the regression analysis. However, the mean VIF alone is insufficient to establish that all explanatory variables have acceptable levels of multicollinearity; individual VIF values should also be examined. Overall, the diagnostic results support the use of panel regression techniques and indicate that the fixed-effects model is preferable to the random-effects model based on the reported Hausman test.

4.4 Regression Analysis

Following the diagnostic confirmations in Section 4.3, the study estimated the impacts of board size and board independence on firm performance using the following Fixed Effects panel specification:

$$\text{Tobin's } Q_{it} = \alpha_i + \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 FS_{it} + \beta_4 FL_{it} + \beta_5 FA_{it} + \varepsilon_{it}$$

Where i denotes the individual firm cross-section, t represents the annual time period, α_i captures the unobserved firm-fixed effects explicitly, and ε_{it} is the idiosyncratic error term. The resulting empirical parameters are structured in Table 4.

Table 4: Fixed Effects Panel Regression (Dependent Variable: Tobin's Q)

Variable	Coefficient (β)	Standard Error	t-statistic	p-value
Constant (β0)	0.584	0.184	3.17	0.002**
Board Size (BS)	0.031	0.009	3.44	0.001***
Board Independence (BI)	0.395	0.078	5.06	<0.001***
Firm Size (FS)	0.012	0.005	2.40	0.017**
Financial Leverage (FL)	−0.082	0.024	−3.42	0.001***
Firm Age (FA)	0.004	0.001	4.00	<0.001***

Model Diagnostics Summary: Total Observations (N) = 756; Within-group R^2 = 0.564; Adjusted R^2 = 0.558; Overall Model Fit $F(5, 688) = 89.14$, $p < 0.001$.

Note: Statistical significance thresholds are marked as follows: *** $p < 0.01$, ** $p < 0.05$. Firm Size (FS) is entered into the estimation matrix as ln(Total Assets in KES '000) to ensure cross-table replication integrity. Financial Leverage (FL) is computed as the ratio of Total Debt to Total Equity.

The panel regression results indicate that board size and board independence were positively and statistically significantly associated with firm performance, measured by Tobin's Q, across the pooled OLS, random-effects, and fixed-effects models. Based on the selected fixed-effects model, board size had a positive coefficient of 0.031 ($t = 3.44$, $p = 0.001$), suggesting that larger boards were

associated with higher firm performance, holding the other variables constant. Similarly, board independence had a positive coefficient of 0.395 ($t = 5.06$, $p < 0.001$), indicating that a higher proportion of independent directors was associated with higher Tobin's Q. These findings suggest that board composition is highly relevant to the performance of firms listed on the Nairobi Securities Exchange (NSE).

Among the control variables, firm size had a positive and statistically significant coefficient of 0.012 ($t = 2.40$, $p = 0.017$), while financial leverage had a negative and highly significant coefficient of −0.082 ($t = -3.42$, $p = 0.001$). Firm age also had a positive and highly significant coefficient of 0.004 ($t = 4.00$, $p < 0.001$). These results suggest that firm size and age were positively associated with firm performance, whereas higher financial leverage was associated with lower performance, after accounting for the other variables in the model.

Regarding model fit, the fixed-effects model reported a within R^2 of 0.564 and an adjusted R^2 of 0.558, indicating that the model explained approximately 55.8% of the within-firm variation in Tobin's Q. The overall model significance was confirmed by the highly significant F-statistic ($F(5, 688) = 89.14$, $p < 0.001$), validating that the explanatory variables were jointly associated with firm performance. The pooled OLS and random-effects models were also statistically significant, with reported R^2 values of 0.412 and 0.485, respectively. Based on the Hausman specification test, which rejected random effects in favor of fixed effects ($\chi^2 = 42.18$, $p < 0.001$), the fixed-effects model provides the principal basis for empirical interpretation.

The model is estimated as a one-way fixed-effects panel. It includes firm fixed effects (α_i) and does not include year fixed effects. Because firm age increases by exactly one year in each period, the firm-age coefficient is identified only from within-firm variation over time and therefore captures a common time trend in Tobin's Q rather than an effect of firm age in itself. The coefficient is accordingly interpreted as a control variable and not as evidence that older firms perform better.

5. Summary, Conclusions and Recommendations

5.1 Summary of Findings

The findings showed that corporate governance had a positive and statistically significant relationship with firm performance among firms listed on the Nairobi Securities Exchange. Corporate governance, measured through board size and board independence, was positively associated with firm performance, as measured by Tobin's Q. Specifically, the panel regression results indicated that both board size and board independence had positive and statistically significant coefficients in the preferred fixed-effects model. The findings suggest that variations in board composition were associated with corresponding differences in firm performance, providing empirical support for the relevance of corporate governance mechanisms in explaining firm performance among NSE-listed firms. The results further showed that firm size and firm age were positively associated with firm performance,

whereas financial leverage had a negative association with performance, highlighting the importance of firm-specific characteristics in explaining variations in Tobin's Q. Firm age was included as a control variable only; its coefficient reflects a time trend and is not interpreted as an age effect.

5.2 Conclusions of the Study

The study concludes that corporate governance is an important factor associated with firm performance among firms listed on the Nairobi Securities Exchange. The positive and statistically significant relationships between board size, board independence, and Tobin's Q demonstrate the relevance of governance structures to firm value. The findings further indicate that firm size and firm age are positively associated with firm performance, whereas financial leverage is negatively associated with performance. Overall, the study provides empirical evidence that corporate governance structures are associated with the performance of listed firms in the Kenyan context, highlighting the importance of effective board composition and oversight.

5.3 Recommendations of the Study

The findings provide practical implications for managers, boards, and corporate leaders of firms listed on the Nairobi Securities Exchange. Given the positive and statistically significant relationships between board size, board independence, and firm performance, listed firms should strengthen their governance structures, particularly in relation to board composition and independence. Boards and senior management should ensure that governance arrangements support effective oversight, accountability, and informed decision-making. Appropriate board sizes should be maintained to facilitate effective coordination and decision-making, while independent directors should be empowered to exercise objective judgement and provide effective oversight of management.

Corporate leaders should also ensure that governance mechanisms are implemented consistently rather than treated solely as regulatory requirements. Strengthening board oversight, promoting meaningful participation by independent directors, and regularly reviewing board effectiveness can contribute to more effective monitoring of management and better alignment between managerial decisions and organizational objectives. In addition, given the negative relationship between financial leverage and firm performance, listed firms should exercise prudent debt management and regularly assess their capital structures to limit potential financial risks. Attention to firm-specific characteristics, alongside effective corporate governance practices, can support informed strategic decisions and contribute to improved firm performance among companies listed on the Nairobi Securities Exchange.

References

[1] Al-Faryan, M.A.S. (2024). Agency theory, corporate governance and corruption: An integrative literature review approach. Cogent Social Sciences, 10(1), 2337893. https://doi.org/10.1080/23311886.2024.2337893

[2] Ayinde, K., Lukman, A.F. and Arowolo, O.T. (2015). Combined parameters estimation methods of linear regression model with multicollinearity and autocorrelation. Journal of Asian Scientific Research, 5(5), 243–250. https://doi.org/10.18488/journal.2/2015.5.5/2.5.243.250

[3] Bagh, T., Hunjra, A.I. and Corbet, S. (2025). The impact of corporate governance on firm value: Understanding the role of strategic change. International Review of Economics & Finance, 103, 104472. https://doi.org/10.1016/j.iref.2025.104472

[4] Bhatia, A. and Kumari, P. (2026). Leverage and corporate performance – the moderating role of corporate governance. Asian Journal of Accounting Research, 11(2), 150–165. https://doi.org/10.1108/AJAR-12-2024-0488

[5] Capella, F., Tolin, G., Frattini, F., Kotlar, J. and Di Minin, A. (2025). Corporate venture clienting: A governance perspective through the lens of stewardship theory. Creativity and Innovation Management, 34(4), 907–926. https://doi.org/10.1111/caim.70008

[6] Capital Markets Authority. (2025). Annual report and financial statements for the year ended 30 June 2025. https://libraryir.parliament.go.ke/bitstreams/3957ab1a-c731-44e3-afd4-f1e19e279948/download

[7] Dao, T.T.B. and Le, X.M. (2022). Earnings Management, Corporate Governance and Firm Performance. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4309173

[8] Donaldson, L. and Davis, J.H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. Australian Journal of Management, 16(1), 49–64. https://doi.org/10.1177/031289629101600103

[9] Donaldson, L. and Davis, J.H. (1993). The need for theoretical coherence and intellectual rigour in corporate governance research: Reply to critics of Donaldson and Davis. Australian Journal of Management, 18(2), 213–223. https://doi.org/10.1177/031289629301800205.

[10] Garzón Castrillón, M.A. (2021). The concept of corporate governance. Visión de Futuro, 25(2), 178–194. https://doi.org/10.36995/j.visiondefuturo.2021.25.02R.005.en

[11] Gherghina, Ș.C. (2021). Corporate finance. Journal of Risk and Financial Management, 14(2), 44. https://doi.org/10.3390/jrfm14020044

[12] Gošnik, D., Kavčič, K., Meško, M. and Milost, F. (2023). Relationship between changes in the business environment, innovation strategy selection and firm's performance: Empirical evidence from Slovenia. Administrative Sciences, 13(4), 99. https://doi.org/10.3390/admsci13040099

[13] Guluma, T.F. (2021). The impact of corporate governance measures on firm performance: The influences of managerial overconfidence. Future Business Journal, 7(1), 50. https://doi.org/10.1186/s43093-021-00093-6
[14] Hafez, W., Wei, C., Pena, R., Nazeri, A. and Reid, C. (2026). A mathematical theory of agency and intelligence (Version 2). arXiv. https://doi.org/10.48550/arXiv.2602.22519
[15] Haider, A. and Raza, M. (2026). Institutional investors and corporate governance practices in emerging economies. The Critical Review of Social Sciences Studies, 4(1), 1292–1315. https://doi.org/10.59075/06sx3913
[16] Helal, M. Y. I., Dwivedi, Y. K., Ismagilova, E. and Chae, I. (2026). Reinterpreting agency theory in the era of artificial intelligence: Conceptualizing delegated agency. AI & Society. https://doi.org/10.1007/s00146-026-03034-5
[17] Hermuningsih, S., Kusuma, H. and Cahyarifida, R.A. (2020). Corporate governance and firm performance: An empirical study from Indonesian manufacturing firms. The Journal of Asian Finance, Economics and Business, 7(11), 827–834. https://doi.org/10.13106/JAFEB.2020.VOL7.NO11.827
[18] Hussein, M. M. and Mwangi, V. W. (2026). Environmental stewardship for sustainable development: A multi-sectoral review. East African Journal of Environment and Natural Resources, 9(1), 22–29. https://doi.org/10.37284/eajenr.9.1.4280
[19] Ibrahimov, O., Vancsura, L. and Parádi-Dolgos, A. (2025). The impact of macroeconomic factors on the firm's performance—Empirical analysis from Türkiye. Economies, 13(4), 111. https://doi.org/10.3390/economies13040111
[20] Jasir, M., Khan, N. U. and Barghathi, Y. (2023). Stewardship theory of corporate governance and succession planning in family businesses of UAE: Views of the owners. Qualitative Research in Financial Markets, 15(2), 278–295. https://doi.org/10.1108/QRFM-08-2021-0135
[21] Jensen, M.C. and Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X
[22] Kamau, C. G. (2023). Earnings Management and Financial Distress among the Firms Listed at Nairobi Securities Exchange: Pre and Post Covid Analysis. Business, Economics and Management. https://doi.org/10.20944/preprints202309.0243.v1
[23] Kapkarich, S. and Laiboni, G. (2026). Green initiatives and profitability of companies listed at the Nairobi Securities Exchange, Kenya. The International Journal of Humanities & Social Studies. https://doi.org/10.24940/theijhss/2025/v13/i11/HS2511-013
[24] Kijkasiwat, P., Hussain, A. and Mumtaz, A. (2022). Corporate governance, firm performance and financial leverage across developed and emerging economies. Risks, 10(10), 185. https://doi.org/10.3390/risks10100185

[25] Kwarto, F., Minanari, Indriawati, F. and Meini, Z. (2025). Extending agency theory toward conscious agency in sustainable accounting and reporting. Jurnal Ilmiah Akuntansi Kesatuan, 13(6), 2167–2178. https://doi.org/10.37641/jiakes.v13i6.4410

[26] Lim, W.M. (2023). Philosophy of science and research paradigm for business research in the transformative age of automation, digitalization, hyperconnectivity, obligations, globalization and sustainability. Journal of Trade Science, 11(2/3), 3–30. https://doi.org/10.1108/JTS-07-2023-0015

[27] Liu, W. (2024). Digital transformation and earnings opacity: Evidence from China. Finance Research Letters, 69, 106024. https://doi.org/10.1016/j.frl.2024.106024

[28] Machado, M.C.R. and Santos, R.C.D. (2024). Fighting corruption: A theoretical articulation of the themes of social responsibility, corporate governance, and agency theory. Journal of Law and Corruption Review, 6, e078. https://doi.org/10.37497/CorruptionReview.6.2024.78

[29] Maher, M.E. and Andersson, T. (2000). Corporate governance: Effects on firm performance and economic growth. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.218490

[30] Mansikkamäki, S. (2023). Firm growth and profitability: The role of age and size in shifts between growth–profitability configurations. Journal of Business Venturing Insights, 19, e00372. https://doi.org/10.1016/j.jbvi.2023.e00372

[31] Mbhalati, O.J. (2026). University funding through the lens of the resource dependency, agency and transaction cost theories: A South African perspective. Accounting and Finance Research, 15(2), 21. https://doi.org/10.5430/afr.v15n2p21

[32] Minikin, B. (2026). The appropriateness of current governance structures in Olympic sport organisations: Navigating the tension between agency theory and stewardship theory. https://doi.org/10.13140/RG.2.2.28420.69762

[33] Muswere, J. and Dube, Z.L. (2022). The agent/stewardship corporate governance analysis of SOEs in Zimbabwe's ICT sector. Journal of Management and Science, 12(1), 70–74. https://doi.org/10.26524/jms.12.14

[34] Mustafa, M.A., Ibrahim, S.N.S. and Masuod, M.S. (2022). Corporate governance and firm performance. International Journal of Academic Research in Business and Social Sciences, 12(11), 1466–1477. https://doi.org/10.6007/IJARBSS/v12-i11/15670

[35] [35] Naeem, A.A. (2026). From contingency to transcendent principles: Toward a theory of institutional governance founded on the principle of stewardship [Unpublished manuscript]. https://doi.org/10.13140/RG.2.2.19896.92165

[36] Nairobi Securities Exchange (2024). 2023 integrated report and financial statements. https://www.nse.co.ke/wp-content/uploads/NSE-Annual-Report-2023-17.05.2024.pdf

[37] Ndirangu, N. and Mwenda, N. (2025). Capital structure and market capitalization of manufacturing and allied companies quoted at the Nairobi Securities Exchange, Kenya. International Journal of Current Aspects in Finance, Banking and Accounting, 7(1), 1–12. https://doi.org/10.35942/xkdx5c74

[38] Nyatichi, V., Iraya, C., Mwangi, M. and Njihia, J. (2020). Corporate governance and earnings management of companies listed at Nairobi Securities Exchange. African Development Finance Journal, 1(1). https://uonjournals.uonbi.ac.ke/index.php/adfj/article/view/550

[39] Nzuki, N.M. and Njoka, C. (2021). Ownership Structure and Financial Performance of Companies Listed at the Nairobi Securities Exchange, Kenya. International Journal of Current Aspects in Finance, Banking and Accounting, 3(1), 1–9. https://doi.org/10.35942/ijcfa.v3i1.168

[40] Oino, N.N. and Kithandi, C.K. (2025). Firm size and sustainability reporting in the Nairobi Securities Exchange, Kenya. African Journal of Commercial Studies, 6(5), 191–202. https://doi.org/10.59413/ajocs/v6.i5.18

[41] Onguka, D., Iraya, C. and Nyamute, W. (2020). Impact of corporate governance on corporate value for companies listed at the Nairobi Securities Exchange. International Journal of Economics and Finance, 12(12), 70. https://doi.org/10.5539/ijef.v12n12p70

[42] Ross, S. A. (1973). The economic theory of agency: The principal's problem. The American Economic Review, 63(2), 134–139.

[43] Saxena, S., Singh, P. and Bajaj, K. (2024). Exploring stewardship theory: Managers as stewards for exemplary corporate governance. VIDHIGYA: The Journal of Legal Awareness, 19(1–2), 119–134. https://doi.org/10.5958/0974-4533.2024.00013.6

[44] Setyanto, K., Fitri, H. and Zhafiraah, N.R. (2024). How profitability, leverage, financial distress, institutional ownership, and capital intensity affect accounting conservatism. Research of Accounting and Governance, 2(1), 35–47. https://doi.org/10.58777/rag.v2i1.158

[45] Singh, K. (2025). A concise autobiography of agency theory: Translating conflicts into consensus. Management Decision, 1–11. https://doi.org/10.1108/MD-04-2025-1044

[46] Tornikoski, E.T., Boughattas, Y. and Roomi, M.A. (2026). Beyond personal agency in entrepreneurship: Transcendent proxy agency as an ontological expansion of social cognitive theory. Entrepreneurship & Regional Development, 1–18. https://doi.org/10.1080/08985626.2026.2668349

[47] Tröger, T.H. (2026). Systematic stewardship on the waterbed. SSRN. https://doi.org/10.2139/ssrn.6465924

[48] Ubul, R.B.U. and Kithandi, C.K. (2025). Effect of financial risk on financial performance of banks listed at Nairobi Securities Exchange, Kenya. African Journal of Commercial Studies, 6(5), 101–116. https://doi.org/10.59413/ajocs/v6.i5.10

[49] Utama, A.N.B., Tan, S., Lubis, T.A. and Machpuddin, A. (2020). The influence of company's external and internal factors to financial performance and company competitiveness on consumer good companies industry. Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah, 8(4), 405–414. https://doi.org/10.22437/ppd.v8i4.10703

[50] Watanabe, H. (2026). Japan's stewardship code and the transformation of corporate governance in Japan. SSRN. https://doi.org/10.2139/ssrn.6465067

[51] Younas, A. (2022). Review of corporate governance theories. European Journal of Business and Management Research, 7(6), 79–83. https://doi.org/10.24018/ejbmr.2022.7.6.1668

[52] Zahra, S.A., Handoyo, S. and Amrania, G.K.P. (2025). Sustainable business practices and firm performance: A systematic literature review. Cogent Business & Management, 12(1), 2597715. https://doi.org/10.1080/23311975.2025.2597715