

The Mediating Effect Of Internal Audit Committee On The Relationship Between Firms Financial Audits And Real Earnings Management

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Abstract: The prevalence of accounting scandals and inconsistent findings from hitherto studies on real earnings management have incited the need to improve the relevance of financial reporting by setting up different and sound governance mechanisms coupled with the introduction of mediating variables to improve the earnings quality. This paper examines the mediating effect of the internal audit committee on the relationship between a firm financial audit and real earnings management in listed non-financial firms in Nigeria. The data were obtained from Thomson Reuters DataStream and financial reports of firms from 2011-2017. The fixed effects, random effects (GLS) and the generalized method of moments (GMM) were used for panel data regression analysis using the firm financial audit and real earnings management. The findings showed that the internal audit committee mediates the relationship between a firm financial audit and real earnings management. Further analysis revealed that audit fees and brand name auditors have positively impacted on the earnings quality while audit tenure was found to be less effective in deterring real earnings manipulation. The findings also indicated that firm size and leverage were found to be less impacted by the earnings quality. There is a need for much emphasis on the use of competent audit committee independence among listed non-financial firms in Nigeria. This could help in ensuring an effective monitoring strategy and restraining real earning manipulation.

1. INTRODUCTION

Shareholders are committing billions of dollars, euros, naira, rupee, ringgits, and yen of their savings in public companies to the care of their contracting agent called managers. The stakeholders are expecting relevant and reliable information from the agent for various firm decisions, whether an investment, financing, liquidity, dividend, merger, and acquisition, to mention but few [1], [2]. The public's confidence in the corporate form has been badly shaken in recent years due to the prevalence of accounting, and financial manipulation carried out at the hands of their contracted agent (Brown, 2013; Hassan & Bello, 2013). Firms are required to report prudently to the owners as good stewards and must portray its actual position and performance, which signals its quality of earnings [5]–[7]. However, where firms deviate (real earnings management) or manipulate their performance metrics and create the appearance of success without actually creating value and paving multiple opportunities for the astute accountants to design transactions that meet their earnings target. The resultant output could be favorable in the short run but not necessarily in the long term [1], [2]. Financial reporting scandals like Enron, Tyco, and their equivalent have brought audit quality and governance mechanisms into the limelight, which proper financial firms Nigeria.

2. LITERATURE REVIEW

Real earnings management connotes motivations by the management to use the magnitude of operational decisions to reach anticipated levels of earnings threshold. This could

attention needs to be given to curtail the issue. Financial audit served a monitoring role to ensure the quality of financial reporting, reduce agency costs emanating from managers' opportunistic behavior, and decrease asymmetric information between firms and stakeholders, which lead to useful information flow to the capital market [8]. A deep understanding of the business being audited, the extraordinarily complex organization required institutional knowledge, skills, experience, and ample time (tenure) to perform high-quality audit judgments reflected in a firm's financial statements [9]. The debate on the desirability of mandatory audit firm rotation, audit fee and brand name auditors on the quality of earnings is far from being resolved. Hitherto empirical earnings management studies do not promise consistent findings regarding audit tenure and earnings quality [9], [10]. The same gesture was applied to the audit fee and earnings quality [11], [12]. Moreover, whether renowned audit firms popularly called brand name auditors determine higher audit quality service rendered if they are engaged by the firms [13], [14]. Therefore, based on the issues highlighted above and the inconclusive findings of preceding studies in the hypotheses section, the study examines the mediating effects of the internal audit committee on the relation between a firm financial audit and real earnings management in listed non-financial firms Nigeria. be achieved by offering more lenient and favorable terms than usual in sales for the time-based period, a glut in production with no immediate markets for the goods produce and reduction in discretionary expenditure. It is usually done within the year and has cash flow consequences to the firms [15]–[17].

2.1 Audit Firm Tenure and Earnings

Management.

Government Accounting Office delegated by the Security and Exchange Commission to study the issue of MAR concluded that there is no clear evidence regarding the

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potential benefits of a MAR rule [18]. Auditing literature postulates that the shorter the audit firm's tenure, the better the firm performance and good audit quality [19]. However, some are of the contrary view and stress that the longer the audit firm tenure with the client, the higher the probability of prejudice the audit quality and eroded the long term firm performance [20].

2.2 Audit Fees and Earnings Management

Audit fee signals economic covenant between the auditor and the client. As such, higher audit fees are assumed to bigot the auditor independence and eroded his audit quality and can lead to economic dependence on the client as in Enron case can be seen as a key instance for the trade-off between economic benefits and the desire to uphold a firm's reputation despite the expertise in the midst [21]. However, lower audit fees demotivates the audit firm to engage the service of in-experience personnel which may find it challenging to understand the actual operation of the enterprises talk less of given their professional judgment based on firm's operation [22] consistency empirical evidence has not yet been documented as regarding the issue which needs to be address.

2.3 Brand name Auditors and Earnings

Management

Pragmatic evidence has usually supported that brand name auditor (big4) cannot jeopardize its reputation for the sake of favoring the client and ratified window dress financial statements for a short time gained at their expenses [23]. But consistent empirical findings documented different results as regards the relation between brand name auditors and earnings management in developed and in developing economies [24]. The agency theory presents a basis for the governance of firms via diverse internal and external control mechanisms. These mechanisms are designed to ensure agent-principal interest alignment, protect shareholders' interests, and thus reduce agency cost. Though, several factors can lead to manipulation, irrespective of the kind of relationship between principals and their agents, such as pressure, targets, opportunity and ethics. Therefore, the kind of relationship between principals and their agents may reduce manipulation but cannot eradicate it [25]–[27].

3. METHODOLOGY AND EMPIRICAL STRATEGIES

This study used annual panel data over the period from 2011 to 2017 to analyze the mediating effect of the internal audit committee on the relationship between a firm financial audit and real earnings management in listed non-financial firms Nigeria. The data were accessed from the Thomson Reuters DataStream and firm financial reports. The study used real earnings management as a proxy for earnings quality, and this series is measured based on the deflator lagged assets. The real earnings management data consists of indicators that are composites of variables taken from the listed non-financial firms from profit and loss accounts, balance sheet and statement of cash flow based on proxies advocated in prior literature [28]–[30]. The independent variables of the study are (i) audit fees; (ii) audit tenure; and (iii) brand name auditors. The audit fee is measured by the natural logarithm of the amount paid as

audit fees and is derived from the firm's financial reports. Moreover, audit firm tenure is measured as a logarithm of tenure which is also derived from the firm's annual reports. And lastly, big 4 auditors are measured using dummy variables 1 for big4 and 0 for non big4 and are usually getting from firm's financial reports in auditors reports page and all the three variables mentioned above represent our predictor variables. On the other hand, the firm size was measured as the natural logarithm of total assets, while leverage was measured as debts to total assets ratio.

3.1 Derivation of the dependent variable

Firstly, cash flow from operation scaled by lagged total assets is regressed against current year sales divide by lagged total assets plus a change in sales scaled by lagged total assets, the residual from the regression model stand as real activity manipulation which is abnormal cash flow from operation.

$$\frac{CFO_t}{Ta_{t-1}} = \alpha_0 + \alpha_1 \left[\frac{1}{Ta_{t-1}} \right] + \gamma_1 \left[\frac{St}{Ta_{t-1}} \right] + \gamma_2 \left[\frac{\Delta St}{Ta_{t-1}} \right] + \varepsilon_{it}$$

Model 1

Secondly, this study further used discretionary expenditure from research and development, advertising, and selling, general, and administrative spending to measure abnormal levels from firms' operation. The unusual discretionary spending is computed by lagging with the total assets and is regressed against current year sales scaled by lagged total assets; the residue from cross-sectional regression from abnormal discretionary expenditure, which is the second component of real earnings manipulation.

$$\frac{DISEXP_t}{Ta_{t-1}} = \alpha_0 + \alpha_1 + \left[\frac{1}{Ta_{t-1}} \right] + \gamma_1 \left[\frac{St}{Ta_{t-1}} \right] + \varepsilon_{it}$$

model 2

Thirdly, this study used the below model for the computation of abnormal production cost, which is the last part of real earnings management. The abnormal production cost was computed by dividing production cost by the lagged total assets is regressed against sales by lagged total assets plus change in sales by lagged total assets plus change in contemporaneous sales also by lagged total assets. The regression residuals saved stand as real earnings management.

$$\frac{ROD_t}{Ta_{t-1}} = \alpha_0 + \alpha_1 + \left[\frac{1}{Ta_{t-1}} \right] + \gamma_1 \left[\frac{St}{Ta_{t-1}} \right] + \gamma_2 \left[\frac{\Delta St}{Ta_{t-1}} \right] + \gamma_3 \left[\frac{\Delta St}{Ta_{t-1}} \right] + \varepsilon_{it}$$

Model 3

The study further having computed the three components separately, it went ahead and applied them as follows: abnormal cash flow multiplied by (-1) as firms that are more likely to engage in real activities manipulations generally have lower cash flow from operation. Unusual discretionary expenditures multiplied by (-1) so that higher value indicates that it is more likely that firm slashes discretionary expenses and the abnormal production cost was multiplied by (+1). The composite residues were used as REM.

$$REM_{IT} = \beta_0 + \beta_{1AUDIT FEE} + \beta_{2AUDIT TENURE} + \beta_{3Brand name} + \beta_{4LEVERAGE} + \beta_{5 FIRMSIZE} + \varepsilon_{it}$$

Descriptive Statistics

Table I provides the descriptive statistics of the panel full sample of 335 observations for a period of seven-year. The table revealed on average; real earnings management is depicted as 8.42 indicating that listed non-financial firms Nigeria are engaging in real earnings manipulation. The study also revealed that while the audit fee was averagely reported at 7.1. The table also showed that on average audit firm tenure was reported at 0.49 or 49% indicating that almost 50% of the audit firms in Nigeria are staying from first to the second tenure with their respective client, while the remaining can stay for more than ten year period with the client. The table further showed that brand name auditors accounted for almost 0.599 or 60% of the audit practice in the country despite low-quality reporting. It was also revealed that on average, 0.59 or 60% of listed non-financial firms in Nigeria were highly levered. It was lastly documented that on average firm size was reported at 17.35%, indicating that more prominent firms also engage in real earnings management despite the scrutiny by the auditors and other stakeholders.

Bivariate Analysis

The table revealed a significant negative relationship between audit fees and real earnings manipulation. It further showed that audit tenure is negatively correlated with real earnings management but not significant, while audit tenure and audit fees were positively associated and significant. The table also revealed that brand name auditors were reported to be negatively correlated with real earnings management but insignificant. It further documents that brand name auditors were significant and positively associated with audit fees and tenure. The table also reported that leverage and firm size were positively related to real earnings management.

3.2 The second phase of the Analysis

The study conducted unit root tests for the stationarity of data at level as well as first difference prior to employing the generalized methods of moment (GMM). In testing for the existence of stationarity, the study employed Fisher-type and Harris Travel unit root tests that assume individual unit root procedures across panels. The tests were performed and the outcome portrayed that the data were stationary at the level and first difference; this permits the use of generalized methods of the moment, which was based on the premise that the data has mixed stationarity both at a level as well as first difference. In addition, the study fulfilled the second condition by observing that the number of cross-sections has exceeded the time dimension that is $N > T$ [17], [31]. The study conducted a Hausman test to choose between fixed and random effects, and the results showed that the t-statistics were insignificant that suggest the use of random effect regression [32]. In a study of this nature, it is expected to carry out the estimation of models using econometric procedures that not only mitigate the problem of missing or unknown control variables but also corrects for endogeneity issues that connote a problem that occurs if an explanatory variable is correlated with the error term. This means that the relationship between dependent and independent variables is affected due to some other unobservable factors such as, omitted variables bias, reverse causality or measurement error which can lead to

the wrong specification in the modeling process [33], [34]. Under the GMM linear dynamic panel-data estimation, the study observed that the variables are statistically significant and show the expected negative signs as expected in Tables 4. The generalized methods of moment outcome reveal that the number of instruments is less than the number of groups, and the F- statistics are jointly significant. Further, AR2 second-order autocorrelation is not significant as depicted in table 4. The table further revealed that Hansen's statistics across the models are all not significant. The dynamic dependent variable and the regressors are all statistically significant as reflected in the table [35], [36]. The variance inflation factors (VIF) were used to test for multicollinearity between the independent variables, and the results depicted they were consistently less than ten, as reflected in descriptive statistics table 2. Robustness checks the study used augmented estimator called system GMM using the `xtabond2` or two-step covariance matrix, which is more robust and more efficient than one step.

3.3 Implementation of the mediating effect

Several steps are needed prior to testing mediation effects. The study proposed three dependency models: the first stage regresses the independent variables against the dependent variable; second stage regress mediator against independent variables; and thirdly, regress independent variables, mediator, and control variables against the dependent variable. The first regression model was run to test whether a significant relationship exists between the predictor and the outcome variable. The second regression model wants to test whether the mediator is correlated with the predictor variables. The third regression wants to test whether introducing the mediator variable decrease the significant of the relationship among the variables [37]–[39].

Model 1

The table revealed that there was a negative and statistically significant relationship between the audit fee and composite real earnings management. The study further revealed that there was a negative and statistically significant relationship between audit tenure and real earnings management. The findings also indicated that brand name auditors were found to also be negatively associated with real earnings management and significant at a 1% level. Further analysis revealed that leverage was reported to be positively related to real earnings management and significant at a 10% level. It was also found that firm size was documented to be negatively correlated with real earnings management and significant at 5% level.

Model 2

The table revealed that audit fees and brand name auditors were found to be negatively related to real earnings management and statistically significant at a 1% level. The study further revealed that audit tenure was found to be negatively correlated with real earnings management but not significant. The findings also indicated that leverage and firm size were found to be positively associated with real earnings management and significant at 1% level. Further analysis revealed that leverage was reported to be

positively related to real earnings management and significant at the 10% level.

Model 3

The findings revealed a statistically significant negative relationship between audit fee and real earnings management at a 5% level, which was initially reported at 1% level; this indicates partial mediation. These findings are in concord with the one reported in [40]–[43] Nigerian and American studies. Though, the study findings are not in congruence with the results of [44]–[46] New Zealand, Spain, Nigeria, Malaysia and the US study which signifies non-restraint of manipulative attitude by the firms. The study further revealed that there was a positive but insignificant relationship between the audit tenure and real earnings management, which indicates full mediation by the introduction of a mediator variable, which was initially significant. This finding is in harmony with the one reported in [9] [47] American and Nigerian studies but the findings are not in concord with the results of [48] [49] Chinese and Malaysian studies which reported that tenure lead to higher audit quality. The findings also indicated that brand name auditors were also found to be negatively associated with real earnings management and significant at a 1% level. The study findings is in congruence with the results of [50], [51] which reported that brand name auditors were able to curb earnings management American and Hong Kong studies but differ with the one reported in [14], [52]–[54] Oman, French and Nigerian studies. Further analysis revealed that leverage was positively correlated with real earnings management and significant at 1% level which was initially reported at 10% level partial mediation. Lastly, the findings indicated that firm size was positively associated with real earnings management and significant at 5% level.

4 CONCLUSION

The study examined the mediating effect of the internal audit committee on the relationship between a firm financial audit and real earnings management in listed non-financial firms Nigeria using 335 observations. Panel random GLS and generalized methods of moment econometric techniques were applied for the data analysis. The findings showed that audit committee independence mediates the relationship between a firm financial audit and real earnings management in listed non-financial firms Nigeria. Further investigation revealed that audit fees positively impacted the earnings quality while audit tenure is less effective in deterring real earnings manipulation. The findings also indicated that brand name auditors are effective in restraining earnings manipulation in listed non-financial firms, Nigeria. It was also found that leverage and firm size have a negative impact on earnings quality.

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Appendix

Table 1 Unit root Test

	Fisher		Harris-Travalis	
Variables	At level	First difference	At level	First difference

REM	580.35* (0.000)	885.66* (0.000)	-16.360 (0.000)	-12.8651 (0.000)
AF	536.97 (0.000)	762.93 (0.000)	-4.5023 (0.000)	-4.4520 (0.002)
AT	177.99 (0.006)	254.71 (0.000)	-9.4424 (0.000)	-9.0090 (0.000)
BN	135.42 (0.000)	762.93 (0.000)	-3.8055 (0.001)	-3.4129 (0.003)
LV	203.266 (0.001)	676.126 (0.000)	-3.6860 (0.000)	-3.1263 (0.009)
FS	203.64 (0.000)	578.003 (0.000)	-4.8152 (0.004)	-2.9328 (0.025)
AC	177.21 (0.003)	692.201 (0.006)	-3.3985 (0.003)	-5.4426 (0.000)

Table 2 Summary Statistics

Variable	Mean	Std. deviation	Skewness	Kurtosis	VIF
REM	8.4654	11.8312	-2.5261	19.8929	2.25
AF	7.1019	0.6555	-0.0679	3.0285	1.62
AT	0.4899	0.0685	0.6197	6.8059	1.54
BN	0.5991	0.4906	-0.4046	1.1637	1.62
LV	0.5924	0.3617	5.9246	17.5588	1.03
FS	17.3597	3.0530	0.9376	3.9343	1.54

Table 3 Correlation Analysis

Correlation Probability	REM	AF	AT	BN	LV	FS
REM	1.000000 -----					
AF	-0.1342* 0.0036	1.000000 -----				
AT	-0.0272 0.5561	0.1475* 0.0014	1.000000 -----			
BN	-0.0298 0.5202	0.5769* 0.0000	0.1434* 0.0018	1.000000 -----		
LV	0.0103 0.8247	0.1399* 0.0024	0.0783 0.0904	0.0452 0.3289	1.000000 -----	
FS	0.0963* 0.0372	0.5422* 0.0004	0.1784* 0.000	0.1464* 0.0015	0.0428 0.3548	1.000000 -----

Notes: *** and ** significant at 1%, 5% & 10% levels respectively

Table 4 Two Step Panel GMM Regressions of Financial Audits and Real Earnings Management

Variables	Expected sign	Model 1	Model2	Model3
REM		-0.7094*** (0.000794)		-0.710654*** 0.0005379
AC	-		0.42941*** 0.0683	0.5708*** 0.025314
AF	-	-0.4134*** (0.02664)	-0.8844*** 0.248	-0.8332** 0.342
AT	-	-0.1162*** (0.0298)	-0.5627 0.6894	0.5754 0.7456
BN	-	-0.9236*** (0.3215)	-0.0173*** 0.0039	-0.5636*** 0.1145
LV	-	0.1836* (0.099)	0.8599*** 0.2758	0.7599*** 0.2711

FS	-	-0.7836** (0.311)	0.947*** 0.231	0.6947** 0.270
No. observation		335	335	335
Probability		0.000	0.000	0.000
AR1		0.235	0.020	0.290
AR2		0.369	0.418	0.331
Sargan statistics		0.000	0.000	0.000
Hansen statistics		0.309	0.244	0.382
no of instruments		30	30	35
no of group		67	67	67