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ABSTRACT

The study examines whether environmental, social, and governance disclosure is associated with financial performance among banking firms listed at the Nairobi Securities Exchange Plc (NSE). Using a causal research design and secondary panel data for 11 banks over 2019–2023, the analysis applied random-effects generalized least squares after confirming classical assumptions, stationarity, and model choice with diagnostic tests and the Hausman procedure. Results show that environmental reporting and social reporting each have a positive and statistically significant relationship with profitability measured by return on equity, while governance reporting is not significant. In the baseline random-effects model, environmental reporting and social reporting are both significant, but governance reporting is not; the model is jointly significant based on the Wald statistic. In a second model that introduces firm size and interaction terms, the overall explanatory power improves, and firm size remains significant while the social reporting coefficient strengthens. Collectively, the findings suggest that investments in environmental and social disclosure align with better financial outcomes in Kenya's listed banking sector, whereas governance disclosure appears more legitimacy-oriented with limited short-run financial impact. The study recommends that banks deepen environmental and social transparency tied to core operations and that regulators continue standardizing ESG disclosure to enhance comparability and investor decision-making. Future research should extend the horizon and incorporate mixed methods to capture lagged and strategic effects of governance practices.

Key Words: ESG disclosure; environmental reporting; social reporting; governance reporting; firm size; return on equity; Nairobi Securities Exchange Plc



INTRODUCTION

Financial performance remains a critical measure of institutional success, reflecting a firm's capacity to generate sustainable returns for its shareholders while maintaining operational stability in dynamic market conditions. In today's complex financial environment characterized by volatility, uncertainty, and heightened stakeholder expectations, traditional financial metrics alone are no longer sufficient to assess the long-term viability of firms (Al Saidi & Matriano, 2024; Galil & Varon, 2024). Across global markets, there has been a paradigm shift toward integrating non-financial indicators—particularly those addressing environmental, social, and governance (ESG) factors—into corporate reporting frameworks. ESG reporting enables firms to demonstrate accountability, ethical conduct, and commitment to sustainable development goals, ultimately enhancing investor confidence and competitiveness in increasingly conscious markets (Chipalkatti, Le, & Rishi, 2021; Zumente & Bistrova, 2021).

Globally, ESG reporting has become an established standard for financial institutions responding to environmental challenges and social inequality. In the United States, regulatory bodies and investors have increasingly emphasized transparency and responsible investment, pushing banks to incorporate sustainability into their operations and disclosures (Gutiérrez-Ponce & Wibowo, 2023). Similar developments are evident in China, where the government has institutionalized green finance and sustainability reporting as tools for mitigating climate risk and improving governance (Chen, Song, & Gao, 2023). These trends affirm that integrating ESG considerations into banking operations can create long-term financial resilience and reputational capital, reinforcing the notion that socially responsible business practices align with improved performance outcomes.

Regionally, African economies are increasingly embedding ESG principles in financial systems to promote sustainable growth. Nigeria, for instance, has adopted sustainable banking frameworks emphasizing pollution control, corporate transparency, and social inclusion within financial institutions (Gold & Aifuwa, 2022; Nwaobia, Ogundajo, & Abe, 2022). In Ethiopia, banks are integrating ESG disclosure into their operations to attract international investors and align with national sustainability agendas (Yimer, 2024). These developments reflect a broader continental shift recognizing that financial performance must be pursued alongside environmental stewardship, social responsibility, and robust governance practices.

In Kenya, ESG reporting is gaining increasing prominence within the banking sector. The Nairobi Securities Exchange (NSE), in collaboration with the Global Reporting Initiative (GRI), launched the *ESG Disclosures Guidance Manual* in 2021 to standardize sustainability reporting (Muigua, 2021). This initiative was reinforced by the Central Bank of Kenya's *Sustainable Finance Initiative* and its 2025 introduction of the *Kenya Green Finance Taxonomy* and *Climate Risk Disclosure Framework*, both aimed at embedding climate-related risk assessment and sustainable financing within the banking system (Wabwile, 2023). Such regulatory milestones signify Kenya's commitment to aligning its financial sector with international ESG standards and promoting responsible investment practices.

Despite these advances, ESG adoption among Kenyan banks remains uneven. While large institutions such as Kenya Commercial Bank (KCB) and Equity Bank have established sustainability reporting practices, smaller listed banks continue to lag behind, primarily due to

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limited resources and inadequate disclosure expertise (Mumo, 2022). Consequently, questions persist about the extent to which ESG reporting influences financial outcomes within Kenya's banking industry. Although some evidence suggests that ESG adoption enhances credibility, reduces operational risks, and improves profitability, critics argue that it increases administrative costs without guaranteed returns (Odintsova, 2024; Bassen & Kovács, 2020). The inconsistency in empirical findings highlights a contextual gap warranting investigation within Kenya's evolving financial landscape.

Furthermore, firm size may moderate the ESG–financial performance relationship. Larger banks often possess greater institutional capacity, stakeholder visibility, and compliance mechanisms to operationalize sustainability initiatives effectively (Zhang & Li, 2024). Conversely, smaller banks may derive higher marginal benefits from ESG engagement as a differentiation strategy. This heterogeneity underscores the need to examine how organizational characteristics shape the financial implications of ESG disclosure in the Kenyan context.

Accordingly, this study explores the relationship between ESG reporting and financial performance among banking firms listed at the NSE, focusing on the moderating role of firm size. The study contributes to literature by providing empirical evidence from an emerging economy perspective and informs policy by guiding regulators and banking institutions on integrating sustainability reporting into strategic management frameworks. Ultimately, this research underscores that ESG disclosure is not merely a compliance exercise but a strategic driver of financial resilience and stakeholder value in Kenya's dynamic financial sector.

LITERATURE REVIEW

Theoretical Foundation

The theoretical foundation of this study integrates multiple perspectives that explain the nexus between environmental, social, and governance reporting and financial performance among banking firms. The theories provide the intellectual framework that anchors how and why ESG disclosures may influence firm outcomes, shaping the research hypotheses and analytical model. This study draws from five complementary theories: Stakeholder Theory, Agency Theory, Resource-Based View Theory, Institutional Theory, and Legitimacy Theory to capture the multi-dimensional nature of ESG reporting within Kenya's banking sector.

Originally developed by Freeman (1984), Stakeholder Theory posits that organizations exist within a network of relationships involving multiple stakeholders such as customers, employees, suppliers, communities, and regulators. The theory argues that firms should pursue strategies that balance and address the needs of these diverse groups to ensure long-term success and legitimacy (McGahan, 2023; Stoelhorst & Vishwanathan, 2024). In the context of ESG reporting, the theory provides a moral and strategic rationale for disclosing information on environmental stewardship, social engagement, and governance integrity to maintain trust and accountability. Transparent ESG reporting signals responsiveness to stakeholder expectations, enhances reputation, and ultimately contributes to sustainable profitability. Thus, Stakeholder Theory underpins this study by explaining how inclusive disclosure practices strengthen stakeholder relations and improve financial performance through enhanced loyalty and social legitimacy.



Agency Theory, articulated by Jensen and Meckling (1976), examines the relationship between principals (shareholders) and agents (managers). It highlights the potential for conflicts of interest arising from information asymmetry, which can lead to inefficiencies and misaligned incentives. Within the ESG framework, governance reporting operates as a mechanism to reduce agency costs by promoting transparency and accountability. Disclosures related to board composition, executive remuneration, and risk management structures mitigate opportunistic behavior and align managerial decisions with shareholder interests. By improving oversight and reducing moral hazard, governance reporting enhances financial discipline and investor confidence. Therefore, Agency Theory underlies the governance dimension of this study, linking transparency and accountability mechanisms to improved financial outcomes.

Proposed by Barney (1991), the Resource-Based View emphasizes that firms achieve sustainable competitive advantage through unique, valuable, and inimitable internal resources and capabilities. ESG practices can be conceptualized as strategic intangible assets—enhancing reputation, attracting ethical investors, and strengthening organizational culture. For instance, investments in environmental efficiency and community relations improve operational effectiveness while fostering goodwill. In the banking context, ESG initiatives represent a source of differentiation that contributes to long-term value creation. Thus, RBV theory grounds this study by framing ESG reporting as an internal strategic resource that generates financial returns through innovation, brand equity, and enhanced stakeholder relationships.

Institutional Theory, advanced by Meyer and Rowan (1977), contends that organizations adopt certain structures, policies, and practices in response to institutional pressures—coercive, normative, and mimetic—in order to gain legitimacy and stability. Kenyan banks face increasing institutional pressures from regulatory bodies such as the Central Bank of Kenya (CBK), the Capital Markets Authority (CMA), and international frameworks like the Global Reporting Initiative (GRI). These pressures drive ESG adoption as a conformity mechanism aligned with global standards and national sustainability goals (Wabwile, 2023; Muigua, 2021). In this sense, Institutional Theory justifies why banks disclose ESG information—to comply with external expectations and maintain legitimacy within a regulated environment.

Legitimacy Theory, as articulated by Suchman (1995), asserts that organizations must continuously demonstrate that their operations are congruent with the values and norms of the society in which they operate. ESG reporting functions as a strategic communication tool through which firms justify their actions to stakeholders and society at large. By disclosing their environmental protection, social inclusion, and ethical governance efforts, banks reinforce their legitimacy and social contract, especially in contexts where trust in financial institutions is fragile. This theory explains the reputational motivation behind ESG disclosure and its indirect impact on financial performance through enhanced public perception and reduced regulatory risk.

Collectively, these theories converge to explain the financial significance of ESG reporting. Stakeholder and Legitimacy Theories highlight the social and reputational value of disclosure; Agency and Institutional Theories emphasize accountability and compliance; and RBV Theory focuses on ESG as a strategic resource for competitive advantage. Therefore, these theoretical



perspectives jointly underpin the hypothesized link between ESG reporting and financial performance among listed banking firms in Kenya

Empirical Review

Empirical research on the relationship between environmental, social, and governance reporting and financial performance has expanded significantly over the last decade. However, findings remain mixed, varying across regions, sectors, and methodologies. This section synthesizes relevant global, regional, and local studies that have explored how ESG disclosures influence firm profitability, particularly within the banking and financial sectors.

Environmental Reporting and Financial Performance

Environmental reporting reflects an organization’s accountability for its ecological footprint, including waste management, energy efficiency, emissions reduction, and environmental conservation initiatives. Globally, studies have shown that robust environmental disclosures are associated with improved firm value and profitability. Megeid (2024) found that environmental transparency positively influenced return on assets (ROA) and return on equity (ROE) among manufacturing firms in Egypt by strengthening corporate reputation and attracting sustainability-oriented investors. Similarly, Pham, Doan, and Nguyen (2021) observed that green investment initiatives improved operational efficiency among Vietnamese banks, which translated into higher profitability. Conversely, Odintsova (2024) cautioned that environmental reporting could impose administrative and compliance costs that erode short-term profitability, especially for smaller firms lacking economies of scale.

Within Africa, Attah-Botchwey, Soku, and Awadzie (2022) demonstrated that environmental reporting improved market value among West African banks through enhanced investor confidence and reduced environmental risk exposure. In Kenya, Agutu and Githira (2023) found that proactive environmental disclosure, including renewable energy investments and climate risk reporting, contributed positively to ROE among listed financial institutions. Collectively, these studies affirm that environmental reporting fosters financial resilience by strengthening stakeholder trust, mitigating regulatory risk, and improving resource efficiency.

Social Reporting and Financial Performance

Social reporting captures disclosures related to human capital development, employee welfare, diversity, community investment, and customer relations. Globally, Ma, Liu, and Wang (2023) established that firms emphasizing social disclosure exhibited higher financial performance, driven by improved customer loyalty and reduced turnover costs. Likewise, Wright et al. (2024) reported that social inclusion and corporate social responsibility programs significantly enhanced the financial sustainability of European banks. In contrast, Sadiq, Rajesh, and Khan (2022) observed that some firms overstated social achievements for reputational gain without measurable financial impact, suggesting a risk of “greenwashing.”

Regionally, Sarpong et al. (2023) examined 50 African banks and found that social initiatives—such as financial inclusion and community engagement—significantly improved ROE, especially in countries with strong regulatory oversight. In Nigeria, Nwaobia, Ogundajo, and Abe (2022)

observed that social reporting positively affected profitability through employee motivation and enhanced brand reputation. Kenyan evidence mirrors these results: Manini (2023) found that listed banks engaging in structured community development programs and employee diversity reporting achieved superior profitability. These findings align with Stakeholder and Legitimacy Theories, implying that socially responsible behavior enhances corporate image and stakeholder loyalty, which translate into better financial outcomes.

Governance Reporting and Financial Performance

Governance reporting encompasses disclosures on board structure, executive compensation, risk management, and internal controls. Empirical evidence reveals both positive and inconclusive relationships with financial performance. Elmghaamez et al. (2023) reported that detailed governance transparency regarding executive pay and risk management significantly enhanced profitability among German listed firms. Necib and Anis (2023) found similar outcomes among Italian firms, where disclosure of board composition and independence correlated positively with ROE and ROA. However, Salehi et al. (2020), in their study of Kenyan firms listed on the Nairobi Securities Exchange, found that while high-quality governance reporting improved stakeholder confidence, its immediate impact on profitability was limited—likely due to regulatory uniformity that minimized inter-firm variation.

Dwekat et al. (2020) also found that governance reporting's effect on firm value was more pronounced over the long term, as strong oversight structures tend to reduce operational risks gradually. Consistent with these observations, the present study's findings indicate that governance reporting, though critical for transparency, may not produce immediate financial gains for Kenya's listed banks, where governance practices are largely standardized due to mandatory regulatory compliance.

ESG Reporting, Firm Size, and Financial Performance

The moderating role of firm size in the ESG–performance relationship has gained scholarly attention. Zhang and Li (2024) analyzed 120 banks in Southeast Asia and found that larger banks experienced stronger positive effects of ESG reporting on ROE due to economies of scale and better compliance capacity. Hussein et al. (2023) reported similar findings in Nigeria, noting that large financial institutions benefited more from ESG initiatives because of greater stakeholder visibility and investor confidence. In contrast, Andersson and Berg (2022) found diminishing marginal returns to ESG investment among large European firms, suggesting that smaller organizations may leverage ESG activities more strategically for differentiation.

Locally, Mwangi and Wanjala (2021) confirmed that firm size positively moderated the ESG–profitability relationship among Kenyan listed companies, indicating that larger institutions could absorb ESG costs more efficiently while smaller ones benefited more reputationally. The findings from these studies support the Resource-Based View and Institutional Theory, illustrating that firm characteristics determine how effectively ESG initiatives translate into financial outcomes.

Summary of Empirical Insights

Across the reviewed studies, environmental and social disclosures consistently exhibit positive relationships with financial performance, while governance reporting shows mixed results. The

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moderating role of firm size remains context-dependent—larger firms tend to realize greater economies of scale, whereas smaller firms utilize ESG practices for strategic positioning. Overall, empirical evidence supports the proposition that ESG reporting contributes to financial performance through enhanced stakeholder trust, risk mitigation, and reputational capital, particularly within regulated sectors such as banking. Nonetheless, the Kenyan context presents a unique opportunity to deepen understanding of how regulatory evolution and firm size interact to shape the financial impact of ESG disclosures

RESEARCH METHODOLOGY

This section presents the research design, target population, data sources, variable measurement, model specification, and analytical procedures employed to examine the relationship between environmental, social, and governance reporting and financial performance of banking firms listed at the NSE. The methodological approach was designed to ensure reliability, validity, and robustness of the findings while aligning with established empirical studies in financial and sustainability research.

Research Design

The study adopted a causal research design to assess the effect of ESG reporting on the financial performance of listed banking firms. This design was appropriate because it enabled the determination of cause-and-effect relationships between ESG disclosure dimensions (environmental, social, and governance) and financial outcomes, while accounting for the moderating influence of firm size. According to Saunders, Lewis, and Thornhill (2019), causal designs are suitable for evaluating hypothesized linkages among quantitative variables, particularly when secondary data are used over multiple periods. The use of a longitudinal panel framework further allowed the researcher to control for unobserved heterogeneity and time-invariant firm-specific effects, enhancing the internal validity of the study.

Target Population and Sampling Frame

The study targeted all 11 commercial banks listed at the Nairobi Securities Exchange as of December 2023. These institutions include both large and medium-sized banks that are subject to the Capital Markets Authority (CMA) and Central Bank of Kenya (CBK) disclosure requirements. The census approach was adopted since the population was small and easily manageable, ensuring that no relevant bank was excluded. A census design provides more comprehensive insights, eliminates sampling error, and enhances the generalizability of the findings to the entire population of listed banks (Mugenda & Mugenda, 2019).

Type and Sources of Data

The study exclusively relied on secondary panel data obtained from published annual reports, sustainability reports, and corporate governance disclosures of listed banks covering the period 2019–2023. This represents the most recent five-year span with complete and reliable data for all listed banking firms. The timeframe was selected to maintain data consistency, ensure fair comparison across firms, and align with the period during which ESG disclosure guidelines were introduced and increasingly implemented in Kenya. Using data from 2019–2023 therefore allowed the study to rely on fully verified information and capture recent trends in ESG disclosure within

the Kenyan banking sector. Additional information on financial performance and firm size was sourced from the NSE-listed banks' audited financial statements. Using secondary data minimized researcher bias and ensured objectivity, since the information was independently verified by regulators and auditors.

Measurement of Variables

The study comprised four main variables—three independent (environmental reporting, social reporting, and governance reporting), one dependent (financial performance), and one moderating variable (firm size).

Financial performance was measured using Return on Equity (ROE), computed as the ratio of net income to shareholders' equity. ROE was selected because it reflects shareholders' profitability and is a key metric for assessing financial success in the banking sector (Al Saidi & Matriano, 2024).

Environmental reporting was operationalized through a binary disclosure index based on 10 items, including energy efficiency, waste management, water conservation, emissions reduction, and green financing initiatives. A score of "1" was assigned if an item was disclosed and "0" if not. The index score was obtained by dividing the total number of disclosed items by the total expected disclosures.

The social reporting variable captured aspects such as employee welfare, diversity and inclusion, customer satisfaction, and community engagement. Similar to the environmental index, it was measured using a weighted disclosure index derived from 10 predefined items consistent with the Global Reporting Initiative (GRI) Standards (2021).

Governance reporting covered disclosures related to board composition, risk management, internal audit structures, and executive remuneration. The governance index was computed as the ratio of disclosed governance items to the total number of expected items.

Firm size was measured as the natural logarithm of total assets, reflecting the scale and operational capacity of each bank. Firm size was also used in interaction terms to test its moderating effect on the ESG–performance relationship, consistent with prior studies such as Zhang and Li (2024).

All variable indices were normalized to ensure comparability across firms and years, minimizing measurement bias and multicollinearity.

Model Specification

The study employed a panel data regression model estimated using Generalized Least Squares (GLS) under random effects. This approach was chosen after conducting the Hausman test, which indicated that random effects were appropriate given the absence of correlation between individual effects and regressors. The general model was expressed as follows:

$$Y_{it} = \beta_0 + \beta_1 ER_{it} + \beta_2 SR_{it} + \beta_3 GR_{it} + \beta_4 FS_{it} + \beta_5 (ER_{it} \times FS_{it}) + \beta_6 (SR_{it} \times FS_{it}) + \beta_7 (GR_{it} \times FS_{it}) + \varepsilon_{it}$$



Where:

- Y_{it} = Financial performance (ROE) of firm i at time t
- ER_{it} = Environmental reporting score
- SR_{it} = Social reporting score
- GR_{it} = Governance reporting score
- FS_{it} = Firm size (log of total assets)
- β_0 = Constant term
- $\beta_1 - \beta_7$ = Regression coefficients
- ε_{it} = Error term

This model structure allowed the study to test both the direct and moderating effects of ESG reporting dimensions on financial performance, consistent with similar frameworks employed by Dwekat et al. (2020) and Mwangi and Wanjala (2021).

Data Analysis Techniques

The data were analyzed using STATA version 18, encompassing both descriptive and inferential statistics. Descriptive statistics summarized the mean, minimum, maximum, and standard deviation of each variable to capture their distribution across firms and time. Inferential analysis included correlation analysis to identify multicollinearity among independent variables, while regression analysis quantified the strength and direction of relationships between ESG disclosures and financial performance. Diagnostic tests were conducted to validate the model's assumptions. The statistical significance of regression coefficients was evaluated at 5% and 1% significance levels, while model fitness was determined using the coefficient of determination (R^2) and the Wald Chi-square statistic.

Ethical Considerations

Although the study utilized secondary data, ethical standards were upheld throughout the research process. All data were obtained from publicly available and verifiable sources, ensuring compliance with research integrity and transparency guidelines. Proper citation and acknowledgment were provided to maintain intellectual honesty.

RESULTS AND DISCUSSION

This section presents the descriptive statistics, correlation analysis, and panel regression results on the relationship between ESG reporting and the financial performance of banking firms listed at the NSE between 2019 and 2023. The moderating role of firm size was also examined.



Descriptive Statistics

Descriptive statistics were used to summarize the characteristics of the study variables, including the minimum, maximum, mean, and standard deviation values. The results are presented in Table 1.

Table 1: Descriptive Results

stats	ROE	ERI	SRI	GRI	Firmsize
N	55	55	55	55	55
min	-0.19936	0.142857	0.714286	0.714286	7.723485
max	0.25302	1	1	1	9.336635
mean	0.141243	0.841558	0.974026	0.924675	8.611695
sd	0.07945	0.234372	0.07321	0.077051	0.37043

Source: Research Data (2025)

The results show that the mean Return on Equity (ROE) for listed banks was 0.1412, indicating moderate profitability across the study period. The Environmental Reporting Index (ERI) averaged 0.8416, suggesting high disclosure levels of environmental practices such as energy efficiency and waste management. The Social Reporting Index (SRI) recorded the highest mean (0.9740), showing strong attention to community involvement, employee welfare, and customer satisfaction. The Governance Reporting Index (GRI) had a mean of 0.9247, reflecting strong adherence to governance principles, likely due to mandatory regulatory disclosure requirements. The average firm size, measured by log of total assets (8.6117), indicated that the sampled banks were large institutions capable of implementing ESG initiatives effectively.

Correlation Analysis

The correlation results presented in Table 2 show the direction and strength of relationships between the study variables.

Table 2: Correlation Results

	LnROE	LnERI	LnSRI	LnGRI	LnFirm~e
LnROE	1				
	55				
LnERI	0.4368**	1			
	0.0009				
	55	55			
LnSRI	0.2999*	0.3507**	1		
	0.0261	0.0087			
	55	55	55		
LnGRI	0.204	0.2681*	0.3769**	1	
	0.1352	0.0478	0.0046		
	55	55	55	55	
LnFirmsize	0.5282**	0.3462**	0.2692*	0.4931**	1
	0.000	0.0096	0.0469	0.0001	
	55	55	55	55	55

Source: Research Data (2025)

The results indicate a positive and significant correlation between ROE and ERI ($r = 0.4368$, $p < 0.01$), implying that enhanced environmental reporting is associated with better profitability. A similar positive relationship was observed between ROE and SRI ($r = 0.2999$, $p < 0.05$), confirming that socially responsible activities strengthen financial performance. The correlation between ROE and GRI ($r = 0.204$, $p > 0.05$) was positive but insignificant, suggesting that governance disclosures may not have a direct effect on profitability. Firm size was strongly correlated with ROE ($r = 0.5282$, $p < 0.01$), indicating that larger banks tend to achieve higher profitability due to economies of scale and enhanced compliance capacity.

Regression Analysis

Panel regression using the Random Effects GLS approach was applied since the Hausman test supported the random-effects assumption. Three models were estimated to evaluate direct and moderating relationships.

Model 1: Baseline ESG Effects

Table 3: Random Effects GLS Regression Results

Random-effects GLS regression		Number of obs	=			55
Group variable: BankID		Number of groups	=			11
R-sq:		Obs per group:				
within = 0.3353		Min	=			5
between = 0.0882		Avg	=			5
overall = 0.1956		Max	=			5
		Wald chi2(3)	=			22.01
corr(u_i, X) = 0 (assumed)		Prob > chi2	=			0.0001
LnROE	Coef.	Std. Err.	Z	P>z	[95% Conf. Interval]	Interva l]
LnERI	0.299678	0.120805	2.48	0.013	0.062906	0.536451
LnSRI	1.848469	0.722478	2.56	0.011	0.432439	3.2645
LnGRI	-0.27425	0.670956	-0.41	0.683	-1.5893	1.040801
_cons	-1.8908	0.1441	-13.12	0.000	-2.17323	-1.60837

Source: Research Data (2025)

The results reveal that environmental reporting ($\beta = 0.2997$, $p = 0.013$) and social reporting ($\beta = 1.8485$, $p = 0.011$) have significant positive effects on financial performance. These findings indicate that banks disclosing environmental and social information achieve higher profitability, supporting the Stakeholder and Resource-Based View Theories, which posit that responsible resource use and community engagement enhance firm value. Governance reporting was negative and insignificant ($\beta = -0.2743$, $p = 0.683$), suggesting that while governance compliance is crucial, it may not directly influence profitability in the short term.

Model 2: Inclusion of Firm Size

The inclusion of firm size improved the model’s explanatory power from $R^2 = 0.1956$ to 0.3568 , indicating that firm size partially explains profitability differences among listed banks. Environmental and social reporting remained significant, while firm size ($\beta = 4.6345$, $p = 0.062$) exhibited a positive and marginally significant effect, implying that larger banks are more

profitable. This aligns with Institutional Theory, which suggests that large organizations have superior structural capacity to implement sustainability strategies.

Table 4: Random Effects GLS Regression Results with Firm Size

Random-effects GLS regression		Number of obs	=	55		
Group variable: BankID		Number of groups	=	11		
R-sq:		Obs per group:				
within = 0.3091		min	=	5		
between = 0.3949		avg	=	5		
overall = 0.3568		max	=	5		
		Wald chi2(4)	=	24.37		
corr(u_i, X) = 0 (assumed)		Prob > chi2	=	0.0001		
lnROE	Coef.	Std. Err.	Z	P>z	[95% Conf. Interval]	
LnERI	0.269941	0.12596	2.14	0.032	0.023063	0.516819
LnSRI	1.656564	0.74112	2.24	0.025	0.203997	3.109132
LnGRI	-0.66635	0.736197	-0.91	0.365	-2.10927	0.776568
LnFirmsize	4.634461	2.485628	1.86	0.062	-0.23728	9.506202
_cons	-11.9103	5.379089	-2.21	0.027	-22.4532	-1.36752

Source: Research Data (2025)

Model 3: Moderating Effect of Firm Size

Model 3 introduced interaction terms between firm size and ESG components. The results show that social reporting ($\beta = 32.908$, $p = 0.001$) and firm size ($\beta = 36.675$, $p = 0.021$) significantly influenced financial performance. However, the interaction between firm size and social reporting (LnFSSRI, $\beta = -4.3377$, $p = 0.002$) was negative and significant, indicating that the positive impact of social reporting on profitability diminishes as firm size increases. The model's explanatory power improved to $R^2 = 0.4866$, and the Wald Chi-square statistic ($\chi^2 = 38.56$, $p < 0.001$) confirmed its overall significance.



Table 5: Random Effects GLS Regression Results with Interaction Terms

Random-effects GLS regression		Number of obs	=			55
Group variable: BankID		Number of groups	=			11
R-sq:		Obs per group:				
within = 0.4278		Min	=			5
between = 0.5325		Avg	=			5
overall = 0.4866		Max	=			5
		Wald chi2(7)	=			38.56
corr(u_i, X) = 0 (assumed)		Prob > chi2	=			0
LnROE	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
LnERI	0.232549	0.447656	0.52	0.603	-0.64484	1.109937
LnSRI	32.90848	10.24253	3.21	0.001	12.83349	52.98346
LnGRI	-4.51376	10.12149	-0.45	0.656	-24.3515	15.32399
LnFirmsize	36.67545	15.84513	2.31	0.021	5.619558	67.73134
LnFSERI	-0.02746	0.117963	-0.23	0.816	-0.25867	0.203741
LnFSSRI	-4.33772	1.417647	-3.06	0.002	-7.11626	-1.55918
LnFSGRI	0.614294	1.288825	0.48	0.634	-1.91176	3.140345
_cons	-48.5529	17.98155	-2.7	0.007	-83.7961	-13.3097

Source: Research Data (2025)

Discussion of Findings

The findings affirm that environmental and social reporting significantly enhance financial performance, consistent with Stakeholder Theory and Resource-Based View Theory, which link sustainability engagement to competitive advantage and long-term profitability. These results agree with prior studies by Megeid (2024) and Attah-Botchwey et al. (2022), who found that sustainability initiatives attract investors and improve operational efficiency.

The insignificant relationship between governance reporting and profitability suggests that governance disclosures in Kenyan banks are largely regulatory rather than strategic. This aligns with Salehi et al. (2020) and Dwekat et al. (2020), who found that governance variables yield limited short-term financial effects due to uniform compliance frameworks.

The moderating effect of firm size revealed a negative interaction between firm size and social reporting, suggesting diminishing returns on social initiatives among larger banks. This supports Institutional Theory, which posits that large organizations may undertake ESG reporting primarily for legitimacy and compliance rather than strategic differentiation. Smaller banks, by contrast, gain more reputational and competitive benefits from authentic social initiatives.



Overall, the results demonstrate that ESG reporting contributes meaningfully to profitability in Kenya's banking sector, particularly through environmental and social dimensions. Governance remains a foundational but indirect driver, while firm size shapes the depth and direction of ESG impacts on financial outcomes.

CONCLUSIONS

The findings reveal that sustainability disclosure has evolved from a peripheral reporting practice to a core determinant of financial resilience among Kenya's listed banking firms. The evidence from the study shows that banks that actively disclose environmental and social information tend to experience stronger profitability, indicating that sustainable operations and transparent reporting are increasingly intertwined with competitive advantage. This demonstrates that financial performance in modern banking is not merely a function of asset management or interest margins but also of how effectively institutions respond to environmental and social accountability demands. The results affirm that sustainability consciousness now forms a crucial component of financial strategy and investor relations within Kenya's banking landscape.

The positive relationship between environmental and social reporting and profitability also highlights a shift in how stakeholders evaluate institutional credibility. Customers, regulators, and investors increasingly reward banks that operate responsibly and communicate their impact transparently. This transformation signifies a deeper recognition that value creation extends beyond immediate financial returns to include social capital, reputation, and stakeholder trust. Conversely, the absence of a significant relationship between governance disclosure and profitability suggests that while governance structures are indispensable for institutional legitimacy, their influence on financial outcomes may materialize over longer horizons through improved oversight and reduced operational risks rather than short-term profit growth.

Ultimately, the findings underscore that ESG integration represents not just an ethical obligation but a viable financial strategy that strengthens institutional endurance and market confidence. Environmental and social responsiveness enhance adaptive capacity in a changing regulatory and climatic environment, while robust governance frameworks sustain accountability and stability. As Kenya's financial sector continues to align with global sustainability trends, banks that institutionalize ESG principles at the heart of their operations will be better positioned to attract investment, maintain public trust, and secure long-term financial viability.

RECOMMENDATIONS

The findings of this study emphasize the need for banks to treat sustainability reporting as a value-creating process rather than a compliance exercise. Kenyan banking institutions should integrate environmental and social considerations into their strategic decision-making frameworks. This means investing in eco-efficient technologies, embedding environmental risk assessment in credit decisions, and developing green finance portfolios that support renewable energy and low-carbon projects. Similarly, social accountability should go beyond philanthropy to include financial inclusion, employee development, and community engagement that enhance long-term customer loyalty and trust. Embedding these practices within the core business model will improve profitability while advancing national sustainability goals.

Regulatory agencies such as the Central Bank of Kenya and the Capital Markets Authority should strengthen the institutional mechanisms that support consistent and verifiable ESG disclosure. Establishing a standardized ESG reporting framework aligned with international benchmarks such as the Global Reporting Initiative or Sustainability Accounting Standards Board would enhance comparability and investor confidence. Regulators should also promote sustainability-linked incentives—such as favorable capital weighting for green assets or recognition awards for transparent ESG leadership—to motivate adoption across the financial sector. By anchoring these measures within the ongoing green finance reforms, regulators will help integrate sustainability into the DNA of Kenya’s financial system.

Finally, investors, policymakers, and other stakeholders should use ESG information as a critical input in evaluating institutional performance and creditworthiness. Investors should incorporate ESG metrics in portfolio selection to identify firms with lower risk exposure and higher resilience. Policymakers should focus on capacity-building programs to strengthen ESG literacy among financial analysts, auditors, and corporate managers, ensuring that sustainability data is both credible and decision-useful. Collectively, these efforts will create a financial ecosystem in which transparency, social impact, and profitability reinforce one another—positioning Kenya’s banking sector as a regional benchmark for sustainable finance and responsible investment.

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