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*Does Environment, Social and Governance Practices
Improve Firm Value in Sub Sahara Africa?*

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Does Environment, Social and Governance Practices Improve Firm Value in Sub Sahara Africa?

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Abstract

Environmental, social, and governance (ESG) practices provide transparent information about a company's non-financial performance, thus ensuring accountability and aiding stakeholders in understanding a company beyond financial metrics. Such stakeholders may include investors, customers, employees, and regulators. Despite several studies, there is inconclusive empirical evidence regarding the connection between ESG practices and firm value. This research examines whether ESG practices enhances firm value in sub-Saharan Africa. The study analysed data from 45 quoted non-financial corporations in Kenya, Nigeria and South Africa between 2012 and 2022. Tobin's Q was used as a measure of firm value. The study employed both random and fixed-effects estimation methods to evaluate the relationship between ESG practices and firm value. The findings revealed that adopting ESG practices positively and significantly impacts the combined sample. Notably, adopting environmental and social practices in isolation does not significantly affect these firms' value. However, the same cannot be said for governance practices, which exhibit a negative and significant relationship with firm value. The study concludes that adopting positive ESG practices has the potential to enhance the value of non-financial firms listed in these Sub-Saharan African countries. Therefore, it is recommended that African regulators develop and enforce a standardised framework for ESG practices for non-financial firms. This can be achieved by adopting globally recognised frameworks, such as the Global Reporting Initiative (GRI).

Keywords: *Environmental, Social, Governance, Stakeholders, Tobin's Q*

Introduction

In the late 1970s, a surge in global consciousness regarding environmental issues, such as deforestation and pollution, prompted the Brundtland Commission and the World Commission on Environment and Development to introduce the concept of "sustainable development" in 1987. Sustainable development is a crucial concept that focuses on fulfilling the current generation's needs while safeguarding future generations' ability to fulfil their own needs. It involves a systematic approach that ensures the utilisation of resources, investments, technology, and institutions in alignment with present and future requirements. Sustainable development aims to strike a delicate balance between economic growth, social progress, and environmental protection. Achieving such harmony between these three factors is a complex challenge that requires careful consideration and planning (Brundtland, 1987).

During the 1990s, an increased global awareness emerged regarding social issues such as poverty, child labour, bribery, and the emergence of new diseases. It became widely acknowledged that governments alone were not equipped to solve these issues, and a shift in business practices was necessary to address

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corruption, unsustainable development projects, and pollution. These developments culminated in the Earth Summit, a United Nations Conference on Environment and Development (UNCED), which convened in Rio de Janeiro, Brazil in 1992. During this conference, heads of state committed to ending the exploitation of natural resources and promoting sustainable development practices (Alshehhi et al., 2018).

ESG encompasses the fundamental principles that guide sustainable and responsible business practices. ESG is an acronym for "environmental, social, and governance.". This framework provides a way to evaluate a company's performance based on three components. The first component, environmental, evaluates a company's management of its environmental impact, including reducing carbon emissions, waste management, the use of renewable energy, resource conservation, and compliance with environmental regulations. The second component, social, assesses a firm's relationships with its stakeholders, such as employees, customers, communities, and other entities. This encompasses a range of factors, such as labour practices, diversity and inclusion, human rights, community engagement, and product safety. Lastly, the governance component evaluates a company's leadership, internal controls, ethics, and transparency. It encompasses several characteristics, including board diversity, director remuneration, transparency, anti-corruption measures, and adherence to ethical business practices. By adopting the ESG framework, businesses can develop a comprehensive strategy that promotes sustainable and responsible practices while ensuring profitability (Khanchel & Lassoued, 2022; Prabawati & Rahmawati, 2022).

The effect of a firm's ESG practices on its value has attracted considerable interest from scholars and practitioners alike. Two opposing perspectives have emerged, each with implications for corporate strategy and performance. The first perspective, the "cost of capital" reduction perspective, suggests that disclosing ESG factors can result in increased costs and negative economic consequences, ultimately reducing a company's market value. This view is grounded in the notion that a company's primary objective is to maximise financial profitability and that non-financial practices like ESG initiatives can potentially decrease profitability. Scholars such as Friedman (2002) and Mackey et al. (2007) support this perspective, arguing that shareholders expect companies to prioritise financial practices over social initiatives that are better suited for charitable or non-profit organisations. The second perspective on ESG practices is the "value creation" perspective. The value-creation perspective is rooted on the notion that responsible and sustainable business practices contribute significantly to long-term success. It has been observed that

companies that address environmental impact, social responsibility, and governance practices tend to enhance their overall resilience, reputation, and financial performance. This is premised on the understanding that such practices are critical components of corporate social responsibility, which is increasingly becoming a crucial consideration for stakeholders, including investors, customers, and regulators. Companies prioritising ESG principles stand to gain a competitive edge in the market and ensure long-term viability.

Investors and stakeholders use Environmental, Social, and Governance (ESG) criteria to evaluate companies based on non-financial metrics. Companies that perform well on ESG criteria are often seen as better-managed, more resilient to risks, and more forward-thinking. ESG considerations are also becoming more influential in investment decisions as more investors aim to align their portfolios with sustainability goals and ethical values. Strong ESG practices can help reduce the risk of liabilities, cut costs in areas like energy consumption and waste management, and lead to operational efficiencies. Companies can track their progress in these areas and demonstrate their commitment to sustainable operations by disclosing their ESG practices (Johnson et al., 2019; Mutiah & Rusmanto, 2023). It is important to recognise that there are challenges regarding the disclosure and reporting of ESG practices, these include the lack of standardised reporting frameworks and the possibility of making false or exaggerated claims regarding environmental friendliness (greenwashing). However, it cannot be denied that ESG factors are becoming increasingly important to various stakeholders, and so businesses must provide comprehensive and transparent ESG information to succeed in today's business environment (Cort & Esty, 2020; Prabawati & Rahmawati, 2022).

Research Problem

The African continent poses a unique challenge in disclosing environmental, social, and governance (ESG) information. Despite having abundant natural resources and a growing entrepreneurial spirit, non-financial companies in Africa often face complex issues ranging from limited resources, environmental degradation, social inequalities, and governance deficiencies. Given this scenario, it is crucial to investigate and understand the impact of ESG practices on the value of publicly traded non-financial companies with a focus on Sub-Saharan Africa.

Several studies have examined the correlation between a company's financial performance and ESG practices. However, the empirical evidence regarding the relationship between firm ESG initiatives and enhanced firm value is mixed. Some studies have found a positive relationship between ESG practices and corporate financial performance (Wu et al., 2022; Samy El-Deeb et al., 2023), while others have found a negative relationship (Bing & Li, 2019; Prabawati & Rahmawati, 2022), and some others even found no relationship at all (Kenny et al., 2022; Rastogi et al., 2023). Benlemlih et al. (2018) noted that the impact of ESG practices on firm performance varies due to differences in institutional and regulatory settings across countries. They suggest that future research investigate the connection between practices and performance in a multi-country setting while controlling for institutional and regulatory practice variations.

ESG principles are becoming increasingly important in driving long-term value creation worldwide, but there is a lack of empirical evidence on their impact in Africa (Aboud & Diab, 2018, 2019; Wahua & Ezeilo, 2021; Chininga et al., 2023; Helfaya et al., 2023; Samy El-Deeb et al., 2023), a continent that faces diverse economic, social, and environmental challenges and opportunities. This study aims to bridge this gap by exploring the effect of ESG practices on firm value among a sample of non-financial firms listed in Sub-Saharan Africa.

Research Objectives

The study examines the effect of ESG practices on the firm value of listed non-financial firms in Sub-Saharan Africa. The specific objectives are as follows:

- a) To assess how ESG practices affect firm value in Sub-Saharan Africa.
- b) To examine the influence of environmental practices on firm value in Sub-Saharan Africa.
- c) To analyze the impact of social practices on firm value in Sub-Saharan Africa.
- d) To investigate the effect of governance practices on firm value in Sub-Saharan Africa.

Research Questions

The study provided answers to the following research questions:

- a) Does ESG practices affect firm value in Sub-Saharan Africa?
- b) To what extent do environmental practices affect firm value in Sub-Saharan Africa?
- c) How does social practice affect firm value in Sub-Saharan Africa?
- d) How do governance practices affect firm value in Sub-Saharan Africa?

Research Hypotheses

The following null hypotheses were formulated to address the study's objectives adequately.

H₀₁: ESG practices have no effect on firm value in Sub-Saharan Africa.

H₀₂: Environmental practices have no effect on firm value in Sub-Saharan Africa.

H₀₃: Social practices have no effect on firm value in Sub-Saharan Africa.

H₀₄: Governance practices have no effect on firm value in Sub-Saharan Africa.

Literature Review

Theoretical Background

Stakeholder Theory

Stakeholders are any individual or group that can influence or be influenced by a company's objectives (Freeman, 1984). This includes but is not limited to, employees, customers, suppliers, stockholders, financial institutions, environmentalists, governmental entities, and other interest groups that may positively or negatively impact the company. Therefore, corporations must consider all stakeholders' interests, concerns, and demands while formulating strategic decisions. A comprehensive stakeholder analysis can help businesses identify and prioritise stakeholders and provide insights into their needs and expectations. Companies can create long-term value, foster trust, and enhance their reputation by engaging with their stakeholders. Clarkson (1995) defines stakeholders based on their claims, interests, ownership, and rights in the firm's activities. The primary stakeholders are employees, investors, customers, and suppliers with formal organisational connections. These stakeholders engage directly with the corporation in transactions essential for survival. In contrast, the secondary stakeholders may not be directly involved in transactions with the corporation but can impact or be impacted by it. Despite the absence of direct engagement, secondary stakeholders are critical for the organisation's success, and their involvement is vital for its survival. Considering Clarkson's classification, it is clear that both primary and secondary stakeholders play a critical role in the success of an organisation. Without the primary stakeholders, the corporation would not have the necessary resources. In contrast, the corporation would lack the support and goodwill necessary for continued growth and success without the secondary stakeholders. As such, it is incumbent upon corporations to recognise and engage with both types of stakeholders in a manner that is mutually beneficial and conducive for long-term success.

Simpson and Taylor (2013) defined stakeholder theory as a comprehensive approach that scrutinises the intricate relationship between a business and society, and considers the firm's social responsibility and accountability towards its stakeholders. Thus, an organisation should allocate more resources to achieve long-term success and focus on nurturing a sound relationship with its stakeholders (Donaldson & Preston, 1995). The underlying principle of stakeholder theory is to cater to the needs and requirements of multiple stakeholders by implementing socially responsible practices that bring about positive change in society (Shrestha, 2020).

Empirical Review

Prabawati and Rahmawati (2022) conducted a study to investigate the effect of ESG scores on the value of firms. The study examined a sample of 184 non-financial firms quoted from Thailand, Indonesia, Malaysia, the Philippines, Singapore, and Vietnam between 2010 and 2019. Tobin's Q was employed to measure firm value, and ordinary least squares (OLS) estimation methods were applied. The study's findings showed that ESG disclosures had a significantly negative impact on firm value.

Rastogi et al. (2023) conducted a study to examine the effect of ESG disclosures on the value of 78 Indian-listed companies from 2016 to 2020. Tobin's Q and market-to-book ratio were utilised to assess firm value. At the same time, random-effects and fixed-effects estimation methods were used to investigate the effect of ESG disclosures on the value of a firm. The results indicate that ESG disclosures do not significantly influence firm value statistically.

Samy El-Deeb et al. (2023) investigated the impact of ESG disclosures on the value of firms. The study focused on 46 non-financial firms listed on the Egyptian Stock Exchange Market (EGX) from 2017 to 2021. The researchers used Tobin's Q to measure firm value. To analyse the relationship between ESG disclosures and firm value, the study employed two-stage least squares (2SSL) estimation methods. The study's results revealed that ESG disclosures had a significant positive impact on the value of firms.

Methodology

Sample Size and Sources of Data

The research approach used is ex post facto design, and the study used secondary data from the chosen non-financial corporations' annual reports and accounts from 2012 to 2022. The sample comprises of forty-five (45) listed non-financial firms, fifteen (15) each from Kenya, Nigeria, and South Africa.

Environmental practices were estimated using their disclosures on land/building assets, plant/machinery assets, greenhouse gas emissions scope 1 (tonnes), energy usage, water usage and waste (tonnes). Social practices were estimated using their disclosures on corporate social responsibility expenses, employee training expenses, pension expenses, number of employees, employee compensation and income tax paid. The assessment of governance practices involves evaluating various factors, such as directors' remuneration, executive directors' benefits, the size of the audit committee, risk committee, remuneration committee, and nomination committee. These factors provide a comprehensive understanding of the effectiveness of governance practices within an organization.

Model

For objective one, the study adapted Samy El-Deeb et al.'s (2023) model to examine the effect of ESG practices on firm value. The model is specified as follows:

$$FV = \beta_0 + \beta_1 ESG_{it} + \beta_2 LV_{it} + \beta_3 LNMKT_{it} + \beta_4 LNFIRM_{it} + \text{eit} \text{-----}(1)$$

For objectives two to four, the study adapted and modified Samy El-Deeb et al.'s (2023) model to investigate the effect of individual ESG factors on firm value. The model is specified as follows:

$$FV = \beta_0 + \beta_1 EVT_{it} + \beta_2 SCL_{it} + \beta_3 GNC_{it} + \beta_4 LV_{it} + \beta_5 LNMKT_{it} + \beta_6 LNFIRM_{it} + \text{eit} \text{-----}(2)$$

Where: FV = Firm value was proxied by Tobin Q, ESG = combined environmental, social and governance practices, EVT = environment practices, SCL = Social practices, GNC = governance practices, LV = leverage, LNMKT = natural logarithm of market capitalisation, LNFIRM = natural logarithm of total assets, β_0 = constant, β_1 - β_6 = slope coefficient, and eit = error term.

Findings and Discussions

Descriptive Analysis

Table 2: Descriptive Statistics

	Variables	OBS	Mean	Std. Dev.	Minimum	Maximum
Combined	FV	495	1.4681	1.1983	0.2029	11.7788
	ESG	495	59.3602	15.6194	0	100.0000
	EVT	495	37.8788	23.6439	0	100.0000
	SCL	495	68.7542	18.2487	0	100.0000
	GNC	495	71.4478	25.3769	0	100.0000
	LV	495	52.2707	25.6297	0.0708	206.8211
	LNMKT	495	4.8287	0.9731	0.53330	7.4755
	LNFIRM	495	16.0234	1.6387	12.2325	20.0342
Kenya	FV	165	1.4491	1.3012	0.2064	10.8794
	ESG	165	50.1684	11.9662	0	72.2222
	EVT	165	30.4040	8.6233	0	66.6667
	SCL	165	57.7778	14.7854	0	83.3333
	GNC	165	62.3232	23.4186	0	100
	LV	165	54.6205	28.7179	0.0708	153.574
	LNMKT	165	4.75488	0.81377	3.3080	7.4293
	LNFIRM	165	16.4890	1.8725	13.0076	20.034
Nigeria	FV	165	1.4982	1.4416	0.20292	11.7789
	ESG	165	56.2626	11.1982	16.6667	77.7778
	EVT	165	30.5051	10.0176	0	83.3333
	SCL	165	81.7172	17.1894	0	100
	GNC	165	56.5657	19.9675	16.6667	100
	LV	165	59.0296	28.1864	3.5548	206.8211
	LNMKT	165	4.1637	0.6850	0.5333	6.0707
	LNFIRM	165	15.9367	1.1176	13.7554	18.2767
South Africa	FV	165	1.4572	0.7432	0.4934	4.0909
	ESG	165	71.6498	14.8213	38.8889	100
	EVT	165	52.7272	34.2996	0	100
	SCL	165	66.7677	13.9561	33.3333	100
	GNC	165	95.4546	10.3075	66.6667	100
	LV	165	43.1620	14.9823	14.6628	89.2521
	LNMKT	165	5.5674	0.8492	3.5546	7.4755
	LNFIRM	165	15.6435	1.7208	12.2325	19.0093

Table 2 displays the descriptive statistics. The average Tobin's Q for the combined sample is 1.4681, indicating that the market value of the firms is, on average, 1.4681 times their book value. This suggests that the firms have intangible assets or growth opportunities not reflected in their accounting records. Additionally, the standard deviation of Tobin's Q for the combined sample is 1.1983, implying a significant

variation in the market value of the firms relative to their book value. This may indicate that the firms have different levels of risk, profitability, growth potential, or competitive advantage. The average ESG score for the combined group is 59.3602, which indicates that the firms have a moderate level of ESG performance. This suggests that the firms are conscious of their social and environmental duties. Additionally, the standard deviation of ESG for the combined group is 15.6194, which means there is a moderate range in the firms' ESG performance. This could indicate that the firms have different approaches, policies, practices, or stakeholder expectations about ESG concerns.

Correlation Analysis

Table 3: Correlation analysis for Model 1

Combined		Tobin's Q	ESG	LV	LNMKT	LNfirm
	FV	1.0000				
	ESG	-0.0083	1.0000			
	LV	0.1530	-0.1314	1.0000		
	LNMKT	0.3882	0.5475	-0.0799	1.0000	
	LNfirm	0.0153	0.2858	0.2737	0.5241	1.0000
Kenya	FV	1.0000				
	ESG	0.0505	1.0000			
	LV	0.2506	-0.0638	1.0000		
	LNMKT	0.6276	0.4220	0.2700	1.0000	
	LNfirm	0.1025	0.4530	0.4053	0.6951	1.0000
Nigeria	FV	1.0000				
	ESG	-0.1226	1.0000			
	LV	0.0754	-0.0238	1.0000		
	LNMKT	0.4250	0.1867	-0.1633	1.0000	
	LNfirm	-0.1925	0.3256	0.0004	0.5576	1.0000
South Africa	FV	1.0000				
	ESG	0.0705	1.0000			
	LV	0.1316	0.1186	1.0000		
	LNMKT	0.4850	0.6067	0.1813	1.0000	
	LNfirm	0.1239	0.6488	0.3420	0.8828	1.0000

Table 4: Variance inflation factor for Model 1

Combined	Variable	VIF	1/VIF
	LNMKT	1.88	0.5330
	LNFIRM	1.60	0.6241
	ESG	1.45	0.6913
	LV	1.18	0.8455
	Mean VIF	1.53	
Kenya	LNFIRM	2.41	0.4142
	LNMKT	1.99	0.5018
	ESG	1.43	0.7008
	LV	1.32	0.7578
	Mean VIF	1.79	
Nigeria	LNFIRM	1.59	0.6300
	LNMKT	1.51	0.6623
	ESG	1.12	0.8934
	LV	1.04	0.9606
	Mean VIF	1.31	
South Africa	LNFIRM	6.00	0.1667
	LNMKT	4.91	0.2035
	ESG	1.77	0.5650
	LV	1.24	0.8046
	Mean VIF	3.48	

Table 5: Correlation analysis for Model 2

Combined		FV	ENV	SOC	GOV	LV	LNMKT	LNFIRM
	FV	1.0000						
	EVT	0.0437	1.0000					
	SCL	-0.0339	0.1070	1.0000				
	GNC	-0.0317	0.3761	0.1253	1.0000			
	LV	0.1530	-	-	-	1.0000		
	LNMKT	0.3882	0.5149	-	0.5324	-0.0799	1.0000	
	LNFIRM	0.0153	0.2667	0.1998	0.1355	0.2737	0.5241	1.0000
Kenya	FV	1.0000						
	EVT	-0.0236	1.0000					
	SCL	-0.1044	0.2595	1.0000				
	GNC	0.1520	0.2386	0.4112	1.0000			
	LV	0.2506	-	-	0.1084	1.0000		
	LNMKT	0.6276	0.1524	0.2517	0.4318	0.2700	1.0000	
	LNFIRM	0.1025	0.2007	0.3452	0.4026	0.4053	0.6951	1.0000
Nigeria	FV	1.0000						
	EVT	0.1008	1.0000					

	SCL	-0.0449	0.1307	1.0000				
	GNC	-0.2182	0.0257	0.4061	1.0000			
	LV	0.0754	- 0.2335	- 0.0546	0.1241	1.0000		
	LNMKT	0.4250	0.2991	0.1425	0.0414	-0.1633	1.0000	
	LNFIRM	-0.1925	0.1448	0.2631	0.2485	0.0004	0.5576	1.0000
South Africa	FV	1.0000						
	EVT	0.1090	1.0000					
	SCL	0.0253	0.2648	1.0000				
	GNC	-0.0931	0.2509	0.2387	1.0000			
	LV	0.1316	0.1144	- 0.0472	0.1951	1.0000		
	LNMKT	0.4850	0.5507	0.3831	0.2662	0.1813	1.0000	
	LNFIRM	0.1239	0.5898	0.3709	0.3342	0.3420	0.8828	1.0000

Table 6: Variance inflation factor for Model2

Combined	Variable	VIF	1/VIF
	LNMKT	2.45	0.4080
	LNFIRM	1.82	0.5481
	GNC	1.55	0.6469
	EVT	1.43	0.6969
	LV	1.21	0.8271
	SCL	1.13	0.8861
	Mean VIF	1.60	
Kenya	LNFIRM	2.60	0.3849
	LNMKT	2.05	0.4869
	LV	1.66	0.6020
	GNC	1.44	0.6935
	SCL	1.40	0.7150
	EVT	1.38	0.72301
	Mean VIF	1.76	
Nigeria	LNMKT	1.61	0.6202
	LNFIRM	1.61	0.6216
	GNC	1.27	0.7848
	SCL	1.26	0.7912
	EVT	1.15	0.8679
	LV	1.10	0.9058
	Mean VIF	1.34	
South Africa	LNFIRM	6.01	0.1665
	LNMKT	4.96	0.2018
	EVT	1.57	0.6370
	LV	1.29	0.7768
	SCL	1.25	0.8025
	GNC	1.17	0.8523
	Mean VIF	2.71	

The correlation matrix for models 1 and 2 is displayed in Tables 3 and 5. The correlation between LNFIRM and LNMKT has been identified as the strongest among the listed non-financial firms in South Africa, with a value of 0.8828, while the listed non-financial firms in Kenya exhibit the second-highest correlation between LNFIRM and LNMKT, with a value of 0.6951. The variance inflation factors (VIF) for models 1 and 2 are presented in Tables 4 and 6. It is important to note that there was no multicollinearity among the independent variables. All independent variables had variance inflation factors (VIF) values lower than 10 (Wooldridge, 2015).

Findings and Discussions

Table 7: Regression Results (Tobin's Q) for Model 1

	Combine		Kenya Sample		Nigerian		South Africa Sample	
	Fixed-Effect	Random - Effect	Fixed-Effect	Random-Effect	Fixed-Effect	Random-Effect	Fixed- Effect	Random-Effect
C	3.705*	2.663**	-2.451	0.891	15.171**	9.215**	-0.735	2.399**
p-value	(0.016)	(0.004)	0.410	(0.368)	(0.000)	(0.000)	0.548	(0.000)
ESG	0.006	-0.013	0.001	-0.002	-0.015	-0.015	0.004	0.000
p-value	(0.004)	(0.193)	(0.892)	(0.825)	(0.083)	(0.063)	(0.404)	(0.977)
LV	0.010	0.012**	0.012**	0.011**	0.004	0.007*	0.023**	0.021**
p-value	(0.000)	(0.000)	(0.002)	(0.000)	(0.123)	(0.021)	(0.000)	(0.000)
LNMKT	1.424**	1.259**	1.846**	1.767**	0.981**	1.204**	1.740**	1.634**
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
LNFIRM	-0.581**	-0.443**	-0.338	-0.508**	-1.078**	-0.770**	-0.561**	-0.698**
p-value	(0.000)	(0.000)	(0.063)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
F/Wald Stat.	25.765**	82.248**	25.576**	53.925**	23.489**	23.551**	40.705**	99.416**
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
R- Squared	0.735	0.402	0.759	0.574	0.743	0.371	0.834	0.713
Hausman Test	19.940**			2.568	14.239**		13.440**	
p-value	(0.001)			(0.633)	(0.007)		(0.009)	

The findings of the Hausman test reveal that a random-effect estimation technique is more appropriate for the non-financial corporations listed in Kenya ($\chi^2 = 2.568$, P-value = 0.633 > 0.05). However, for the combined sample as well as for the non-financial corporations quoted in Nigeria and South Africa separately, a fixed-effect regression model is more suitable ($\chi^2 = 19.940$, P-value = 0.001 < 0.05 for the

combined sample, $\chi^2 = 14.239$, P-value = 0.007 < 0.05 for Nigeria, and $\chi^2 = 13.440$, P-value = 0.009 < 0.05 for South Africa).

The F-statistic and Wald-statistic values of the specific country samples for the fixed and random effect regression models indicate that these models are valid for drawing inferences. This is due to their statistical significance at the 5% level. The combined sample has an R-squared value of 74%. However, the individual samples of quoted non-financial corporations in Kenya, Nigeria, and South Africa have R-squared values of 57%, 74%, and 83%, respectively.

Table 8: Regression Results (Tobin's Q) for Model 2

	Combine Sample		Kenya Sample		Nigerian Sample		South Africa Sample	
	Fixed- Effect	Random- Effect	Fixed- Effect	Random- Effect	Fixed- Effect	Random- Effect	Fixed- Effect	Random- Effect
C	4.043*	2.380**	-1.460	0.891	13.413**	8.343**	1.950	3.559**
p-value	(0.011)	(0.006)	(0.630)	(0.361)	(0.000)	(0.000)	(0.156)	(0.000)
EVT	0.001	-0.005	0.017	0.015	-0.020*	-0.017*	0.007*	0.003*
p-value	(0.894)	(0.064)	(0.171)	(0.160)	(0.016)	(0.027)	(0.014)	(0.018)
SCL	-0.003	0.001	-0.011	-0.010*	0.008	0.007	-0.002	-0.002
p-value	(0.301)	(0.588)	(0.62)	(0.050)	(0.157)	(0.193)	(0.395)	(0.263)
GNC	-0.002	-0.009**	0.004	0.002	-0.012**	-0.012*	-0.008*	-0.010**
p-value	(0.383)	(0.000)	(0.300)	(0.531)	(0.028)	(0.018)	(0.033)	(0.006)
LV	0.010**	0.012**	0.010*	0.011**	0.004	0.006*	0.023**	0.021**
p-value	(0.000)	(0.000)	(0.010)	(0.001)	(0.165)	(0.028)	(0.000)	(0.000)
LN MKT	1.425**	1.2444**	1.906**	1.789**	0.934**	1.186**	1.728**	1.647**
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
LN FIRM	-0.601**	-0.423**	-0.413**	-0.517**	-0.964**	-0.721**	-0.676**	-0.725**
p-value	(0.000)	(0.000)	(0.026)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
F/Wald Stat.	24.672**	55.311**	23.630**	36.783**	22.434**	17.454**	40.545**	72.051**
p-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
R- Squared	0.735	0.404	0.766	0.583	0.757	0.400	0.849	0.732
Hausman Test		31.019		3.519	20.621**		13.953*	
p-value		(0.214)		(0.742)	(0.002)		(0.030)	

The results of the Hausman test indicate that for the combined sample ($\chi^2 = 31.019$, P-value = 0.214 > 0.05) and the listed non-financial corporations from Kenya, a random-effect regression model is more appropriate ($\chi^2 = 3.519$, P-value = 0.742 > 0.05). However, for the listed non-financial corporations in South Africa and Nigeria separately, a fixed-effect regression model is more appropriate ($\chi^2 = 20.621$, P-value = 0.002 < 0.05 for Nigeria, and $\chi^2 = 13.953$, P-value = 0.030 < 0.05 for South Africa). The F-statistic and Wald-statistic values of the specific country samples for fixed and random effect regression

demonstrate that the models are appropriate for drawing inferences. This is because they are statistically significant at a 5% level. The R-squared value of the combined sample is 40%, while the individual samples of quoted non-financial corporations in Kenya, Nigeria, and South Africa, it is 58%, 76%, and 85%, respectively.

ESG Practices and Value of a Firm

The results of the study indicate that there is no significant impact of ESG practices on the value of individual non-financial corporations listed in Kenya ($\chi^2 = -0.002$, P-value = $0.825 > 0.05$), Nigeria ($\chi^2 = -0.015$, P-value = $0.063 > 0.05$), and South Africa ($\chi^2 = 0.004$, P-value = $0.404 > 0.05$). However, it was observed that ESG practices positively and significantly affected the value of the combined sample ($\chi^2 = 0.006$, P-value = $0.004 < 0.05$). This suggests that a rise in ESG practices can increase the value of non-financial corporations listed in Kenya, Nigeria, and South Africa. These results are consistent with the literature on the topic, as evidenced by Wu et al. (2022). However, they contradict the findings of Kenny et al. (2022) and Rastogi et al. (2023), who did not find any significant correlation between ESG practices and firm value.

Environmental Practices and Value of a Firm

The findings of this study demonstrate that environmental practices do not exert a statistically significant effect on firm value of the combined sample ($\chi^2 = -0.005$, P-value = $0.064 > 0.05$) or on the individual sample of listed non-financial corporations in Kenya ($\chi^2 = 0.015$, P-value = $0.160 > 0.05$). In Nigeria, environmental practices have a negative and statistically significant effect on the individual sample of listed non-financial corporations' value ($\chi^2 = -0.020$, P-value = $0.016 < 0.05$). In contrast, in South Africa, environmental practices have a positive and statistically significant effect ($\chi^2 = 0.007$, P-value = $0.014 < 0.05$). Consequently, it is imperative to increase environmental practices in South Africa, as they are bound to enhance the value of listed non-financial corporations. The findings are consistent with Li et al.'s (2023) and Samy El-Deeb et al. (2023) studies. However, they contrast the results of Mohamad et al. (2021) and Prabawati and Rahmawati (2022), who discovered that the value of a firm is negatively correlated to its environmental practices.

Social Practices and Value of a Firm

The findings of this study demonstrate that social practices have no significant effect on the combined sample ($\chi^2 = 0.001$, P-value = $0.558 > 0.05$), the individual sample of quoted non-financial corporations' value in Nigeria ($\chi^2 = 0.008$, P-value = $0.157 > 0.05$) and South Africa ($\chi^2 = -0.002$, P-value = $0.395 > 0.05$). However, social practices negatively and significantly affect the individual sample of quoted non-financial corporations' value in Kenya ($\chi^2 = -0.010$, P-value = $0.050 < 0.05$). This implies that increased social practices will decrease the value of the individual sample of listed non-financial corporations in Kenya. The results agree with the studies of Constantinescu et al. (2021) and Prabawati and Rahmawati (2022). However, they contradict the findings of Li et al. (2023) and Samy El-Deeb et al. (2023), who found that social practices have a significant positive effect on the value of a firm.

Governance Practices and Firm Value

The findings of this study demonstrate that governance practices do not significantly affect the individual sample of quoted non-financial corporations' value in Kenya ($\chi^2 = 0.002$, P-value = $0.531 > 0.05$). However, governance practices negatively and significantly affect the combined sample ($\chi^2 = -0.009$, P-value = $0.000 < 0.05$) and the individual sample of quoted non-financial firms' value in Nigeria ($\chi^2 = -0.012$, P-value = $0.018 < 0.05$), and South Africa ($\chi^2 = -0.010$, P-value = $0.006 < 0.05$). This implies that an increase in governance practices will decrease the value of the combined sample of quoted non-financial firms' value in Nigeria, Kenya, and South Africa, as well as the individual sample of listed non-financial corporations' value in South Africa and Nigeria. The results align with the research conducted by Tahmid et al. (2022) and Mutiah and Rusmanto (2023) but contradict the findings of Li et al. (2023) and Samy El-Deeb et al. (2023), who discovered a significant positive association between governance practice and firm value.

Conclusions and Recommendations

This study answered the question of whether or not environmental, social, and governance (ESG) practices enhance the value of non-financial corporations in Sub-Saharan Africa. The study's sample size comprised of forty-five (45) listed non-financial firms, including fifteen (15) firms each from Kenya, Nigeria, and South Africa, from 2012 to 2022. Tobin's Q was used to measure firm value, while the random-effects and fixed-effects estimation methods are employed to investigate the relationship between ESG practices and firm value. The study's findings reveal that ESG practices positively and significantly impact the combined

sample. However, the influence of ESG practices on the individual sample of listed non-financial corporations in each country is not statistically significant. Furthermore, environmental practices did not significantly affect the combined sample as well as the individual sample of listed non-financial corporations in Kenya. Interestingly, environmental practices negatively and significantly impacted the individual sample of quoted non-financial firms in Nigeria while positively affecting the South African sample.

The results also indicated that social practices negatively and significantly impact the value of individual non-financial corporations listed in Kenya, but did not significantly impact the combined sample, and the individual samples of Nigeria and South Africa. On the other hand, governance practices negatively and significantly impacted the combined sample and the individual samples of Nigeria and South Africa but did not affect the individual Kenyan sample. It is worth noting that the findings of this study are consistent with previous research that has shown the importance of good governance practices in enhancing firm value.

The study concludes that implementing environmental, social, and governance (ESG) practices will significantly increase the overall value of non-financial firms listed in Kenya, Nigeria, and South Africa. Based on these findings, the following recommendations were made: (i) Regulators in Sub-Saharan Africa should enforce the use of standardised ESG reporting framework, such as the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB). Such a framework will facilitate compliance and ensure uniformity in regional ESG reporting. (ii) Investors and lenders should consider ESG factors when making investment or lending decisions. They should prioritise firms that provide high-quality and relevant ESG information. This will encourage companies to adopt better ESG practices and reporting, ultimately improving ESG standards. (iii) Regulators in Sub-Saharan Africa should review and standardise the codes and regulations related to corporate governance for listed firms. This should be done while considering each country's cultural and institutional peculiarities. By doing so, compliance costs and complexities for firms will be reduced, and the credibility and consistency of governance practices will be enhanced. This will ultimately lead to an improvement in the overall quality of governance in listed firms.

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