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Financial reporting quality and the performance of firms in Sub-Sahara Africa: The mediating role of firms' characteristics

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ABSTRACT

The purpose of this study is to test the validity of the mediating role of firms' characteristics and its consequences on the financial reporting quality and performance of publicly quoted firms in sub-Saharan Africa. The study employed a quantitative approach and tested an existing theory by formulating relevant hypotheses. Measures of firms' characteristics include the statistic factor (size) and dynamic factors (return on assets and return on equity as dependent variables; and discretionary cash flow from operating activities less net profit as an independent variable). The sample size consists of one hundred and twelve (112) public firms quoted on stock exchanges in three (3) sub-Saharan African countries from 2012 to 2022. Data obtained were analyzed using fixed effect and random effect panel data regression and structural equation modeling. The results revealed that financial reporting quality positively and insignificantly affects performance. However, financial reporting quality and firms' performance were found to be positively and significantly affected when firms' characteristics (size) were introduced. The implication of these results is that financial reporting quality alone cannot lead to an increase in firms' performance. The size of the firm should be given due consideration to guarantee increased firm performance via high-quality financial reporting. Moreover, the results of this study are expected to offer information to the management of firms, enabling them to fulfill the condition of quality financial reporting so that investors and analysts of capital markets can benefit from determining informed investment decisions.

Contribution/Originality: The originality of this study stems from the fact that the research was done in sub-Saharan Africa, where no study had existed; most of the prior empirical studies did not account for the mediating role of firms' characteristics on the relationship between financial reporting quality and firm performance.

1. INTRODUCTION

Quality financial report is imperative to firms' management because it is one of the most predominant means existing and potential investors uses to make informed decisions about the performance of a firm. Ogbeide, Ogiugo, and Adesuyi (2021) opined that for investors to make informed decision they rely on the Accounting Information System (AIS), and information obtained from AIS is employed in assessing, maintaining, and improving financial reporting quality (FIRQ). Financial reporting quality is vital as it positively impacts key capital providers, credit options, and market efficiency (Oyebamiji, 2022). For financial reporting to be seen as having a quality, it is vital to

possess indisputable elements, which Inneh, Busari, Fakunle, Adeoye, and Kolawole (2022) depict as value-relevant, reliable, comparable, understandable, verifiable, and timely.

Orife, Orijinta, and Ofor (2022) contended that financial reporting quality affects firms' performance, liquidity, efficiency, and users' decisions. Hence, firms need to identify the impact of FIRQ on those aspects (performance, liquidity, efficiency and users' decisions). Supporting the views of Orife et al. (2022), Okoro and Ekwueme (2021) asserted that information asymmetry will be condensed since greater transparency is a result of high-quality financial information that seeks to satisfy shareholders' information needs. The growing interests and needs for firms to produce quality financial reports are linked to plentiful accounting scandals and financial crises that occurred in the past, which undermined investors' confidence in financial reports (Alhadab & Al-Own, 2017; Edesiri & Confidence, 2020).

Financial reporting quality refers to the faithful representation of the accounting information captured by the financial reporting system or process (Djaballah, 2019). Recent studies by Asyik, Agustia, and Muchlis (2023); Ogbonnaya and Amauwa (2019); Rathnayake, Rajapakse, and Lasantha (2021); and Sani, Nasir, Ahmad, and Bakare (2023)suggest that high-quality financial accounting information has the tendency to influence firms' performance. Regardless of the fact that there are robust empirical studies on financial reporting quality in both developed and developing countries, these studies were mainly focused on assessing the relationship between financial reporting quality, audit quality, corporate governance, firm value, and performance, amongst others.

Arguably, there are limited numbers of empirical studies that have assessed whether firms' characteristics (particularly firm size) mediate the relationship between financial reporting quality (FIRQ) and the performance of firms in sub-Saharan Africa. Consequently, there is literature and geographical gaps as to whether firm size mediates the relationship between FIRQ and the performance of firms in sub-Saharan Africa; the gaps that this study sought to satisfy. The study focused mainly on measuring financial performance via return on assets (ROA) and return on equity (ROE), firms' characteristics using the natural logarithm of total assets (size), and financial reporting quality using discretionary cash flows from operating activities less net profit.

Furthermore, after determining the mediating role of firms' characteristics in the relationship between financial reporting quality and performance, it would enable us to identify the effect when firms generate quality financial accounting information and what will result from having poor quality financial accounting information for decision-makers, holding the size of the firm constant. Arising from the above, it is pertinent to raise the following question: to what extent do firms' characteristics mediate the relationship between financial reporting quality and the performance of firms in sub-Saharan Africa? The remaining part of this paper is divided into: Review of Related Literature; Methodology; Results and Discussions; Conclusion and Recommendations.

2. REVIEW OF RELATED LITERATURE

2.1. Financial Reporting Quality (FIRQ)

Financial reporting quality relates to the quality of information in the financial statement, including disclosures and notes to the accounts. Hsu and Yang (2022) asserted that high-quality reporting offers decision-useful information that is relevant, verifiable, and faithfully represents the economic reality of firms' activities and financial position during a reporting year. Kaawaase, Nairuba, Akankunda, and Bananuka (2021) noted that the caliber of financial reporting frequently determines its value.

Notably, firms strive to produce quality financial reports so as to show how some accounting information is better and more reliable than others in relation to its attributes and distinctiveness in disclosing what it intends to communicate (Mbawuni, 2019). Effiong, Asuquo, and Enya (2020) asserted that quality financial reporting connotes complete and transparent financial information designed not to conceal or mislead financial statement users.

In accounting literature, financial reporting quality is a broad-based term that has a series of varied measurable characteristics. Fundamental among the measures of financial reporting quality is accrual quality, which seeks to

measure financial reporting quality as firms' net income minus operating cash flows. In this study, financial reporting quality was measured using discretionary operating cash flows less net profits. Plentiful benefits of high-quality information have been advanced in the accounting literature. For instance, Koolivand, Salehi, Arabzadeh, and Ghodrati (2023) showed that FIRQ decreases information risks and liquidity. Other studies showed that FIRQ prevents management from using discretionary powers for their personal gains (Osisioma, Ezejiofor, & Okoye, 2020); aids efficient decision-making (Dang, Nguyen, & Tran, 2020); and reduces asymmetric information dilemmas resulting from agency conflicts (Salehi, Maalah, & Nazaridavaji, 2021).

Consequently, firms that report high-quality financial information would offer market agents better and improved information that allows them to act in the market with a higher level of information (Junaidu & Ahmed, 2020). Salehi et al. (2021) added that high-quality financial reporting decreases a lack of equality and asymmetric information emanating from conflicting agents. Thus, the truthfulness and reliability of financial data reported by management must be seen in the milieu of quality financial reporting in order to offer numerous stakeholders a tolerable degree of trust in the financial reporting process.

2.2. Firms' Performance

Broadly, the performance of a firm may not necessarily depend on its efficiency but also on the market where it is domiciled or operates (Elayan, Li, Liu, Meyer, & Felton, 2016; Olaniyi & Abubakar, 2018). In view of the above assertion, several firms' performance measures have been used in the accounting literature; these firms' performance measures are exactly what Okoro and Ekwueme (2021) described as industry, market, and firm-level performance measures. While some studies used either industry or market-level performance, other studies on firms' performance employed measures such as net profits, return on assets, return on equity, liquidity ratio, return on capital employed, book value per share, dividend per share, earnings per share, and so on.

In this study, we employed two (2) firms' performance measures: Return on Asset (ROA) and Return on Equity (ROE). First, ROA indicates how profitable firms are in relation to their total assets. Management of firms, analysts, and investors use ROA to determine how efficiently management is able to use its assets to generate profits (Bansal & Sharma, 2016). ROA is predominantly denoted as a percentage; a firm's net profit divided by its total assets. A higher ROA implies that the firm is more efficient and productive at managing its assets to generate profits, while a lower ROA indicates inefficient use of the firm's assets (Al-Dmour & Al-Dmour, 2018). ROA is a vital financial performance ratio, as it is used when comparing a firm's performance between periods or when comparing two (2) varied firms of similar size in the same industry.

Second, ROE is a measure of a firm's financial performance expressed as net profits divided by shareholders' equity. It is a measure of a firm's profitability and how efficiently the firm is able to use its equity to generate profits (Suhadak, Kurniaty, Handayani, & Rahayu, 2018). A higher ROE denotes efficient management, and that management is generating profits from its equity financing (Amahalu & Obi, 2020). Generally, investors would prefer firms with a higher ROE; however, this can be used as a threshold to select shares of firms within the same sector. On the basis of the above discussion, we hypothesized as follows:

H_o1a: *Financial reporting quality has no significant effect on return on the assets of firms in sub-Saharan Africa.*

H_o1b: *Financial reporting quality has no significant effect on return on the equity of firms in sub-Saharan Africa.*

2.3. Firm Characteristics

In the literature, several firms' characteristics abound; these firms' characteristics include, but are not limited to, firm size, age, governance structure, asset structure, and growth rate. Given the numerous firms' characteristics, this study employed the size of firm. Prior studies have shown inconsistent results on the relationship between firm size and financial reporting quality (Dechow & Dichev, 2002; Haider, 2020). While a stream of studies documented

a positive effect and showed support for larger firms, the opposing stream indicates that larger firms face more pressure to beat analysts' expectations; hence, larger firms are more likely to have high-quality financial reports.

Usually, larger firms have robust internal control systems, management, and good mechanisms of governance; hence, they are more likely to recruit experienced management team and have a well-constituted board, which could result in high-quality financial reports. Haider (2020) showed that because larger firms are accompanied by increased numbers of shareholders, they take into cognizance the repute of having a high-quality financial report. Thus, firms' concern about their reputations may encourage them to disclose high-quality financial reports that are consistent with the principals' financial information needs.

Furthermore, because larger firms typically have greater negotiating dominance in the market industry and with auditors, they are probable to have high-quality financial reports (Junaidu & Ahmed, 2020). Again, larger firms have more opportunities to maneuver through a wide range of accounting treatments, choices, and methods. Though larger firms' may have numerous and associated costs linked with their revenue, they declare more profits compared to small firms (Junaidu & Ahmed, 2020; Olaniyi & Abubakar, 2018). On the basis of the above discussion, we hypothesized as follows:

H_{o2a}: Firm characteristics do not mediate in the relationship between financial reporting quality and the performance (ROA) of firms in sub-Saharan Africa.

H_{o2b}: Firm characteristics do not mediate in the relationship between financial reporting quality and the performance (ROE) of firms in sub-Saharan Africa.

2.4. Theoretical Foundation

This study was hinged on the positive accounting theory (POAT); in the accounting literature, POAT has been one of the most dominant paradigms describing the accounting practices, choices, and methods in the preparation of financial statements in the last four (4) decades. One fundamental rationale used to popularize POAT is that their view of accounting theory and practices is the same as those used in the sciences (Watts & Zimmerman, 1986). However, Ball and Brown (1968) were the first to popularized POAT, and they used it to elucidate and predict both capital market and accounting choices. Prior to the emergence of POAT, normative accounting theory (NOAR) had been the most dominant in the accounting literature (Kabir, 2010).

The prime aim of POAT and NOAR has been to determine how incomes, assets, and equities are measured and recognized in financial reporting. A conventional question raised by NOAR is whether to recognise changes in market price if an entity is not a party to a transaction and what basis (historical costs, market value, etc.) to use in reporting financial statements. POAT is preferred over than NOAR; POAT symbolizes a foremost drift in the accounting research paradigm. In accounting literature, two (2) streams of research have been conducted as regards the use of POAT. One stream of studies by Beaver, Lambert, and Morse (1980) and Grant (1980) examined the relationship between earnings quality and share prices; results revealed that earnings quality is germane to share price valuation.

The second stream of studies, Kaplan and Roll (1972) and Ricks (1982), differentiates between two (2) opposing views: the no-effect hypothesis and mechanistic hypothesis, as regards FIRQ and firms' performance. However, the evidence is conflicting and could not discriminate between the opposing hypotheses (that is, there are conflicting results as to whether FIRQ affects firms' performance). The studies, *inter alia*, raised concerns about the descriptiveness of some deductions underlying POAT prescriptions. For instance, there is only one (1) source of accounting information about a firm: its financial reporting system (financial statements), but because financial statements are not prepared on a single basis, the information obtained may be misleading to shareholders about the performance of such a firm.

The theoretical implication shows that POAT, which shows or allows different ways and options be used to make financial statements, must show accurate information about the business activities in the financial statement

parts. The foremost idea of POAT is that a firm is a nexus of contracts, and varied accounting choices and methods constitute an integral part of these contracts (Sunder, 1997). Though the idea above is all-purpose, studies suggest that accounting choices and methods that promote quality financial reporting influence firms' performance (Ahmed & Duellman, 2007; Krishnan, 2003; Peasnell, Pope, & Young, 2005; Reitenga & Tearney, 2003).

3. METHODOLOGY

3.1. The Population and Sample

The study used an *ex-post facto* research design because the events being analyzed had occurred; hence, the researchers could not manipulate the data. The population consists of industrial and consumer goods firms listed on three (3) Stock Exchanges in the sub-Saharan African countries of Nigeria (West), South Africa (Southern), and Kenya (East). Forty-one (41) industrial and consumer goods firms in Nigeria, twenty-three (23) in Kenya, and seventy-seven (77) in South Africa, thereby totaling one hundred and forty-one (141) publicly quoted industrial and consumer goods firms in the three (3) sub-Saharan African countries. The methods used in this study differ from prior studies because, while most studies focused on a single country, this study focused on countries in sub-Saharan Africa. Also, firm characteristics have not been used as a mediator variable in the relationship between financial reporting quality and firms' performance, which this current study has employed.

Using stratified sampling, the most robust industrial and consumer goods firms were selected from each country in sub-Saharan Africa. Accompanying the stratified random sampling, judgmental sampling was used in selecting firms from each country in sub-Saharan Africa. As a result of the above, firms whose datasets were unavailable were removed from the study sample. In view of the above, a sample size consisting of one hundred and twelve (112) firms (Nigeria: 32, Kenya: 21, and South Africa: 59) was selected.

3.2. Model Specification

This study used four variables, which in part constitute measures of financial reporting quality (FIRQ), firm performance (return on assets and return on equity), and firm characteristics (firm size). Interestingly, most studies, including studies by Asyik et al. (2023); Ogbonnaya and Amauwa (2019); Rathnayake et al. (2021) and Sani et al. (2023) have employed these variables and measures to estimate FIRQ, firm performance, and the characteristics of the firm. The following empirical model was estimated to test the mediating effects of firm size in the relationship between FIRQ and firm performance:

$$FPEF_i = f(FIRQ_i \ FSIZ_i) \qquad (1)$$

$FPEF_i$ = Firm performance (disaggregated into return on assets – ROA and return on equity – ROE) for firm i; $FIRQ_i$ = Financial reporting quality for firm i; $FSIZ_i$ = Firm size for firm i. Incorporating the disaggregated components of the dependent variables, Equation 2 and 3 were estimated as follows:

$$ROA_i = f(FIRQ_i \ FSIZ_i) \qquad (2)$$
$$ROE_i = f(FIRQ_i FSIZ_i) \qquad (3)$$

Equations 2-3 were expressed in their explicit forms and further represented as Equations 4-5 after introducing the coefficients of the regression as follow:

$$ROA_{it} = \alpha_0 + ß_1 FIRQ_{it} + ß_2 FSIZ_{it} + €_{it} \qquad (4)$$
$$ROE_{it} = \alpha_0 + ß_1 FIRQ_{it} + ß_2 FSIZ_{it} + €_{it} \qquad (5)$$

3.3. Data Source and Variables Description

Data were collected from the Stock Exchange yearly books, audited financial statements, and internet pages of the publicly quoted industrial and consumer goods firms in sub-Saharan Africa, and the study period is from 2012 to 2022. The data obtained were described as shown in Table 1:

Table 1. Description of variables of the study.

S/N	Variables	Description	A-priori sign
1	Financial reporting quality (FIRQ)	Discretionary cash flow from operating activities less net profit	Nil
2	Firm performance (FPEF):		
	Return on assets (ROA)	Net profits divided by total assets	+
	Return on equity (ROE)	Nets profits divided by total equity	+
3	Firm characteristics :		
	Firm size (FSIZ)	Natural logarithm of total assets	Nil

Given that firm characteristics and firm performance are on the same scale, we scaled FIRQ using the natural logarithm; this was done to avoid scaling problems and outliers in the dataset.

3.4. Data Analysis Techniques

Data obtained were analyzed using descriptive, diagnostic, and inferential statistical tools. The Hausman specification test was employed in choosing between the fixed effect and random effect results to ascertain which is more efficient. Wald statistics was employed in validating hypothesis one (1), which is on FIRQ and the performance of firms, while hypothesis two (2), which is on firms' size, FIRQ, and the performance of firms in sub-Saharan Africa, was validated using the structural equation modelling (SEM) results.

Table 2. Descriptive statistics.

Variables	Kurtosis	Skewness	Mean value
ROE (Nigeria)	2.41	1.08	12.18
ROA	2.09	1.49	10.90
FIRQ	2.00	3.05	8.390
FSIZ	2.89	3.26	6.301
ROE (South Africa)	2.69	3.75	22.02
ROA	2.10	1.64	19.03
FIRQ	2.99	1.23	13.42
FSIZ	2.07	2.72	9.031
ROE(Kenya)	1.53	4.02	11.91
ROA	1.99	3.30	9.220
FIRQ	1.89	2.39	7.390
FSIZ	1.43	3.37	6.240

4. RESULTS

Table 2 shows the descriptive statistics of the entire panel data for the three (3) countries in sub-Saharan Africa. The mean values revealed that the average return on equity (ROE) of the publicly quoted industrial and consumer goods firms in sub-Saharan African countries revolves around12.18 (Nigeria), 22.02 (South Africa), and 11.91 (Kenya), with the highest mean score of 22.02 in South Africa; overall, the mean ROA in sub-Saharan Africa is considered high. The mean values for return on asset (ROA) were 10.9 (Nigeria), 19.03 (South Africa), and 9.22 (Kenya), with South Africa recoding the highest mean ROA score.

Furthermore, the mean scores for financial reporting quality (FIRQ) are 8.39 (Nigeria), 13.42 (South Africa), and 7.39 (Kenya). The FIRQ mean values suggested that South Africa recorded high-quality financial reports, followed by Nigeria, while Kenya had the least amount of high-quality financial reports recorded. However, the

studied sub-Saharan African countries recorded improvements and high-quality financial reports, perhaps due to the implementation of the International Financial Reporting Standards (IFRSs). Again, the firm characteristics measure (firm size, FSIZ) showed that South African firms were larger (9.031), accompanied by Nigeria (6.301) and Kenya (6.240), the least.

The skewness values for ROE, ROA, FIRQ, and FSIZ are negative, indicating that FIRQ, firm size, and performance variables moved in the same direction. The kurtosis values for ROE, ROA, FIRQ, and FSIZ are less than 3 (mesokurtic distribution). This suggests that the size of firms and financial reporting quality would lead to an increased tremendous positive event (firm performance) for publicly quoted industrial and consumer goods firms in sub-Saharan Africa.

Table 3. Pearson correlation matrix.

Variables	ROE	ROA	FIRQ	FSIZ
ROE	1.000			
ROA	0.016	1.000		
FIRQ	0.033	0.072	1.000	
FSIZ	0.157	0.322	0.344	1.000

As shown in Table 3, the Pearson correlation matrix of the summarized panel data of the publicly quoted industrial and consumer goods firms in sub-Saharan Africa revealed that there is a positive relationship between firm size (FSIZ), financial reporting quality (FIRQ), and firms' performance (ROE and ROA). Also, explanatory and mediating variables are not perfectly correlated given that none of the Pearson coefficients exceeded 0.8 as recommended by Gujarati (2003).

Table 4. Variance inflation factor (VIF).

Variables	VIF	1/VIF
FIRQ	1.01	0.990
FSIZ	1.04	0.962
Mean VIF	1.03	

The result of the Variance Inflation Factor is reported in Table 4. Mean VIF score (1.03) is not greater than the accepted mean VIF (10.0), an indication of the nonexistence of multicollinearity in the study's model of financial reporting quality, firm characteristics, and firms' performance in sub-Saharan Africa. This outcome further reinforces the result of the Pearson correlation matrix presented in Table 3.

Table 5. Ramsey RESET test.

F-value =16.03	
Probability F =0.000	

Table 5 displays the outcome of the Ramsey Reset test. The result showed that the F-value is 16.03 and Probability F is = 0.000, an indication that the alternative hypothesis was rejected while the null hypothesis was accepted. This implies that the powers of fitted values have no omitted variables, thus the financial reporting quality, firm characteristics, and firms' performance models do not suffer from omitted variables or functional form misspecification problems.

Table 6. Fixed/Random effects for financial reporting quality and return on assets (ROA).

Estimator	Fixed effect (FE) model		Random effect (RE)model	
Variable	Coef.	Prob.	Coef.	Prob.
FIRQ	0.037 (1.22)	0.938	0.039(1.39)	0.893
Constant	0.007(3.02)	0.001	0.009(4.36)	0.000
F-value	2.390			
Probability F	0.793			
Within R-squared	0.300		0.380	
Between R-squared	0.201		0.270	
Overall R-squared	0.251		0.325	
Wald statistics			3.020 Prob. = 0.675	
Hausman			2.190; Prob.chi2= 0.788	

Table 6 presents the results of the fixed effect (FE) and Random effect (RE) models for financial reporting quality and return on assets (ROA). The coefficient of the RE model result for financial reporting quality is 0.039, suggesting that financial reporting quality (FIRQ) will lead to about 3.9% changes in return on assets (ROA). Both FIRQ and ROA measures were insignificant for both the FE model (F = 2.390; F-Prob. = 0.793 > 0.05), and the RE model (Wald Ch2 = 3.020; Prob.Ch2= 0.675 > 0.05) at the 5% significance level. The t-test values for both FE (1.22) and RE (1.39) showed that the variable is statistically insignificant in explaining the influence of FIRQ on ROA. The overall R^2 is 0.325 for RE, which is higher than FE (0.251). This implies that FIRQ explained about 32.5% of the variation in ROA. The Hausman test (Prob>Chi2= 0.788 > 0.05) suggests that the RE model is more efficient than the FE model. The Wald Ch2 is 3.02 and is insignificant in providing evidence to support the proposition that FIRQ has a significant effect on ROA in sub-Saharan Africa.

Table 7. Fixed/Random effects for financial reporting quality and return on equity (ROE).

Estimator	Fixed effect (FE)		Random effect (RE)	
Variable	Coef.	Prob.	Coef.	Prob.
FIRQ	0.020(1.96)	0.070	0.038(1.99)	0.061
Constant	0.390(4.11)	0.001	0.411(6.22)	0.000
F-value	2.770			
Probability F	0.842			
Within R-squared	0.420		0.470	
Between R-squared	0.330		0.370	
Overall R-squared	0.375		0.420	
Wald statistics			3.960 Prob. = 0.539	
Hausman			3.420; Prob.chi2= 0.632	

Table 7 presents the results of the fixed effect (FE) and random effect (RE) models for financial reporting quality and return on equity (ROE). The coefficient of the RE model result for financial reporting quality is 0.038, suggesting that financial reporting quality (FIRQ) will lead to about 3.8% changes in return on equity (ROE). Both FIRQ and ROE measures were insignificant for both the FE model (F = 2.770; F-Prob. = 0.842 > 0.05), and RE model (Wald Ch2 = 3.960; Prob.Ch2= 0.539 > 0.05) at the 5% significance level. The t-test value for both models {FE (1.96) and RE (1.99)} showed that the variable is statistically insignificant in explaining the influence of ROE. The overall R^2 is 0.4200 for RE, which is higher than FE (0.375); thus indicating that FIRQ explained about 42% of the variation in ROE. The Hausman test (Prob>Chi2= 0.632 > 0.05) suggests that RE is more efficient than FE. The Wald Ch2 is 3.420 and is insignificant in providing evidence to support the proposition that FIRQ has a significant effect on ROE in sub-Saharan Africa.

Table 8. Fit indicators of financial reporting quality, firm characteristics and performance.

Fit indicators	Structural equation modeling (SEM) coefficients	Comments
Goodness of fit (GFI)	0.94	Significant
Adjusted goodness of fit (AGFI)	0.92	Significant
Comparative fit index (CFI)	0.95	Significant
Root mean square residual (RMR)	0.03	Significant
Root mean square error of approximation (RMSEA)	0.06	Significant

The results in Table 8 showed that the measurement model offers absolute fit to the dataset with a goodness of fit *(GFI)* of 0.94; adjusted goodness of fit *(AGFI)* of 0.92; comparative fit index *(CFI)*of 0.95, root mean square residual *(RMR)*of 0.03; and root mean square error of approximation *(RMSEA)* of 0.06. *GFI*, *AGFI*, and *CFI* beat the recommended threshold of 0.9, while *RMSEA* is below the threshold of 0.08. The above results connote that the structural equation modeling (SEM) approach used in demonstrating the mediating role of firms' characteristics between financial reporting quality and firm performance fits properly.

Table 9. Test of models.

Structural	Coef.	Observed information matrix (OIM) std. error.	z	P>/z/
(ROA)<- (FSIZ)	0.126	0.055	4.66	0.000
Constant	1.842	0.103	12.34	0.000
(ROE)<-(FSIZ)	0.043	0.062	5.10	0.000
Constant	2.371	0.145	19.01	0.000
(FIRQ)<-(FSIZ)	0.129	0.025	6.27	0.000
Constant	2.905	0.131	25.2	0.000

The outcomes of the test of the model are reported in Table 9. Based on the outcomes, hypotheses H_{2a}-$H2_b$ are supported, thereby indicating that industrial and consumer goods firms' size positively mediates the relationship between financial reporting quality (FIRQ) and firm performance (ROA, ROE).

Table 10. Model's standardized regression results.

Path	Standardized regression weight	Z-value
Direct effect of the integrative model		
ROA → FSIZ (γ1)	0.064	3.26
ROE → FSIZ (γ2)	0.052	3.10
FIRQ → FSIZ (γ3)	0.058	5.99
Indirect effect of the integrative model		

Table 10 showed that the integrative model of FIRQ and firm performance (ROA, ROE) as mediated by firm size had both direct and indirect effects. The import of the foregoing is that firm size mediates the relationship between financial reporting quality and firms' performance. This led to the rejection of the null hypothesis and acceptance of the alternate hypotheses ($H2_a$-$H2_b$) that firm characteristics mediate in the relationship between financial reporting quality and the performance (ROA, ROE) of firms in sub-Saharan Africa.

5. DISCUSSION

In the literature, high-quality financial reports have been linked mostly to larger firms. In fact, the debate in the literature is that accounting numbers denoted in financial statements should be of high quality so as to guarantee investors' confidence and hence the performance of firms. Prior studies by Asyik et al. (2023); Rathnayake et al. (2021) and Sani et al. (2023) suggest that high-quality financial accounting information has the tendency to

positively and significantly affect firms' performance; however, whether this is the case for publicly quoted industrial and consumer goods firms in sub-Saharan Africa has been left unresearched.

A disaggregated financial reporting quality, firm characteristics, and performance model was developed to resolve the lacuna in the accounting literature. First, the results indicated that financial reporting quality positively and insignificantly affects performance (ROA, ROE). On the other hand, firm size was found to significantly mediate the relationship between financial reporting quality and firms' performance. Thus, a statistical factor (firm size) is able to produce quality financial reporting and increase the performance of firms in sub-Saharan Africa. The results in part agree with the findings of Djaballah (2019); Ogbonnaya and Amauwa (2019); Rathnayake et al. (2021); Sani et al. (2023) and Asyik et al. (2023) who found that high-quality financial accounting information and firms' performance are linked with the size of the firm.

The theoretical implication showed that positive theory, which explains choices and methods in financial statement preparation, is reflected in the faithful representation of the components of financial statements. Overall, with firm size introduction in our model, financial reporting quality and firms' performance were positively significantly affected; hence, a statistic factor (firm size) is able to produce quality financial reports and increase the performance of publicly quoted firms in sub-Saharan Africa.

6. CONCLUSION AND RECOMMENDATIONS

This study used disaggregated measures of firms' performance (return on assets and return on equity), firm characteristics (firm size), and financial reporting quality (discretionary cash flow from operating activities less net profit) in advancing models describing the direct relationship between FIRQ and the performance of the firm and mediating role of firm size in the relationship between FIRQ and the performance of firms. The study sampled one hundred and twelve (112) publicly quoted industrial and consumer goods firms in sub-Saharan Africa (Nigeria, Kenya, and South Africa) from 2012-2022.

Findings showed that FIRQ (measured via discretionary cash flows from operating activities less net profits) positively and insignificantly influences the performance of firms (return on assets and return on equity). Contrarily, with the introduction of firm size into our empirical model, it was shown that FIRQ and firms' performance were positively and significantly affected. Consequent upon the above, a statistical factor (firm size) is able to produce high-quality financial reporting as well as increased performance.

Impliedly, financial reporting quality alone is unable to predict or result in increased firms' performance. Therefore, to have high-quality financial reports and to increase the performance of the firm, size of the firm matters and should be given due consideration. The practical implication is that the results obtained in this study are expected to provide information to the management of publicly quoted firms in sub-Saharan Africa so as to enable them to fulfill their quality financial reporting, which investors will positively react to.

7. LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

This study employed two (2) components of firms' performance, one (1) firms' characteristics, and a financial reporting quality measure to advance a model that assessed the mediating role of firm attributes in the relationship between financial reporting quality and the performance of publicly quoted industrial and consumer goods firms in sub-Saharan Africa. However, the study did not incorporate other components of firms' performance (e.g., earnings per share, return on capital employed, book value per share, dividend per share, etc.) and other firms' characteristics (age, turnover, governance, and capital structure, etc.) in its empirical models.

Consequent upon the above, there is a need for future researchers in accounting and finance to validate the empirical model of this study by introducing other firms' characteristics and performance variables as well as obtaining data from varied sectors in sub-Saharan Africa and other regions outside sub-Saharan Africa.

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