

Audit committee and financial reporting timeliness: fresh insight from dynamic models in Nigerian Listed Firms

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Abstract

This paper explores shareholder representatives' effect on the audit committee, financial report timeliness, and how institutional ownership moderates this relationship. The paper uses a dynamic panel model using the Generalised Method of Moment (GMM) to control for potential endogeneity. The results indicate that shareholders on the audit committee significantly reduce financial reporting timeliness. In particular, the shareholders play an active part in improving the financial reporting process and timeliness. Their presence provides a good atmosphere in which external auditors can effectively operate. Both the static and dynamic estimations confirm the significance of the effects. This study will benefit regulators and policymakers, enabling them to appreciate better the importance of shareholders' representatives and institutional ownership in curbing reporting lags and improving the timeliness of financial reporting.

Keywords: Audit, Committee, shareholders, timeliness, Institutional ownership

1. Introduction

The timeliness of financial reporting is a critical determinant of firm value, providing stakeholders, including investors and regulators, with reliable accounting information essential for informed economic decision-making (Aksoy et al., 2021). Timely financial reporting enhances the value of financial information, whereas delayed reporting can elicit unfavorable market reactions, ultimately negatively impacting the capital market (Kaawaase et al., 2021). In the accounting and auditing literature, Financial Reporting Timeliness (FRT) is frequently viewed by two distinct concepts: audit delay, which refers to the duration between the completion of an audit and the issuance of the audit report, and FRT, which represents the period between a company's fiscal year-end and the publication date of its financial report (Aniefiok, 2024). Financial reports must be disclosed to stakeholders within a stipulated timeframe to ensure their relevance and reliability (Sterin, 2020).

There are few studies on shareholders' representation on the audit committee (AC), as previous research has focused on stock price synchronicity and movement of the stock prices (Crisóstomo et al., 2020). Others believe that a controlling shareholder with cash flow rights might be a strong motivation in exploiting the firm's value. Such a shareholder would select the AC to monitor management effectively and reduce information asymmetry (Mohammed et al., 2019). Crisóstomo et al (2020) argue that shareholders' power confirms that directors adhere to the company's regulations, as there is no direct link between them and the auditors. Others view it from shareholders' wealth perspectives (Arowoshegbe & Emeni, 2014), corporate governance structure (Adegboye et al., 2020), and independence of the AC (Isah, Che-Ahmad & Ishak, 2018). The present study explores the unique features of the Nigerian AC which involve shareholders as committee members, consequent upon the dramatic growth in shareholder activism following the

recent sequence of accounting scandals and corporate collapses (Goranova et al., 2017; Uche et al., 2016).

The Nigerian revised Code of Corporate Governance (CCG) identified the AC as one of the most critical mechanisms of a company's structure, associating auditors and corporate managers through their essential monitoring roles (Larasati et al., 2019). The Code requires all listed firms to establish an AC, under Principle 11.4.6 of Nigeria CCG without prejudice to the provisions of Section 404 (2 & 3) of the Companies and Allied Matters Act of 2020. The AC must comprise five members of which three are representatives of the shareholders, while two are non-executive directors and members with financial or accounting knowledge (CAMA, 2020). The key function of the committee is to inspect the auditors' report and make recommendations to the annual general meeting as it deems fit.

The principal objective of this paper is to examine the effect of shareholders as members of the AC on FRT for Nigerian companies for the year 2011-2015. The paper contributes to knowledge in many folds: first, the interaction effect of institutional ownership (IO) to moderate the relationship by enhancing AC effectiveness; second, the overall monitoring process by the shareholders, third, timely release, and finally, the methodological approach using GMM. The rest of the paper is organised in the following manner: literature reviews and develops the hypotheses; the study's methodology and data; discussion of the results; and finally, the conclusions.

2. Literature review and hypothesis development

2.1. Audit committee and shareholder representatives

The composition of the AC is crucial in ensuring the timeliness and quality of financial reporting. The inclusion of shareholder members in the AC can positively impact the financial reporting process, bringing their experience and expertise to bear (Khemakhem & Fontaine, 2019). Factors such as members' status, accounting knowledge, and industry expertise can influence the AC's performance (Al-ahdal & Hashim, 2022). Shareholder membership in the AC can ensure timely financial reporting and enhance the AC's reputation (Mohammed & Garba, 2023). This is particularly important for firms with large shareholder equity, where timely reporting is crucial for investors and stakeholders (Ghafran & Yasmin, 2018). The study is grounded in agency and resource dependence theories, emphasizing the importance of CG mechanisms and human-factor dependence in achieving organizational goals (Jensen & Meckling, 1976; Wang, 2021). The presence of shareholders on the AC can effectively monitor executive directors' powers and protect auditors' independence, ultimately increasing public confidence in financial reporting (Ghafran & Yasmin, 2018).

2.2 Audit committee shareholder chairman and financial report timeliness

Consequent to the complexity of financial reporting and regulation across the globe, there is significant interest in AC members (Wu et al., 2018), and especially the importance of the AC chair as a central point of AC efficiency. Under this new arrangement, the leadership of the AC is

to be held by the shareholders, since the responsibility for overseeing the financial reporting process is upon the chairman (DesJardine et al., 2023) and thus, any breakdown in the reporting process. Aniefiok, (2024) also argued that the AC chair determines the effectiveness of the committee, and is thus, the contact point for the committee, management, and external/internal auditors (Aibar-Guzmán et al., 2024). The literature suggests that the AC chair is one of the firm's higher positions in the hierarchy, acting as a reliable source of power (Kalembe et al., 2024). Consequently, a shareholder as AC chair is likely to be more dynamic in reducing reporting delay, enhancing the process, and presenting the report within the regulation time. Based on the above discussion, we hypothesised:

H₁: A shareholder as AC chair has a negative relationship with FRT.

2.3 Shareholder financial expertise and financial report timeliness

Financial knowledge is an important characteristic of the AC (Kalembe et al., 2024), that is, its effectiveness depends to a large extent on its members' expertise (Barba Navaretti et al., 2022). Several actions from regulatory bodies have focused on improvement in the timeliness of financial reporting (Bedford et al., 2023). The association between AC financial expertise and timeliness of reporting is vital because the AC is responsible for overseeing the financial reporting process and audit engagement (Wan Hussin et al., 2018). Most researchers, therefore, consider the formation of the AC as an important area of scholarship as far as financial reporting timeliness is concerned (Aksoy et al., 2021). In Nigeria, shareholders are to possess at least a first degree, its equal, or an advanced degree from an approved university or a recognised university abroad in accounting or a management-related field of study. They can also have academic qualifications below a first degree in a related field from any tertiary institution at home or abroad, as a regulatory requirement (Riccardi et al., 2018).

Previous researchers argued that the high-profile corporate scandals involving Enron were due to a lack of accounting expertise by the AC chair (Breedon, 2003). Thus, familiarity, ability, and operational control from shareholders may lead to the efficacy of the committee. Such expertise is a critical resource that will improve the firm's viable returns, mainly in financial reporting quality (Bala et al., 2019). Therefore, AC shareholders with financial expertise are an important element of governance, assisting firms to achieve their strategic objectives (Evans & Rusmin, 2017; Sani et al., 2020). Thus, we hypothesised:

H₂: AC shareholders with financial expertise have a negative relationship with FRT.

2.4 Audit committee block shareholders and financial report timeliness

Block shareholders on the AC can offer suitable AC performance because of the size of shares owned (Dou et al., 2018), as they have the power to reduce managerial bias by inspiring management to invest in profitable portfolios (Keune & Keune, 2018). Recent research suggests that the presence of block shareholders may enhance internal control, and offer effective monitoring ideas for improving FRT (Bappah et al., 2022). Additionally, block shareholders with a higher number of shares can monitor the financial reporting practice, and put pressure on

managers to comply with shareholders' interests (Abed et al., 2022). Although all shareholders must monitor the activities of managers, individual block shareholders on the AC protect auditors by providing a suitable environment for audit activities and the production of high-quality financial reports within the regulation time (Habbash, 2019). An alternative argument suggests that certain block shareholders may be less prepared to restrict managers' opportunistic behaviour in the financial reporting process, reducing its quality (Githaiga et al., 2022). Consequently, we hypothesised that:

H₃: An AC block shareholder has a negative relationship with FRT.

2.5. External audit and financial report timeliness

In a market-driven economy, financial reports are considered a link between a company's performance and its financial position, vital information for shareholders and users (Alsmady, 2022). The auditor is seen as an effective third party who assists in reducing information asymmetry and disputes between management and owners. Auditors provide an independent and effective examination to verify the correctness of financial statement before it is published (Alahdal & Hashim, 2022). Consequently, timely financial reporting is important to investors and users (Aksoy et al., 2021). It adds value to information content and reduces information asymmetry, hence, leading to the improvement of firm value (Huang et al., 2017). However, external auditors face an information reliability dilemma due to unnecessary delays in accounting reports (Mohammed et al., 2018). The time taken to audit financial statements is fundamental to providing timely information and positively impacts firm value (Sadiq et al., 2020). This makes FRT an important component in today's CG studies.

Studies have revealed that audit firms have solid incentives to accomplish the audit work on schedule to maintain their reputations, and increased share of the market; others affirm that the Big4 audit firms are expected to provide a quality audit judgment on time than other auditors (Corten et al., 2021). In Nigeria, CG codes allow listed firms to absorb professional auditors they wish regardless of their status. Thus, the empirical result of the determinants of the status of audit firms on FRT is inconsistent (Hassan, 2016). Some studies have documented evidence of a significantly positive association between the status of the audit firm and audit delay, while others have observed an insignificant relationship (Komal et al., 2022). According to Sterin (2020), auditors with international affiliations tend to have a shorter delay. However, Lai et al (2018) report no significant association among the status of the audit firm and audit delay. It is, therefore, hypothesised that:

H₄: An external auditor has a negative relationship with FRT.

2.6 Audit committee and institutional ownership

Shareholding in recent times worldwide inclines to recognisable interest groups including long-term funds, insurance, and banks (Mohammed & Garba, 2023). Institutional investors decrease information lopsidedness and successfully confine management, which depresses earnings

management and encourages good financial reporting (Kalembe et al., 2024). Further, IO strengthens CG apparatus, such as ACs for adequate supervision of accounting report procedure, thus, reducing the problem of agency. Susanto & Pradipta (2016) suggest that for companies in Indonesia with IO, the real earnings management is contained. IOs are becoming increasingly important economically, due to their significant presence in most of the capital markets across the globe (Wei Jiang Emory et al., 2023). One of the essential building blocks of CG is the ability of IOs to actively monitor corporate activities (Barba Navaretti et al., 2022). In theory, IOs have the capacity and power to effectively reduce agency-related costs because of their substantial holdings in the entity (DesJardine et al., 2023). In addition, IOs can participate in reforming firms' activities (Nagar & Schoenfeld, 2021).

It has been argued that there are positive stock market reactions to acquisitions by large block investors (Alsmady, 2022). The accounting literature has documented that long-term IOs can effectively monitor managers in suppressing earnings management and reducing FRT (Abed et al., 2022). Thus, attention to IO's monitoring in emerging economies is gathering momentum with rapid economic growth, as witnessed in Nigeria. Consequently, IOs are empowered to monitor corporate activities (Kaawaase et al., 2021). In this current research, IOs are expected to play a vital role in moderating the relationship between AC shareholders' attributes and external auditors on FRT in Nigerian listed firms. It is believed that the interaction would restore the corporate image by producing a timely financial report that is free from earnings smoothing. Accordingly, the hypotheses below are projected:

H_{5a}: IO moderates the relationship between an AC shareholder chair and FRT

H_{5b}: IO moderates the relationship between AC shareholders' financial expertise and FRT

H_{5c}: IO moderates the relationship between AC block shareholders and FRT

H_{5d}: IO moderates the relationship between external auditors and FRT.

3. Methodology and Data Collection

3.1 Sample

The changes due to regulation witnessed in Nigeria in 2004 and the subsequent global financial crisis of 2008 have prompted this study on firms listed on the Nigerian Exchange Group (NGX). The data were drawn from annual reports and accounts. Hence, the total sample is 101 firms, with 505 firm-year observations over the five years 2011-2015. The present study opted to use dummy variables for AC shareholders, and proportions for other variables. This study also used log FRT as the natural logarithm of the number of days between the fiscal year-end and the date when the report was published. The logarithm of FRT is used to standardise the dependent variable during estimation. The definitions of the variables are presented below;

Where:

logFRT= logarithm financial report timeliness, ACSFE = Audit committee shareholders' financial expertise, ACSCh = Audit committee shareholder chairman, ACBLS = Audit committee blockholders, EXAUD = External audit, DA = Discretionary accruals, IO = Institutional

Ownership, FSIZE = Firm size, LEV = Leverage, PROF = Profitability, GWTH = Firm growth, COMPLEX= Client complexity. The study variables are measured as follows; logFRT is calculated by logging the number of days at year-end to the time when the financial report is published, ACSFE is a binary taken a value of 1 if a shareholder is a financial expert, and else 0, the measurement of ACSCr is by 1 if the chair of the AC is a shareholder and 0 otherwise, ACBLS is also a binary with a value of 1 if a shareholder is a blockholder or else is 0, for EXAUD the measurement is by the natural logarithm of audit fees, DA embodies total accruals less non-discretionary accruals., while IO is given as 5% or more shares held by owners, however, FSIZE is equally, given as the logarithm of total assets, PROF is calculated as net profit divided by owner's equity, LEV is total liability divided by total assets, while IFRS is measured by dummy variable of 1 if IFRS is used or else is 0, equally, COMPLEX is set a dummy of 1 if a firm has a subsidiary, 0 otherwise, and finally, GRWTH given by market equity value to book value.

3.2 Model Specifications

The paper used dynamic panel data applying the system GMM, which is more appropriate for resolving issues of endogeneity, however, loss variables, measurement of error term, and unobserved heterogeneity are addressed (Agarwala et al., 2023). Additionally, the dependent variable lagged $y_i, t-1$ variable placed at the right of the equation is associated with the error term uit , in a way that static panel methods produce unreliable and partial regressors. Hence, to avoid this issue, the system GMM regressors are used. Consequently, the dynamic system GMM expands equations of the first difference where the lagged levels of the investigated variable are instrumented, with the set of another level equations through the first-difference of similar lagged variables as instruments (Roodman, 2009). Thus, the following dynamic model was used:

$$\ln Y_{it} = \phi \ln Y_{it-1} + \gamma_{it}' + \beta \chi' + d_t + \varepsilon_{it} \quad (1)$$

Where:

The study hypotheses were tested using the following dynamic regression models:

$$\begin{aligned} \text{LogFRT}_{it} = & \beta_0 + \beta_1 \text{ACFE}_{it} + \beta_2 \text{ACSCr}_{it} + \beta_3 \text{ACBLS}_{it} + \beta_4 \text{EXAUD}_{it} + \beta_5 \text{DA}_{it} + \beta_6 \text{IO}_{it} + \\ & \beta_7 \text{ACSF} * \text{IO}_{it} + \beta_8 \text{ACSCr} * \text{IO}_{it} + \beta_9 \text{ACBL} * \text{IO}_{it} + \beta_{10} \text{EXAUD}_{it} * \text{IO}_{it} + \beta_{11} \text{FSIZE}_{it} + \\ & \beta_{12} \text{LEV}_{it} + \beta_{13} \text{PRO}_{it} + \beta_{14} \text{IFRS}_{it} + \beta_{15} \text{GRWTH}_{it} + \beta_{16} \text{COMPLEX}_{it} + \varepsilon_{it} \end{aligned} \quad (2)$$

$$\begin{aligned} \text{LogFRT}_{it} = & \beta_0 + \beta_1 \text{ACFE}_{it} + \beta_2 \text{ACSCr}_{it} + \beta_3 \text{ACBLS}_{it} + \beta_4 \text{BIGFOUR}_{it} + \beta_5 \text{DA}_{it} + \beta_6 \text{IO}_{it} + \\ & \beta_7 \text{ACSF} * \text{IO}_{it} + \beta_8 \text{ACSCr} * \text{IO}_{it} + \beta_9 \text{ACBL} * \text{IO}_{it} + \beta_{10} \text{BIGFOUR}_{it} * \text{IO}_{it} + \beta_{11} \text{FSIZE}_{it} + \\ & \beta_{12} \text{LEV}_{it} + \beta_{13} \text{PRO}_{it} + \beta_{14} \text{IFRS}_{it} + \beta_{15} \text{GRWTH}_{it} + \beta_{16} \text{COMPLEX}_{it} + \varepsilon_{it} \end{aligned} \quad (3)$$

4. Results and Discussions

4.1 Descriptive Statistics of Continuous Variables

Table I shows the results of the descriptive statistics of the continuous variables, as minimum, maximum, standard deviation, and mean values.

Table 1. Descriptive statistics for continuous variables

Variables	Obs	Mean	Std. Dev.	Min	Max
LogFRT	505	95	59	10	365
EXAUD	505	14953	18352	400	145000
DA	505	0.27	0.18	0.01	0.55
IO	505	0.15	0.14	0	0.49
BSIZE	505	9	3	5	20
ROA	505	0.08	0.05	-0.02	0.33
LEV	505	0.11	0.03	0.05	0.20
GRWTH	505	0.08	0.03	0.06	0.21
FSIZE	505	4.79	0.84	2.54	7.45
PROF	505	0.14	0.13	-0.07	0.72

Source: Stata version 14.0 outputs

The results show that Nigerian firms delay their financial report announcements by an average of 95 days, violating the SEC's 90-day requirement. The study also estimates DA using the Modified Jones Model (MJM) (Dechow et al., 1995), revealing a mean value of 0.27, indicating significant opportunistic earnings management among Nigerian listed firms. Results for other variables show EXAUD starts at a minimum of N400,000 to a maximum of N145,000,000, with a mean value of N14,953,000 and a standard deviation of N18,352,000. IO averages 15%, with a maximum of 49%. BSIZE ranges from a minimum of 5 members to a maximum of 20 members, with a mean of 9. LEV averages 11% ranging from a minimum of 5% to a maximum of 20%, with a standard deviation of 3%. PROF has the lowest loss of -7% and the highest gain of 72%, while a mean of 14% and a deviation of 13% is recorded. ROA averages 0.8%, ranging from a minimum loss of -2% to a maximum of 33%, with a standard deviation of 5%. GWRTH averages 8%, ranging from a minimum of 6% to a maximum of 21%, with a standard deviation of 3%. FSIZE starts at a lowest of N2.54 billion to an all-time high of N7.45 billion, with a mean value of N4.79 billion and a standard deviation of N844,343 million. All variables reveal normal variation from the mean.

4.2 Descriptive statistics for dummy variables

Table 2 presents the frequency statistics of the dummy variables. It can be seen that 86% (435 firms) have financial expertise on the AC as shareholders, signifying compliance with SEC regulations, however, 14% (70 firms) suggest no financial expertise.

Table 2: Descriptive statistics for dummy variables

Variables	Obs	Frequency		Percentage		Total%
		1	0	1	0	
ACSFE	505	435	70	86	14	100

ACSCr	505	480	25	95	5	100
ACBLS	505	151	354	30	70	100
COMPLEX	505	360	145	71	29	100
IFRS	505	404	101	80	20	100

Source: Stata version 14.0 outputs

Table 2 shows that 95% (480 firms) of ACs have shareholders as chairmen and only 5% (25 firms) are chaired by non-shareholders. The results further indicate that 30% (151 firms) of Nigerian companies ACs contain block shareholders, while 70% (354 firms) do not, although block holders are likely to improve the procedure of accounting report and protect auditors' independence. Moreover, the frequency distribution of COMPLEX indicates that 71% (360) of firms have subsidiaries and branches, while 29% (145 firms) are without. Additionally, the result shows that 80% (404 firms) use IFRS in their financial report preparation, while 20% (101 firms) represent the one year before the mandatory use of IFRS in Nigeria.

4.3. Correlation Matrix

Table 3 shows the correlation matrix for the study variables. Overall, the results indicate that multicollinearity is not a threat. The highest correlation between the independent variables was 41% between ACSC and ACSFE. This scenario is believed to be normal, as Hair et al. (2014) have opined that a correlation of less than 90% might not be a problem during estimation. Additionally, Baltagi (2008) states that the impact of multicollinearity is reduced by the regressors during estimation and hence poses no problem. FRL is significantly and positively correlated to IO, suggesting that IO could increase monitoring and bring about effectiveness in AC functions as well as enhance the performance of external auditors. ACSCr, EXAUD, GRWTH, PROF, IFRS, and FSIZE significantly and negatively correlate with FRL, indicating the tendency of ACSCr, EXAUD, GRWTH, PROF, IFRS, and FSIZE to reduce FRL among firms listed on the NSE. However, ACSFE, ACBLS, DA, and LEV are insignificantly and positively correlated to FRT.

4.4 Diagnostic Test

Econometrics problems in panel data regression were addressed as depicted in Table 4.

Table 4. Tests

Test Type	F	χ^2	Prob> χ^2	Prob>F	Mean VIF
Endogeneity	7.40552**			0.0067***	
Multicollinearity					2.12
Auto/Serial correlation	4.612			0.0342	
Heteroskedasticity		(100) = 78496.06	0.000		

Source: Stata outputs version 14.0

The results of the tests show that the model is characterised by the presence of heteroscedasticity and auto/serial correlation, although multicollinearity is not a problem as the mean value of VIF

is 2.12. The results of the test also indicate the presence of endogeneity, hence, the use of GMM is justified.

Table 5. Correlation Matrix

	FRL	ACSFE	ACSCR	ACBLS	EXAUD	DA	IO	LEV	GRWTH	PROF	IFRS	FSIZE	COMPLEX
LogFRT	1.00												
ACSFE	0.03	1.00											
ACSCR	** -0.11	*** 0.41	1.00										
ACBLS	0.08	** 0.11	0.01	1.00									
LAUDFEE	*** -0.22	0.00	-0.01	*** -0.25	1.00								
DA	0.00	0.01	-0.05	0.00	0.02	1.00							
IO	*** 0.15	*** 0.18	0.02	** 0.11	** -0.12	-0.01	1.00						
LEV	0.03	-0.05	0.06	0.05	0.03	0.00	-0.01	1.00					
GRWTH	*** -0.21	0.02	*** -0.12	-0.05	** 0.12	-0.03	-0.01	-0.07	1.00				
PROF	*** -0.12	-0.05	-0.04	*** -0.13	0.05	-0.03	** -0.11	0.05	0.01	1.00			
IFRS	*** -0.12	0.00	0.02	0.01	*** 0.16	*** 0.13	-0.02	** 0.09	0.01	-0.04	1.00		
FSIZE	*** -0.19	*** 0.18	0.06	** -0.12	*** 0.35	*** 0.01	** -0.10	-0.05	** 0.12	0.02	0.02	1.00	
COMPLEX	0.04	** 0.11	-0.04	-0.03	0.03	0.15	0.18	-0.04	0.07	0.04	-0.01	*** 0.26	1.00

Source: Stata outputs version 14.0

4.5 Regression Analysis

The results of the two models are shown in Table 6. The lagged dependent variable is significant at a 1% level of significance with the coefficient value of 0.5192 using lag one of three (1 3) and employing the use of the second or deeper lag. Second lags are not usually correlated with the current error term, although the first lag often is (Roodman, 2009). The second lag is used to find instruments that are good for model efficiency. Hence, the lag (1 3) argument is correctly specified and the instruments used are valid.

Table 6: Dynamic Panel Regression using system GMM

Variables	Onestep sys-GMM		Twostep sys-GMM		Twostep sys-GMM/BIG4	
	β	<i>p-value</i>	β	<i>p-value</i>	β	<i>p-value</i>
L.LFRL	0.536	0.000***	0.519	0.000***	0.561	0.000***
ACSFE	-0.095	0.453	-0.152	0.000***	-0.242	0.000***
ACSCR	-0.282	0.150	-0.238	0.000***	-0.291	0.001***
ACBLS	0.092	0.179	0.125	0.000***	0.173	0.000***
LEXAUD	-0.288	0.165	-0.272	0.000***	-	-
BIG4	-	-	-	-	-0.0889	0.008***
DA	0.069	0.503	0.062	0.000***	0.0643	0.000***
IO	-4.485	0.177	-3.112	0.010**	4.021	0.000***
IO_ACSFE	-2.114	0.046**	-1.579	0.000***	-2.066	0.000***
IO_ACSCR	-0.630	0.422	-0.631	0.005**	-1.192	0.000***
IO_ACBLS	-0.995	0.057*	-1.186	0.000***	-1.257	0.000***
IO_LEXAUD	-2.416	0.000***	-1.839	0.000***	-	-
IO_BIG4	-	-	-	-	0.236	0.211
LEV	0.343	0.507	0.235	0.000***	-0.280	0.000***
PROF	-0.749	0.246	-0.088	0.000***	0.000705	0.211
GRWTH	-0.633	0.233	-0.413	0.000***	-0.873	0.000***
IFRS	0.426	0.050**	0.479	0.000***	0.665	0.000***
LFSIZ	0.003	0.903	0.016	0.178	-0.00185	0.779
COMPLEX	-0.177	0.110	-0.107	0.050**	-0.00692	0.881
Constant	1.190	0.113	0.922	0.000***	-0.364	0.064*
Wald Chi2(25)	223.81		82265.37		140396.57	
Prob>Chi2(24)	0.000		0.000		0.000	
AR2	0.002		0.101		0.083	
Hansen	0.152		0.672		0.515	
No. of group/Instr.	100/97		100/97		100/97	

Source: Stata version 14.0 outputs

The results for AR2 and the Hansen J-statistical test show 0.101 and 0.672 respectively, indicating that there is no second-order correlation and that the moment condition was correctly specified and valid. The numbers of groups and instruments are 100 and 97 respectively, signifying that the moment conditions are correctly specified.

The results indicate a significant negative relationship between the presence of ACSFE in the AC and FRT in Nigerian firms. Specifically, a 1% increase in ACSFE presence in the AC is associated with a 15% decrease in FRT (Abernathy, Barnes, Stefaniak, & Weisbarth, 2017). This finding suggests that ACSFE facilitates timely financial reporting, improves internal control systems, and enhances financial reporting quality, ultimately contributing to effective audit work. The results indicate that the addition of an ACSCr has a significant and negative effect on FRT. Specifically, a 1% increase in ACSCr reduces FRT by approximately -0.238 (24%) (Mangena & Pike, 2005). This finding supports the hypothesis that ACSCr is negatively associated with FRT. The involvement of shareholders in the AC enhances financial reporting timeliness and strengthens CG practices (Habbash, 2019). Furthermore, the results suggest that shareholders are increasingly aware of their rights and are taking a more active role in ensuring timely financial reporting (Aksoy et al., 2021). Overall, this finding suggests that ACSCr with the requisite experience and supervisory expertise is potentially more efficient in reducing financial reporting delay, thus enhancing financial reporting timeliness. Further, the results suggest that ACSCr offers significant insights and focus as the committee handles conflicts between external auditors and the firm's management, consistent with agency theory.

On ACBLS, the results indicate an insignificant effect on FRT as reported by (Arowolo & Che-Ahmad, 2017). This finding contradicts the expected negative association between ACBLS and FRT. Instead, ACBLS is associated with a 13% increase in FRT. This result supports previous studies suggesting that ACBLS may prioritize self-interest over monitoring responsibilities, leading to poor FRT (Hales et al., 2018). In contrast, the results suggest that EXAUD has a significant negative relationship with FRT, reducing it by 27% (Abdulmalik & Che-Ahmad, 2019). This finding supports the hypothesis that EXAUD is negatively associated with FRT, align with resource dependence and agency theories (Bao & Lewellyn, 2017). Although the alternative measurement used for EXAUD is a dummy 1 if a firm is audited by a Big4, and 0 otherwise. The results indicate that BIG4 has a significantly negative association with FRT, signifying that companies audited by Big4 might have lower FRT in the short run due to the presence of shareholders on the AC, *ceteris paribus*, displaying similarity with EXAUD.

The interaction result indicates that IO could enhance the performance of AC members, as $IO*ACSFE$, $IO*ACSCr$, $IO*ACBLS$, and $IO*EXAUD$ have a negative and significant relationship with FRT at the 1% level of significance, *ceteris paribus*. This suggests that $H5a-5d$ is supported. A firm with IOs is, therefore, likely to have more monitoring efforts in safeguarding its investment. It means that the interaction of IO could further improve the earlier established

relationship between AC shareholders and lower FRT. In particular, although the result of ACBLS was initially a positive relationship, IO influences ACBLS' behaviour to become a significantly negative relationship. The result is consistent with those of various authors (Elyasiani et al., 2017; Ghafran & Yasmin, 2018). Nevertheless, IO does not influence the performance of BIG4 in its interaction with FRT.

Additionally, IOs on the board are a more effective monitoring tool, leading to improving timeliness and financial reporting quality and thus indicating AC effectiveness. IOs seek to safeguard investors by assuming an intermediary role between the board of directors (BoD) and management. The IO's interaction is aligned with Principle 11.4.6 revised CCG. Further, in a lower corporate risk environment, the presence of IO could improve the ability of auditors to reduce the high-risk engagement effort, resulting in lower FRT (Elyasiani et al., 2017). It is also consistent with the agency theory as a potential mechanism to reduce conflict and increase confidence, bringing in more resources to the firm as posited by the resource dependence theory.

4.7 Additional analysis

To prove the correctness of the instruments, the regression equation was estimated using Two-stage Least Square (2SLS) analysis (see Table 7). The result indicate that the 2SLS is appropriate and significant at 1% showing Wald chi2 (24) = 142.88 but the Prob > chi2 also has 1% significant level. The test for Sargan indicates that the instrumental variables are properly stated and effective. The results show that 2SLS estimators are alike to the actual result, which is significant at 5% and 1% levels for ACSFE, DA, ACSCr, and EXAUD, while the relationship between ACBLS and FRL is insignificant.

Table 7: Regression analysis using Two Stage Least Square

Variables	β	p-Value
DA	0.8695	0.029**
ACSFE	-1.2532	0.034**
ACSCr	-0.1903	0.007***
ACBLS	0.0134	0.733
EXAUD	-0.1819	0.003***
IO	14.5198	0.009***
IO*ACSFE	-12.2310	0.042**
IO*ACSCr	-0.3535	0.581
IO*ACBLS	0.0837	0.793
IO*EXAUD	-0.6708	0.013**
_cons	1.1728	0.042**
Sargan		0.1576
Basman		0.1802
R ²		0.020
Prob>Chi2		0.000

Again, the interaction relationship of IO*ACSCr and IO*ACBLS are insignificantly associated with FRT. However, the model could still be effective in lowering FRT using better instruments.

5. Conclusion

The present study examined the relationship between AC and FRT in Nigeria, using data from 2011-2015 and analysis from dynamic models. Our findings support the participation of shareholders in ACs in Nigeria. Specifically, we discovered that ACSFE, ACSCr, and EXAUD significantly decrease FRT and improve the quality of financial reporting. The paper also reports the interaction effectiveness of IO's on FRT. The findings established that IOs could improve the performance of shareholders on the AC, improving audit efforts by providing an enabling environment for EXAUD operation and thus improving financial reporting timeliness. Specifically, the interaction indicates that ACBLS, which hitherto was considered to have a positive relationship behaves negatively with a strong significant relationship with FRT. This has a serious impact on lowering financial reporting delays. The study suggests that similar research be conducted in financial institutions to determine the capability of shareholders on their ACs.

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