Parikalpana: Journal of Sustainability, Business and Social Innovation

Economic sustainability practices and financial performance of largest listed companies in Sub-Saharan Africa

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Received 19 October 2025
Revised 29 January 2026
Accepted 29 January 2026

Abstract

Purpose – This study aims to investigate how economic sustainability practices affect financial performance among the largest listed firms in Sub-Saharan Africa. While prior studies have explored sustainability disclosures and environmental, social and governance (ESG) indicators within single countries or sectors, few have examined a broad range of economic sustainability metrics such as value creation, input intensity, procurement efficiency, market share (MAS), company size (CS) and tax compliance using a multi-country sample. This study fills that gap by analyzing 115 firms drawn from Nigeria's Nigerian Exchange Limited 50, South Africa's Johannesburg Stock Exchange Top 40 and Kenya's Nairobi Securities Exchange 25 indices over 15 years.

Design/methodology/approach – Firm performance is measured by return on assets (ROA) and Tobin's Q, while economic sustainability variables include economic value added (EVA), market share, raw material/input intensity, procurement cost and CS. The study employs panel-corrected standard errors to address heteroskedasticity, serial correlation and cross-sectional dependence.

Findings – Results reveal that EVA and MAS positively and significantly influence both ROA and Tobin's Q, indicating that value creation and competitive positioning enhance profitability and investor valuation. Input intensity and procurement cost show weak or negative effects, implying potential inefficiencies. Firm size negatively affects both performance measures, suggesting diseconomies of scale, while tax compliance positively influences Tobin's Q, highlighting market rewards for legitimacy and compliance.

Originality/value – This research contributes novel cross-country evidence from African capital markets, demonstrating that certain economic sustainability practices strengthen financial outcomes. It provides valuable insights for managers, regulators and investors on aligning sustainability with financial performance in emerging economies.

Keywords Economic sustainability, Economic value added, Market share, Procurement cost, Raw material, Input intensity, Financial performance, ROA, Tobin's Q, Sub-Saharan Africa, Nigeria's NGX 50, South Africa's JSE top 40, Kenya's NSE 25

Paper type Research article

1. Introduction

Economic sustainability has moved from being a niche concern to a strategic priority for many large corporations. Practices commonly associated with economic sustainability include more

Declaration of conflict of interest: The authors declare that they have *no known financial or non-financial conflicts of interest* that could have appeared to influence the work reported in this paper.

Parikalpana: Journal of Sustainability, Business and Social Innovation
Emerald Publishing Limited
e-ISSN: 2582-4821
p-ISSN: 0974-2808
DOI 10.1108/PJSBSI-10-2025-0057

efficient use of inputs, deliberate efforts to create economic value beyond conventional accounting profits, strengthening competitive market positions and aligning activities with the expectations of customers, suppliers, employees and public stakeholders. Proponents argue that these practices can produce long-term resilience and legitimacy for firms and that, in many contexts, they also generate measurable financial benefits. At the same time, critics note that sustainability initiatives often require up-front spending and managerial focus that may suppress short-term accounting returns. Thus, whether and how sustainability investments translate into improved financial performance remains an empirical question that varies by context (Abedin *et al*., 2022; Aydoğmuş *et al*., 2022; Burcă *et al*., 2024; Cherif *et al*., 2020).

This uncertainty is particularly pronounced in Sub-Saharan Africa. Institutional features such as regulatory capacity, enforcement of disclosure standards and the reliability of supply chains differ markedly across African markets. For example, regional guidance on environmental, social and governance (ESG) disclosure has advanced in some jurisdictions, yet implementation and enforcement remain uneven (Nairobi Stock Exhange, 2021). In addition, procurement and input-intensive processes are often less efficient in many African settings; evidence from Nigerian public and private sectors shows that procurement bottlenecks and weak contract monitoring can reduce organizational effectiveness and compress margins (Obasa and Gado, 2022; Tukur *et al*., 2023). Such frictions can blunt the payoff from sustainability investments that increase input use or procurement costs without delivering commensurate efficiency gains.

Despite these challenges, there is also evidence that when firms convert sustainability efforts into demonstrable economic value, both accounting returns and market valuations improve. Studies in emerging markets highlight economic value added (EVA) and other value-creation metrics as reliable predictors of higher return on assets (ROA) and Tobin's Q when firms pursue strategies that translate sustainability into productivity, innovation or market advantage (Asogba *et al*., 2023; Subedi and Farazmand, 2020). Market share is another important channel: firms with stronger competitive positions often capture pricing power and scale benefits that raise both profitability and valuation (Tudose *et al*., 2021). Conversely, very large firms may face diseconomies of scale and managerial complexity that depress ROA and market multiples in environments where institutional support is weak (Abedin *et al*., 2022).

Methodologically, empirical work using firm panels from emerging markets must handle common statistical problems such as heteroskedasticity, contemporaneous cross-sectional dependence and serial correlation. Panel-corrected standard errors (PCSE) provide one robust solution by producing consistent standard errors in the presence of these violations, thereby improving inference for the effects of sustainability variables on ROA and Tobin's Q (Bailey and Katz, 2011). Given these considerations, a multi-country panel that combines the Nigerian Exchange Limited (NGX) 50 (Nigeria), the Johannesburg Stock Exchange (JSE) Top 40 (South Africa) and the Nairobi Securities Exchange (NSE) 25 (Kenya) offers a useful setting to test whether economic sustainability practices affect both operational performance and market valuation. These indices represent the most capitalized and most actively traded firms in their markets, and together they provide variation in institutional environments, sector composition and firm capabilities that are useful for identifying how sustainability translates into accounting and market outcomes.

This study therefore examines the relationship between economic sustainability practices and financial performance among the largest listed firms in Sub-Saharan Africa. We measure accounting performance with ROA and market performance with Tobin's Q. We operationalize economic sustainability with indicators such as EVA, raw material or input intensity, procurement efficiency, market share (MAS) and tax compliance. To address panel data issues typical of emerging-market samples, we estimate our models using PCSE and perform robustness checks for serial correlation and heteroskedasticity. By doing so, the study aims to provide robust, policy-relevant evidence on whether sustainability practices help or hinder firm performance in the African context.

2. Literature review

2.1 Economic sustainability and financial performance

The theoretical basis linking sustainability and performance draws on stakeholder theory, resource-based views (RBVs) and legitimacy theory. Firms that adopt sustainable practices may enhance stakeholder trust, reduce operational costs and differentiate themselves competitively, thereby improving financial outcomes. On the other hand, sustainability efforts often entail up-front costs, diversion of managerial focus or resource reallocation away from core profitable activities.

Empirical work yields mixed results. In South Africa, Delport *et al*. (2024) find that ESG performance relates positively to Tobin's Q, although its effect on accounting returns is less consistent. In the broader South African context, experiments with ESG ratings show weak or conditional links to profitability (Matemane *et al*., 2024). In Sub-Saharan Africa, some studies report that sustainability disclosures enhance investor confidence, but the translation to improved ROA is inconsistent. Thus, while sustainability credentials may raise valuation multiples, the operational path to enhanced accounting returns is less clear in resource-constrained environments.

2.2 Theoretical foundations

The relationship between sustainability practices and firm financial performance is anchored in well-established management theories. Stakeholder theory posits that firms that proactively address stakeholder needs, customers, communities, regulators and investors build trust and social capital that can reduce transaction costs and reputational risk, thereby improving financial outcomes (Freeman *et al*., 2004; Jensen, 2010). The RBV suggests that sustainability capabilities – processes for efficient resource use, supplier relationships and reputation capital – can become strategic resources that are valuable, rare, inimitable and non-substitutable, supporting sustained competitive advantage and superior returns (Barney, 1991; Hart, 1995). Legitimacy theory emphasizes that sustainability disclosure and compliance with social norms can lower firm-specific risk and enhance access to capital by signaling adherence to societal expectations (Suchman, 1995). Conversely, the cost and/or agency perspective warns that sustainability initiatives often require up-front investments and managerial attention that may depress near-term accounting profits, creating potential trade-offs between short-run earnings and long-run value (Jenson and Meckling, 1976; Margolis and Walsh, 2003). This theoretical plurality explains why empirical findings vary: the net effect of sustainability on performance depends on whether firms convert sustainability investments into distinctive capabilities and on contextual moderating factors (e.g. institutional quality, enforcement and stakeholder activism).

2.3 Empirical evidence of economic sustainability and financial performance in Sub-Saharan Africa

Research in Sub-Saharan Africa shows a nuanced picture. South Africa, with its more mature capital markets and regulatory frameworks, yields the strongest and most consistent evidence that sustainability (ESG) performance relates positively to market valuation (Tobin's Q), although the impact on accounting returns (ROA and/or return on equity) is often weaker or conditional on sector and firm characteristics (Delport *et al*., 2024; Matemane *et al*., 2024). Delport *et al*. (2024) find that ESG metrics increase Tobin's Q for South African listed firms, but the effect on ROA is less clear, while Matemane *et al*. (2024) report that ESG–profitability links are sensitive to company size (CS) and industry. Studies in South Africa also emphasize that ESG measurement choice and the presence of credible reporting influence results (Masongweni and Simo-Kengne, 2024).

In Nigeria, evidence is mixed. Some studies report positive relationships between sustainability disclosure and market valuation or improved stakeholder perceptions, particularly in firms where institutional governance is stronger; yet many studies find no

statistically robust increase in accounting profitability, pointing to the need for active investor monitoring and enforcement for sustainability to translate into ROA gains. In Kenya, recent empirical work – supported by the NSE's ESG guidelines – suggests that credible sustainability reporting can enhance investor confidence and sometimes firm value, but consistent effects on ROA depend on sectorial dynamics and reporting quality.

Regional multi-country studies indicate that the institutional environment conditions the sustainability–performance link. Where investor protection, disclosure enforcement and market liquidity are stronger, sustainability signals more reliably translate into valuation premiums and operational improvements. Conversely, where governance institutions are weak, sustainability disclosure may be symbolic or "window dressing," yielding limited accounting performance benefits (Asare *et al*., 2023). This heterogeneity argues for cross-country panels and robust methods that control for firm-fixed effects and panel dependence when studying African markets.

2.4 Empirical evidence of economic sustainability and financial performance in global and emerging markets

Beyond Africa, a growing body of global and emerging-market research suggests that sustainability is generally non-negative for firm value and often positive for market valuation (Atz *et al*., 2021; Aydoğmuş *et al*., 2022). Meta-analyses indicate that ESG is associated with neutral to positive financial outcomes on average, but effect sizes differ by region, method and ESG dimension (environmental, social, or governance). In emerging markets, studies show both positive effects where governance and enforcement support ESG credibility and negligible effects where institutional weaknesses prevail (Mamatzakis *et al*., 2017). Research on procurement efficiency, resource intensity and EVA underlines operational channels: firms that convert sustainability into process improvements, procurement efficiencies or innovation-backed value creation tend to show stronger ROA and Tobin's Q outcomes (Burcă *et al*., 2024).

2.5 Measurement and methodological considerations

Measurement heterogeneity and econometric practice explain much of the inconsistent empirical literature. Studies differ in ESG indices (third-party ratings vs self-reported disclosure), performance metrics (accounting vs market), time horizons (short vs long term) and sector composition. Panel data from emerging markets frequently exhibit heteroskedasticity and serial correlation; consequently, robust estimators such as PCSE, clustered standard errors or heteroskedasticity-consistent covariance matrices are preferable (Brooks, 2008; Gujarati, 2004). Endogeneity (reverse causality and omitted variables) is a major concern; instrumental variables, difference-in-differences designs and lagged specifications help but are sometimes infeasible in African datasets. Recent methodological advances recommend multi-country fixed-effects models (FEMs), nonparametric robustness checks and sensitivity tests for ESG component effects. Overall, rigorous measurement and robust panel methods are critical for valid inference in sustainability–performance research, especially in Sub-Saharan Africa.

2.6 Gaps and hypotheses

Much of the prior literature focuses on single-country settings or limited firm samples. Few studies jointly analyze multiple African markets using robust panel methods that correct for bias and inefficiency. Moreover, many studies emphasize environmental or social dimensions; fewer directly examine *economic sustainability* metrics such as value creation or MAS growth. This motivates our hypotheses:

(1) H1: Economic sustainability practices (EVA and MAS) have a positive effect on ROA;

(2) H2: Economic sustainability practices positively affect Tobin's Q and

(3) H3: Input intensity [raw material to assets (RMA)] ratio and procurement cost ratio (PCR) negatively impact performance.

3. Methodology

The study population comprises 115 firms across three indices: NGX 50 (Nigeria), JSE Top 40 (South Africa) and NSE 25 (Kenya). These indices capture the largest, most liquid and most market-impact firms across the region. This study looked at the effect of sustainability practices on financial performance of listed largest companies in Sub-Saharan Africa between 2008 and 2022. The study covered 15 years, which provided a significant amount of data on the sustainability practices and financial performance of the largest listed companies in Sub-Saharan Africa. The selected time frame included the period of the global financial crisis that occurred between 2008 and 2009; this period had a significant impact on the global economy, including Sub-Saharan Africa.

The dependent variables are ROA and Tobin's Q (market valuation). Key independent variables capture economic sustainability: RMA, PCR, EVA, MAS, plus control variables such as government tax (GTAX) ratio and CS. Industry and country dummy controls are included.

Before regression, multicollinearity was checked via variance inflation factor (VIF) (mean = 2.34), indicating no serious collinearity. The panel diagnostics showed significant random effects (Breusch–Pagan Lagrangian Multiplier (LM) test) and significant differences between fixed and random effects (Hausman test). However, both ROA and Tobin's Q models exhibited heteroskedasticity and serial correlation (via modified Wald and Wooldridge tests). To correct these violations, the PCSE estimator is adopted, which yields robust coefficient estimates under cross-sectional dependence and panel heteroskedasticity.

4. Analysis and discussion of findings

4.1 Unit root tests

Before estimating the model, it is important to establish the stationarity properties of the panel variables to avoid spurious regression results. Since the dataset covers a 15-year period and includes multiple firms across countries, panel unit root tests were employed to assess whether the variables are stationary at levels or require differencing to achieve stationarity. The study applied both the Levin, Lin and Chu test and the augmented Dickey–Fuller (ADF) Fisher Chi-square test at levels and first differences. These complementary approaches provide robust evidence on the order of integration of the series.

As reported in Table 1, the results indicate that all variables are stationary at levels, that is, integrated of order zero, I(0). The null hypothesis of non-stationarity was rejected for all variables at the 1%, 5%, or 10% levels of significance. This outcome implies that the series do not contain unit roots and that the relationships estimated in subsequent analyses are unlikely to be spurious. Accordingly, the study proceeds with the panel least squares and PCSE estimation techniques without differencing the variables, since all series are already stationary at levels.

4.2 Variance inflation factor (VIF)

The VIF is a measure used to assess the presence of multicollinearity among independent variables in a regression model. In Table 2, the VIF for CS is 6.22, indicating a relatively high degree of multicollinearity. This suggests that CS may share a substantial amount of variance with other variables in the model, but not up to the threshold of 10. MAS: The VIF for MAS is 4.69, which also suggests a moderate level of multicollinearity. MAS may be correlated with other variables, but this correlation cannot affect the stability of coefficient estimates. RMA:

Table 1. Panel unit root tests

	Levin, Lin & Chu t* I(0)	ADF – Fisher Chi-square I(0)	Decision rule Decision rule
ROA	−15.4650***	589.282***	I(0)
TOBINQ	−23.3339**	578.027**	I(0)
CO	−58.713***	−434.847***	I(0)
IND	−8.391***	−232.844***	I(0)
CS	−8.652***	362.790**	I(0)
RAW	−10.984***	−395.501***	I(0)
PCR	−5.215***	−483.9936***	I(0)
EVA	−7.929***	−501.110***	I(0)
MAS	−3.505***	443.733**	I(0)
GTAX	−14.574***	−577.863***	I(0)

Note(s): I(0) is the unit root test at levels, I(1) is the unit root test stationary at first difference. ***$p < 0.01$, **$p < 0.05$ and *$p < 0.1$

Source(s): Authors' own work

Table 2. Variance inflation factor

Variable	VIF	1/VIF
CS	6.22	0.160735
MAS	4.69	0.213365
RMA	1.64	0.611120
PCR	1.37	0.731183
INDS	1.29	0.778176
EVA	1.29	0.778200
GTAX	1.17	0.856230
CO	1.11	0.904690
MEAN VIF	2.34	

Source(s): Authors' own work

RMA has a VIF of 1.64, indicating a relatively low level of multicollinearity. This variable is not strongly correlated with the other independent variables in the model. PCR: PCR has a VIF of 1.37, indicating a relatively low level of multicollinearity. It is not highly correlated with the other variables in the model. Industry (INDS): The VIF for INDS is 1.29, suggesting a low level of multicollinearity. INDS is not strongly correlated with the other independent variables. EVA ratio: EVA also has a VIF of 1.29, indicating a low level of multicollinearity. It is not highly correlated with the other variables.

GTAX: GTAX has a VIF of 1.17, indicating a low degree of multicollinearity. It is not strongly correlated with the other variables. Country of operation (CO): CO has the lowest VIF at 1.11, suggesting very little multicollinearity. It is not highly correlated with the other independent variables. The mean VIF across all variables is 2.34, which is below the commonly accepted threshold of 10. While there is some degree of multicollinearity present, it is not severe enough to raise significant concerns about the stability of coefficient estimates in the model.

4.3 Model specification test

More so, the study conducted Breusch and Pagan LM test and Hausman test to assess the difference among random effect, fixed effect and pooled ordinary least squares (OLS). Table 3 reports the result of the model specification test.

Table 3. Model specification test

	Test statistics	*p*-value
ROA model		
Breusch and Pagan Lagrangian multiplier	385.07	0.0000
Hausman test	174.93	0.0120
Tobin's Q model		
Breusch and Pagan Lagrangian multiplier	4920.43	0.0000
Hausman test	10.83	0.0309

Source(s): Authors' own work

4.3.1 ROA model. The Breusch and Pagan LM test results for the ROA model indicate the presence of random effect at *p*-value less than 0.05. The result implies that pooled OLS less efficient compared to the random effect. The Hausman test results for the ROA model indicate that fixed effect is more robust compared to the random effect. However, due to the significant presence of heteroskedasticity problem and serial correlation, the study adopts more efficient method PCSE (panel corrected s that is capable of reporting a robust standard error and correct for the violation of the two assumptions.

4.3.2 Tobin's Q model. Breusch and Pagan LM test: The Breusch and Pagan LM test results for the Tobin's Q model indicate the presence of random effect at *p*-value less than 0.05. The result implies that pooled OLS is less efficient compared to the random effect. The Hausman test results for the Tobin's Q model show significant differences between the estimates from the FEM and random effects model (REM). The *p*-value of 0.0000 suggests that the FEM is more appropriate in this context, indicating the need to account for individual-specific effects. More so, the study adopts more efficient method PCSE (panel corrected s that is capable of reporting a robust standard error and correct for the violation of the two assumptions.

4.4 Model diagnostics test

Table 4 presents the results of model diagnostic tests for two different models: the ROA model and the Tobin's Q model. These tests help assess the validity of the models and detect potential issues such as heteroskedasticity and autocorrelation.

4.4.1 ROA model. Modified Wald test for groupwise heteroskedasticity: The modified Wald test for groupwise heteroskedasticity indicates the presence of heteroskedasticity in the ROA model. The *p*-value of 0.0000 suggests that the heteroskedasticity is statistically significant. Wooldridge test for autocorrelation in panel data: The Wooldridge test for autocorrelation in panel data indicates the presence of autocorrelation in the ROA model. The *p*-value less than 0.05 reveals that the autocorrelation is statistically significant at a 5% significance level.

Table 4. Model diagnostics test

	Test statistics	*p*-value
ROA model		
Modified Wald test for groupwise heteroskedasticity	1.1e+06	0.0000
Wooldridge test for autocorrelation in panel data	6.763	0.0103
Tobin's Q model		
Modified Wald test for groupwise heteroskedasticity	5.2e+06	0.0000
Wooldridge test for autocorrelation in panel data	43.752	0.0000

Source(s): Authors' own work

4.4.2 Tobin's Q model. Modified Wald test for groupwise heteroskedasticity: The modified Wald test for groupwise heteroskedasticity indicates the presence of heteroskedasticity in the Tobin's Q model. The *p*-value of 0.0000 suggests that the heteroskedasticity is statistically significant. Wooldridge test for autocorrelation in panel data: The Wooldridge test for autocorrelation in panel data indicates the presence of autocorrelation in the Tobin's Q model. The *p*-value of 0.0000 suggests that the autocorrelation is statistically significant. In both models, diagnostic tests have revealed significant issues. Heteroskedasticity and autocorrelation can impact the validity of regression results and may require further analysis and potentially the application of robust estimation techniques to address these issues. In view of this, the study adopts the PCSE model to correct the violation of the no serial correlation and homoskedasticity of the residual.

4.5 Interpretation of the effect of economic sustainability practices on financial performance of largest listed companies of Sub-Saharan Africa

Table 5 presents the regression results on the effect of economic sustainability practices on the financial performance of the largest listed companies in Sub-Saharan Africa. The table reports the outputs of the FEM, REM and PCSE estimations for both ROA and Tobin's Q, which were employed as the two measures of financial performance in the study.

In the PCSE model for both ROA and Tobin's Q, some independent variables were examined for their impact on the respective dependent variables.

Table 5. Regression estimate of the effect of economic sustainability practices on financial performance of largest listed companies of Sub-Saharan Africa

	ROA model			TOBIN's Q model		
	(FE) ROA	(RE) ROA	(PCSE) ROA	(FE) TOBIN's Q	(RE) TOBIN's Q	(PCSE) TOBIN's Q
RMA	−0.0677*	−0.0523*	−0.0482	−0.0123	−0.0163	−0.0319***
	(−2.05)	(−2.31)	(−1.64)	(−1.22)	(−1.75)	(−6.36)
PCR	−0.00150	−0.0211**	−0.0107	0.00359	0.00186	0.000817
	(−0.21)	(−3.28)	(−1.53)	(1.65)	(0.87)	(1.26)
EVA	0.0498***	0.0423***	0.0410***	0.00763***	0.00663***	0.00286***
	(10.28)	(9.54)	(7.25)	(5.14)	(4.54)	(3.61)
MAS	10.86***	6.486***	7.084***	1.654***	1.173***	0.620***
	(11.62)	(10.30)	(8.37)	(5.77)	(4.50)	(4.04)
GTAX	0.367***	0.558***	0.415***	0.0270	0.0466**	0.0743**
	(7.72)	(12.39)	(5.70)	(1.86)	(3.21)	(3.01)
CS	−4.984***	−2.599***	−2.606***	−0.972***	−0.634***	−0.330***
	(−11.29)	(−10.09)	(−8.78)	(−7.19)	(−5.47)	(−4.23)
INDS	0	−0.358**	−0.436**	0	−0.00198	0.116
	(.)	(−3.01)	(−2.70)	(.)	(−0.02)	(1.72)
CO	0	−0.318	−0.529	0	0.402	0.566***
	(.)	(−0.82)	(−1.57)	(.)	(1.40)	(4.02)
_cons	11.92*	5.133	0.858	6.310***	3.154*	1.384
	(2.41)	(1.70)	(0.30)	(4.16)	(1.98)	(1.65)
N	2,217	2,217	2,217	2,217	2,217	2,217
R^2	0.150		0.185	0.040		0.143
adj. R^2	0.087			−0.031		
pseudo R^2						
ll_0	−7513.0			−4756.9		
Ll	−7333.0			−4711.2		
χ^2		534.5	224.6		81.23	76.44

Source(s): Authors' own work

4.5.1 ROA model (PCSE). The RMA: RMA has a negative coefficient of approximately −0.0482, although it is not statistically significant at conventional levels ($p > 0.05$). This suggests that RMA may not have a significant effect on ROA in this model. PCR: PCR also does not appear to have a statistically significant effect on ROA, as indicated by its coefficient of approximately −0.0107 and a *p*-value greater than 0.05.

EVA: EVA, on the other hand, shows a positive and statistically significant impact on ROA. Its coefficient of approximately 0.0410 suggests that an increase in EVA is associated with higher ROA. MAS: MAS has a strong positive effect on ROA, with a coefficient of approximately 7.084. This positive impact is statistically significant ($p < 0.01$), indicating that higher MAS is associated with higher ROA. GTAX: GTAX has a positive effect on ROA, but it is statistically significant. The coefficient is approximately 0.415. CS: CS has a negative and statistically significant impact on ROA, with a coefficient of approximately −2.606. This suggests that larger companies may have lower ROA.

4.6 Tobin's Q model (PCSE)

RMA: RMA shows a significant negative impact on Tobin's Q with a coefficient of approximately −0.0319 ($p < 0.001$), suggesting that higher RMA is associated with lower Tobin's Q values. PCR does not have a statistically significant effect on Tobin's Q in this model, as indicated by its coefficient of approximately 0.000817 and a *p*-value greater than 0.05.

EVA ratio exhibits a significant positive influence on Tobin's Q, with a coefficient of approximately 0.00286 ($p < 0.001$), indicating that higher EVA is linked to higher Tobin's Q values. MAS has a strong positive effect on Tobin's Q, with a coefficient of approximately 0.620 ($p < 0.001$). This suggests that companies with higher MAS tend to have higher Tobin's Q values.

GTAX: GTAX has a positive effect on Tobin's Q, and it is statistically significant with a coefficient of approximately 0.0743 ($p < 0.01$). CS: CS has a negative and statistically significant impact on Tobin's Q, with a coefficient of approximately −0.330 ($p < 0.001$). This indicates that larger companies may have lower Tobin's Q values.

4.7 Discussion of findings

The findings from the PCS) estimation provide important insights into how economic sustainability practices influence the financial performance of the largest listed companies in Sub-Saharan Africa. The results demonstrate that EVA exerts a positive and statistically significant influence on RO), suggesting that firms which generate value above the cost of capital achieve superior accounting returns. This outcome is consistent with the broader empirical evidence showing that value creation enhances financial outcomes. For instance, Donatus *et al*. (2023) found that sustainability disclosure and economic value-added metrics significantly improve the financial performance of listed Nigerian financial institutions, affirming that economic sustainability reinforces profitability. Similarly, a comparative study across selected Sub-Saharan African manufacturing firms reported that financial transparency and value-driven reporting positively influence both ROA and EVA (Asubiojo *et al*., 2024). These findings align with stakeholder and resource-based theories, which posit that value-driven management attracts investor confidence and operational efficiency.

Furthermore, MAS shows a strong positive and significant association with ROA and Tobin's Q, underscoring the importance of competitive positioning in driving firm performance. Firms with a larger MAS benefit from economies of scope, stronger brand recognition and better pricing power, which collectively enhance both accounting and market-based performance. This pattern mirrors earlier evidence from the Nigerian banking sector, where MAS was found to be a significant determinant of profitability and market strength (Etale *et al*., 2016). Similarly, a Ghanaian study by Badu and Appiah (2017) revealed that firms with strong market dominance report higher returns and valuation multiples. The present study

extends this evidence by showing that the same relationship holds across Nigeria, Kenya and South Africa, reinforcing the idea that competitive dominance and market leadership remain central to profitability and valuation within emerging African markets.

Conversely, RMA and PCR exhibit negative coefficients in both the ROA and Tobin's Q models, though they are largely insignificant. This suggests that high input intensity and inefficient procurement practices may exert downward pressure on performance, albeit without a decisive statistical impact in this sample. A comparable study also finds that excessive input or operational costs weaken profitability and shareholder value, particularly in manufacturing sectors where cost efficiency is a major driver of performance (Asubiojo *et al*., 2024). These results imply that resource optimization, rather than mere input expansion, is critical to sustaining profitability under Africa's competitive and resource-constrained conditions.

A particularly intriguing finding is the negative and significant relationship between CS and financial performance, observed consistently across both ROA and Tobin's Q models. This outcome challenges the traditional assumption that larger firms inherently enjoy superior performance due to economies of scale. Instead, it appears that diseconomies of scale, managerial complexity and coordination inefficiencies might erode profitability among the largest firms in Sub-Saharan Africa. Ishiaka (2023) and Uliansyah *et al*. (2025) similarly reported a negative relationship between firm size and firm value, suggesting that increases in firm size may be associated with organizational complexities and inefficiencies that diminish performance and market valuation. Likewise, Matsoma *et al*. (2022) found that large South African retail firms suffer profitability declines as scale increases, primarily due to rising administrative costs and market saturation. These consistent findings across contexts reinforce that CS may not always translate into improved performance, particularly in economies where infrastructure and institutional constraints limit operational efficiency.

Finally, the positive effect of the GTAX on Tobin's Q suggests that higher tax compliance may serve as a signal of legitimacy and financial health to investors. Firms that demonstrate transparency and regular tax contributions often enjoy greater investor confidence and institutional legitimacy, which in turn enhances market valuation. This is consistent with legitimacy theory, which posits that compliance with societal and regulatory expectations strengthens firms' reputational capital and investment appeal (Delport *et al*., 2024; Matemane *et al*., 2024).

Taken together, these results indicate that value creation, market dominance and legitimacy through compliance are central channels through which economic sustainability practices translate into superior financial performance in Sub-Saharan Africa. However, input intensity and excessive scale appear to hinder both profitability and valuation, implying that efficiency and strategic positioning – rather than sheer size or resource accumulation – are the true engines of sustainable competitiveness in the region.

5. Conclusion and recommendations

This study finds that among the largest listed firms in Sub-Saharan Africa, economic sustainability practices, particularly those reflecting value creation (EVA) and market share (MAS), are positively associated with both accounting returns and market valuation. In contrast, metrics like raw material intensity and procurement cost show weaker or negative relationships, and larger CS tends to reduce both ROA and Tobin's Q.

From these findings, managers should prioritize sustainability strategies that reinforce value creation and competitive positioning rather than simply cost-cutting or scale expansion. Firms should be cautious about scaling operations too rapidly, as inefficiencies may erode returns. Regulators and market authorities in African stock exchanges could incentivize enhanced sustainability reporting and integrate sustainability performance into listing criteria or governance guidelines.

Future research should extend this framework to more African countries, incorporate dynamic or lagged effects of sustainability practices and explore interactions between sustainability, governance quality and institutional variables.

Acknowledgments
The authors sincerely appreciate all the faculty members of the Department of Accounting, Afe Babalola University, Ado-Ekiti, Nigeria, for their invaluable comments, constructive criticisms and encouragement during the seminar presentation of this paper. Their insights and suggestions greatly enhanced the quality and depth of this research.

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