
Effect of audit committee characteristics on audit quality of listed cement companies in Nigeria

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ABSTRACT

This study examined the effect of audit committee characteristics on audit quality of cement companies listed on the Nigerian Exchange Group (NGX) for the period from 2013 to 2022. Audit committee characteristics are measured with audit committee multiple directorships, gender diversity, financial expertise and meeting frequency while audit quality was measured with discretionary accruals. Data for the analysis were derived from annual reports and accounts of the cement companies. The study employed ex post facto and causal research design. The research population is three listed cement companies because they are not many, the study census all three cement companies listed in Nigeria. The panel regression results showed that gender diversity and financial expertise of the audit committee had significant negative effect on discretionary accruals. The study also revealed that multiple directorships and frequency of meetings of the audit committee have insignificant effect on discretionary accruals. The study concludes that audit committee enhances audit quality of the listed cement firms in Nigeria. In line with the results, the study recommends that audit committee of listed cement firms should be composed of members holding outside directorships. Likewise, the participation of female directors in the audit committee would enhance corporate governance and safeguard the funds of investors.

Keywords: Audit Committee, Audit Quality, Gender Diversity, Meetings Frequency, Multiple Directorships

1. INTRODUCTION

The board of directors constitutes the audit committee to assist the board in performing its supervisory obligations to the stakeholders. In doing so, the audit committee is responsible for ensuring independent contact with external auditors, internal auditors and management (Salehi et al., 2021). The audit committee is known as an effective corporate governance tool that reduces the potential for fraudulent financial reporting. The primary objective of audit quality is to provide high-quality financial reporting information that is useful for economic decision-making with respect to economic entities, in particular financial entities (International Accounting Standard Board (IASB), 2008). High-quality financial reporting information is critical because it will have a positive impact on capital providers and other stakeholders in making investment decisions that can increase overall business performance. In the United States of America, the accounting scandals of the early 2000s (Catanach & Rhoades, 2018) clearly illustrate the value of audit effectiveness. However, the perception of audit quality remains difficult due to the diverse financial reporting contexts, legislation, procedures and understandings.

Multiple directorships between members of the audit committee are popular among public corporations in Nigeria. However, its effect on the standard of the audit has yet to be rigorously reviewed in the literature. Given that regulatory changes have resulted in some consistency in the features of audit committees across Nigerian companies, like the size of the audit committee, independence and financial competence, it is important to analyze other features of the audit committee, like multiple directorships of the audit committee.

In addition, an unresolved empiric issue is whether multiple directorships of audit committee members will substantially impair the monitoring capacity of the audit committee. In addition, the gender diversity within the audit committee is a function that has gained growing attention. It is suggested that the practice of handling earnings will be mitigated by female representation in the audit committee. In coping with financial problems, women are thought to possess higher ethical and risky than men (Krishnan & Parsons, 2018).

Furthermore, the audit committee's financial competence is another function of the audit committee, which relates to audit quality and received considerable attention from the previous literature. Accounting or financial expertise is generally experienced or certified (Price Water House Coopers, 2018). Expertise and expertise in accounting and financial matters is an important aspect of the audit committee. This advantage enables the audit committee members to become better aware of the

financial and operating reports that enable them to effectively carry out their monitoring tasks (Matlain, 2015).

The audit committee meetings also foster enhanced coordination between the audit committee members and the auditors (external and internal) and make the audit committee more efficient (Blue Ribbon Committee 1999). Audit committee meeting is considered to be a significant attribute for tracking performance. As a result, the audit committee, which meets with internal auditors more regularly, is known to be well trained on auditing and accounting issues. The risk of financial misconduct may be minimized by a regular meeting of the audit committee (Abbott et al., 2017). Bryan, Liu and Tiras (2019) have noted that it is also anticipated that audit committees operating on a daily basis would be able to conduct monitoring tasks efficiently than those who do not meet frequently.

Most studies were carried out in foreign countries on audit committee features and audit quality, such studies are the empirical studies of (Bhasker, 2018; Jaafar, 2016; Mishra & Malhotra, 2016; Mulder, 2017; Overmans, 2017; Sukma & Bernawati, 2019). These studies have been carried out in the United Kingdom, Belgium, India, Finland and Malaysia. As findings from these countries could not be applied to the Nigeria scenario due to differences in economic, political and social environments, this created a gap in the field of the study.

Most of the studies carried out in Nigeria, such as (Adagye, 2021 & Bala with Gugong, 2017 with Kibiya & Che Ahmad & Amran, 2018 & Moses, 2019 Musa & Oloruntoba & Oba 2016 and Umobong & Ibanichuka, 2020;)

are shown in literature. These studies cited above were all conducted in Nigeria, but some of these studies were specifically focused on quoted banks, such as those conducted by Musa et al. (2014); Moses (2016); Adagye (2021), while Bala and Gugong (2017); Umobong and Ibanichuka (2020) focused on listed food and beverage companies in Nigeria. This has also opened up a gap in previous empirical studies in the area covered. Finally, based on the level of literature reviewed by this study, it was noted that no prior literature combined these four carefully selected features of The audit committee covers the various directorships of the audit committee, the gender composition of the audit committee, the financial expertise of the audit committee and the number of meetings of the audit committee.

The general objective of this study is to investigate the effect of audit committee characteristics on audit quality of the cement manufacturing companies listed in Nigeria. In particular, the purpose of the study is to examine the degree to which the multiple directorships, the gender diversity of the audit committee, the financial

expertise of the audit committee and the meeting frequency of the audit committee affect the quality of audits of the cement companies listed in Nigeria.

The remainder of this paper is structured as follows: part 2 discusses the literature and sets out the theoretical context for this research; the methodology adopted for the study is discussed in part 3; the results of the study are summarized in part 4. Finally, the findings and recommendations in part 5 are drowned out.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Concept of Audit Committee Characteristics

Under the SOX Act (2002), for the purposes of overseeing the accounting and financial reporting processes of the establishment, the audit committee refers to a committee formed by the board of directors. The Report of the Cadbury Committee on the financial aspects of corporate governance concluded that the audit committee has the power to increase the standard of financial reporting by reviewing the financial statements on behalf of the board (Cadbury Committee Report, 1992).

As a result of deficiencies in corporate governance, the duties of the audit committee have been extended to include collaborating with the internal control and management system to ensure proper handling of corporate activities, improving corporate transparency and improving the financial reporting processes and practices of the company (Ayinde, 2020). In Nigeria, in accordance with the provisions of the Companies and Allied Matters Act as amended (CAMA 2014: Section 359, Subsections 3 and 4), the SEC allows all listed companies on the Nigerian Stock Exchange (NSE) to set up audit committees (Madawaki & Amran, 2018). Full approval by the audit committees indicates their importance as part of the entity's accountability and transparency, where the interests of stakeholders are to be addressed by the audit committees (Blue Ribbon Committee, 1999).

Audit Quality

Tang, Chen and Zhijun (2018) described the quality of the audit as the degree to which the financial statements give us fair and authentic information on the company's financial condition and performance. Jonas and Blaurchet (2000), however, include a widely accepted description indicating that complete and unmistakable knowledge is the standard of financial reporting that is not intended to misinform users. In the opinion of the International Accounting Standard Board (2008), the purpose of financial reporting is to provide the reporting agency with financial information that is useful in providing prospective investors, lenders and other creditors in their capacity as decision makers of capital.

Empirical Review

Audit Committee Multiple Directorships and Audit Quality

Adeyemi, Okpala and Dabor (2020) have investigated factors that influence audit quality in Nigeria. Primary data was provided by 430 respondents from a variety of stakeholders in the area of financial reporting and audit. Tests have shown that the most efficient ones to influence audit effectiveness are multiple directorships in Nigeria. The role of the audit committee in improving financial reporting was also reviewed by Atu et al. (2013) in Nigeria. The Z-Test was used to examine the data and it was found that multiple audit committee directorships had a positive impact on the audit committee's work. Ghafran (2013) analyzed the effect of the audit committee's characteristics on the standard of financial reporting in the context of a broad sample of UK companies over the period 2007-2010. The study found evidence that the activity of the members of the audit committee had a significant negative impact on the consistency of the earnings reported.

The relationship between the various directorships of the audit committee and the revenue management of the listed French companies was analyzed by Baccouche, Hadriche and Omri (2013). As its members held several additional external directorships, the results revealed that the audit committee was unable to provide adequate oversight of earnings control. The interrelationship between several audit committee directorships and the standard of financial reporting in Nigeria was also discussed by Emmanuel, Ayorinde and Babajide (2019). Using a questionnaire, research has introduced a survey study. The study found that the audit committee improves the standard of corporate financial statements by having several directorships.

In a study conducted by Vlaminck and Sarens (2019), which examined whether the audit committee's features had an impact on the content of the 2008 to 2009 financial statements. The empirical study demonstrates a positive and significant correlation between the proportion of audit committee members holding more than three directorships simultaneously and the consistency of the financial statements. Mishra and Malhotra (2016)'s empirical work examined the effectiveness of audit committees in limiting income control in Indian firms from 2013 to 2015. Evidence showed that the different directorships of the audit committee members had a significant impact on the earnings standard.

Jaafar (2016) examined the audit committee's activities and its relationship with Malaysia's standard of financial reporting, where the business of the audit committee is assessed from the point of view of several boards and overlapping board

committees. There is also a statistical association between the audit committee's multiple directorships and delays in the audit report. In addition, Bhasker (2018) assessed the effect of several directorates of Finnish companies from 2013 to 2017 on the consistency of financial statements. The findings showed that the audit committee's various directorships had a negative impact on the consistency of the financial statements. There is no Relationship between Audit Committee Multiple Directorships and Audit Quality

Audit Committee Gender Diversity and Audit Quality

The audit committee carried out a gender market response analysis by Huang et al. (2019), with evidence from US-traded international firms from 2012 to 2019. The study revealed that the appointment of female audit committee members had substantial positive cumulative abnormal returns relative to the appointment of male audit committee members. Although Sun, Liu and Lan (2019) examined whether the gender of directors in fully autonomous audit committees had an impact on the ability of committees, from 2013 to 2015, to restrict revenue management, As a result, the study was unable to detect a correlation between the proportion of female audit committee directors and the level of management of earnings.

Ittonen, Miettinen and Vahamaa (2018) found evidence that firms with female representation on the audit committee had minimized the inherent risk of error. They have found that gender diversity is associated with lower audit fees. Thiruvadi and Huang (2018) also examined whether the audit committees' gender diversity had a direct effect on the management of the earnings of the company. 320 S&P Small Cap 600 businesses were used to perform a regression analysis. The research found that the presence of a female director on the audit committee restricts earnings management.

Salleh, Hashim and Mohamad (2019) examined whether the inclusion of women in audit committee boards improves the audit committee's effectiveness in monitoring earnings management activities. The study found a significant negative association between the involvement of female directors on the boards of the audit committee and the management of profits. Following the 2017 revision of the Malaysian Corporate Governance Code, Salleh and Haat (2013) also looked at the relationship between 2005 and 2009 in Malaysia between the diversity of the audit committee and earnings management. Analysis of multivariate regression has been used. The female directors have shown little effect on earnings control mitigation, which may be due to the limited size of the audit committee's female members.

Ismail and Abdullahi (2020) examined whether the decrease in income management is linked to the presence of women on boards and audit committees. The study showed that women's participation in boards and audit committees would restrict earnings management. In addition, the relationship between earnings management and gender equity in the board of directors and the audit committee was examined by Mulder (2019). The study found that the presence of women in real earnings management has a negative association.

From 2016 to 2020, the Overmans (2017) study analyzed the impact of gender diversity on the earnings standards of publicly listed companies in the Netherlands, Germany, Spain, Sweden, the United Kingdom, Belgium, Italy and France. Results have shown that the audit committee's gender diversity contributes to improving the standard of earnings. In addition, the impact of the diversity of the audit committee on the standard of financial reporting of non-commercial state corporations in Kenya was identified by Mwangi et al. (2019). The findings of both the correlation and regression analysis showed that the audit committee's diversity had a statistically important relationship with the financial reporting standard.

Adagye (2019) has calculated the effect of gender diversity on the financial reporting standard of quoted deposit money banks in Nigeria using ex post facto research design. The study followed the Techniques of Multivariate Regression. The study found that the diversity of gender does not contribute to Nigeria's quality of bank financial reporting. There is no relationship between Audit Committee Gender Diversity and Audit Quality

Audit Committee Financial Expertise and Audit Quality

Madawaki (2019) examined whether the establishment of audit committees was linked to the improvement of financial reporting quality. The result showed that the experience of the audit committee was substantially linked to the improvement of the financial statements standard. The relationship between the features of each board of directors, audit committees and the level of earnings management in Egyptian companies registered on the Egyptian Stock Exchange was analyzed by Metawee (2021). The study concluded that there is a substantial link between the degree of control of revenue and the independence of the members of the board of directors and the audit committee members' financial expertise.

The Hamdan, Mushtaha and Al-Sartawi (2019) studies explored the relationship between the audit committee's characteristics and earnings management. The study used pooled OLS and was included in the study samples with binary logit regression. The study found that the audit committee's members' financial expertise had a

positive impact on the consistency of the financial reports. Musa et al. (2019) studied the impact of the features of the audit committee on the quality of the deposit banks' financial reporting in Nigeria. Findings have also shown that the experience of the audit committee has had a positive impact on the quality of financial statements.

The relationship between the characteristics of the audit committee and the earnings management of the food and beverage companies listed in Nigeria for the 2017 to 2022 period was analyzed by Bala (2021). Multiple regression was used and the study findings revealed that the audit committees' financial experience showed an inverse association with earnings management. Whereas in Nigeria, the quality of audited financial statements of money deposit banks was investigated by Kabiru and Rufai (2021). The study concluded that a high percentage of financial experts, not necessarily accounting experts, were unlikely to disclose deficiencies in the internal regulation of financial reporting.

The relationship between the characteristics of the audit committee and the earnings effectiveness of the food and beverage companies listed in Nigeria for the period from 2015 to 2021 was analyzed by Bala and Gugong (2021). To run the study data using OLS, multiple regression was used. The findings showed that the audit committee's financial experience showed an inverse relationship with the management of earnings. The relationship between the features of the audit committee and the characteristics of external auditors and the standard of financial reporting was also discussed by Mohammad (2021). The review of the annual reports has shown that the audit committee's competence is predictive of the quality of financial reporting.

Kibiya et al. (2019) investigated the effect of the audit committee's features on the standard of financial reporting by Nigerian listed firms. For the 2018 to 2022 period, the study used a multivariate regression analysis. The audit committee's financial expertise is optimistic and statistically relevant in terms of Nigeria's listed non-financial companies' financial reporting standards. Mbobo and Umoren (2019) analysed the effect of the attributes of the audit committee on the standard of financial reporting by Nigerian banks for the period 2016 to 2021. To analyze the findings, the analysis used correlations and regression analysis. The study found that the audit committee's financial experience had not had a substantial impact on the standard of financial reporting in Nigerian banks. While Aderemi et al. (2019) assessed the impact of financial literacy and the frequency of audit committee members' meetings on the financial reporting standard for the 2016 to 2019 period in the listed Nigerian companies. The findings showed that the audit committee's

financial literacy and the frequency of audit committee meetings had a positive impact on the financial reporting standard.

The characteristics of the Audit Committee and the integrated reporting of the companies listed on the Johannesburg Stock Exchange were investigated by Anis and Indira (2021). To evaluate knowledge, a multiple regression model was then used. Moreover, the audit committee's experience and the frequency of the audit committee's meetings have had a significant impact on the level of integrated reports. In the meantime, Salawu et al. (2017) analyzed the results of the experience of the audit committee and the quality audit meetings of listed consumer goods companies in Nigeria, from 2019 to 2023. The results showed that the audit committee's experience and meetings had positive and non-significant effects on the audit quality of the consumer goods companies listed in Nigeria.

Using secondary data from the NSE, the relationship between the features of the audit committee and the financial reporting quality of food and beverage companies was examined by Umobong and Ibanichuka (2019). The study confirmed that the improvement of the audit committee's independence, members' financial experience, firm age and frequency of meetings improved the standard of financial reporting. The attributes of the audit committee and the quality of the audit have also been discussed by Asiriuwa et al. (2022). Binary probit regression was utilized for analysis. The results of the study have shown that the audit committee's amount of experience and overall effectiveness both have a positive relationship with the audit quality.

Khudhair, Al-Zubaidi and Raji (2021) discussed the influence of internal and external governance structures in selected firms of Iraqi non-financial firms, such as the size of the board, the independence of the audit committee, the competence of the audit committee and the meetings of the effectiveness audit committee. The Logit regression methodology showed that there was no significant impact on the audit quality of Iraqi non-financial firms from the audit committee's financial experience. Agwor and Onukogu's (2018) research examined the impact of the audit committee's expertise and the earnings management activities of the food and beverage manufacturing companies in Nigeria for the period 2006 to 2016. It was found that not only was the competence of the Committee and earnings management important, but also that a negative coefficient was observed.

Amin et al. (2018) analyzed the impact on businesses with concentrated ownership of the board's characteristics on quality earnings moderated by audit quality. The study found that the audit committee's independence, experience and scale had positive effects on the quality of earnings, while the audit committee's meeting had

a negative impact on the quality of earnings. While Onyabe et al. (2018) explored the effects of the meeting of the audit committee and the expertise over the 2007-2016 periods on the standard of financial reporting of listed deposit money banks in Nigeria. The study found that the impact on the financial reporting standard of deposit money banks listed in Nigeria by the audit committee's expertise was negative and negligible.

The audit committee's position on the revised audit opinion in Jordan for the period 2012 to 2017 was investigated by Alkilani, Hussin and Salim (2019). The results showed that the audit committee's financial experience had a negative impact on the audit opinion that was updated. The impact of the features of the audit committee was also analyzed by Sukma and Bernawati (2019) with 70 observation data on the audit efficiency of the manufacturing companies listed on the Indonesian Stock Exchange in 2016-2018. The findings showed that experience had a significant impact on the audit's consistency.

Audit Committee Frequency of Meetings and Audit Quality

Moses (2016) examined the effects of the audit committee's number of meetings on the consistency of listed Nigerian banks' financial reporting. The study analyzed data using correlation coefficient and regression analysis techniques and found that the relationship between the number of audit committee meetings and the quality of these banks' financial reporting was statistically insignificant. In addition, for the period from 2013 to 2015, Mishra and Malhotra (2016) examined the effectiveness of audit committees in limiting the control of profits of Indian companies. Evidence suggests that the audit committee's duration of meetings had a substantial impact on the quality of earnings.

A review of the quality of the audit committee and its relationship with the quality of financial reporting was conducted by Shankaraiah and Amiri (2017). The study population consists of companies which were listed between 2002 and 2012 on the Bombay Stock Exchange, India. The study found that the frequency of the audit committee's meetings significantly increased the consistency of the financial reporting of the companies listed in India.

Therefore, this study hypothesized that:

Ho: *There is no relationship between audit committee characteristics and audit quality of listed cements companies in Nigeria.*

Theoretical Framework

Agency Theory

The agency theory was developed by Jensen and Meckling (1976), and the conflict of interest that arises as a result of the separation of ownership and control can be traced back to the roots of the theory of the agency. They claimed that the ownership and control division contributed to moral hazard problems, where agents act to the detriment of shareholders in order to gain personal benefits. Successful audit committee monitoring will help significantly to mitigate this behaviour. In general, audit committees balance owners' needs with management's interests.

The theory is based on the dilemma that the 'agent' does not act as if it maximizes the 'primary' welfare. The Agency's relationship consists of the relationship between the agent and the principal. Jensen and Meckling (1976) describe this relationship as a contract in which one or more entities engages another person to perform a service on their behalf, which includes the delegation to the agent of a decision-making authority. The basic premise that the agent will not always behave in the principal's best interests is that all parties maximize their own usefulness.

3. METHODOLOGY

Ex post facto and causal research design was adopted by this study. Three (3) cement companies listed on the floor of the Nigerian Exchange Group (NGX) from 2013 to 2022 constitute the population of this study. Due to the small size of the population, the statistical sampling technique is not used in this study; however, all the cement companies listed are censored. This study used secondary data; these data are obtained from the annual audited accounts and financial reports published in the Nigerian Stock Exchange fact book for ten (10) year period covering 2013 to 2022. Panel regression was employed. Audit quality is also proxy using a Dechow et al. (1995) modify Jones model while audit committee characteristics proxy with audit committee multiple directorships, gender diversity, financial expertise and meeting frequency of the audit committee.

The functional representation of the model is stated below;

Audit Quality = f (Audit Committee Characteristics)

AUDQ = f (MDAC, ACGD, ACFE, ACFM, FRSZ)

The adaption of the model below was in line with the work of Bala (2014); Musa et al., (2014); Bala and Gugong (2015); Mbobbo and Umoren (2016); and Onyabe et al., (2018).

This model is econometrically expressed as;

$$DACC_{it} = \beta_0 + \beta_1 MDAC_{it} + \beta_2 ACGD_{it} + \beta_3 ACFE_{it} + \beta_4 ACFM_{it} + \beta_5 FRSZ_{it} + \mu_{it}$$

Where: DACC = Discretionary Accruals; MDAC = Multiple Directorships of Audit Committee

ACGD = Audit Committee Gender Diversity; ACFE = Audit Committee Financial Expertise

ACFM= Audit Committee Frequency of Meetings; FRSZ= Firm Size (Control Variable)

$\beta_1 - \beta_5$ = Coefficient of explanatory variables; β_0 = Constant or Intercept of the regression line

μ = Error Term; i = individual firms; t = time period

Variables Measurement

Table 1
Variables Measurement

Variable	Nature of Variable	Proxy	Acronym	Measurement and Sources
Audit Quality	Dependent Variable	Discretionary accruals	DACC	Modified Jones Model (1995)
Audit Committee Characteristics	Independent Variable	Audit Committee Multiple Directorships	MDAC	Is the proportion of audit committee members with at least one directorship in other firms to the total audit committee members.
		Audit Committee Gender Diversity	ACGD	Proportion of audit committee members that are female to the total number of audit committee members.

	Audit Committee Financial Expertise	ACFE	Proportion of audit committee members with the knowledge of accounting and finance to the total number of audit committee members.
	Audit Frequency Meetings	committee of	ACFM Is the number of audit committee meetings held in a year.
Control Variable	Firm Size	FRSZ	Log of Total Asset.

Source: Retrieved from literature by the Authors (2023)

4. RESULT AND DISCUSSION

Table 2
Descriptive Statistics

Statistics	DACC	MDAC	ACGD	ACFE	ACFM	FRSZ
Mean	0.0902035	0.540667	0.086000	0.765667	3.933333	5.000000
Max	0.137773	0.700000	0.300000	1.000000	5.000000	1.820000
Min	0.040549	0.330000	0.000000	0.500000	3.000000	1.120000
Std	0.022624	0.099548	0.088692	0.153054	0.365148	5.530000
Skewness	0.097436	0.423109	0.382026	0.206548	-0.877250	1.195625
Kurtosis	2.599952	2.347734	1.992306	2.038860	7.166468	3.335269
JB	0.247516	1.426919	1.999028	1.368047	25.54717	7.288096
Prob	0.883593	0.489946	0.368058	0.504583	0.000003	0.026146
Observation	30	30	30	30	30	30

Source: Authors' Analysis (2023).

The average value of discretionary accrual is 0.09, it indicates that on the average, the discretionary accruals value of the cements firms is 9%. The multiple directorships of the audit committee have an average value of 54%. With regard to the gender diversity of the audit committee, the cement firms possess 8%. The average value of audit committee financial expertise of the cement company is 76%, while the average times audit committee meets is 4 times.

Correlation Coefficient Matrix

Table 3
Correlation Coefficient Matrix

Correlation Probability	DACC	MDAC	ACGD	ACFE	ACFM	FRSZ
DACC	1.000000 -----					
MDAC	-0.045888 0.8097	1.000000 -----				
ACGD	-0.009719 0.9593	-0.335958 0.0695	1.000000 -----			
ACFE	0.053603 0.7785	-0.132654 0.4847	-0.031804 0.8675	1.000000 -----		
ACFM	0.076701 0.6871	-0.245380 0.1912	0.364146 0.0479	0.327836 0.0770	1.000000 -----	
FRSZ	0.474222 0.0081	0.381506 0.0375	-0.343470 0.0631	-0.172999 0.3606	0.020554 0.9141	1.000000 -----

Source: Authors' Analysis (2023).

The correlation matrix of the independent variables is also shown in the table above. Variables are found to correlate reasonably well (between 0.381 and -0.031). The general rule of thumb is that if the coefficient of correlation between two regressors is greater than 0.8, then multicollinearity is a serious problem. There is no coefficient of correlation greater than 0.8. This suggests that multicollinearity is not a problem in model valuations.

Variance Inflation Factor

Table 4
Variance Inflation Factor

Variable	VIF	1/VIF
C	NA	3.460384
MDAC	1.230803	3.878879
ACGD	1.800423	3.551597
ACFE	1.184149	1.384060
ACFM	1.410163	1.706783
FRSZ	1.592452	7.330231

Source: Authors' Analysis (2023)

Table above presents the variance factor (VIF) and tolerance coefficients of each of the explanatory variables. It is observed that the collinearity diagnosis revealed a VIF well below 10, a tolerance above 0.2. This shows that there is no threat of multicollinearity or independent errors.

Random Effect Model Regression Results

Table 5

Random Effect Regression Results

Variable	Coefficient	Standard Error	T-statistics	Prob
C	-0.016758	0.022369	-0.749163	0.4610
MDAC	-0.050865	0.035553	-1.430655	0.1654
ACGD	-0.120938	0.048680	-2.484327	0.0204
ACFE	-0.193503	0.069408	-2.787920	0.0102
ACFM	-0.006948	0.010232	-0.679039	0.5036
FRSZ	0.028106	0.005452	5.154978	0.0000
R ²	0.534			
Adj. R ²	0.437			
F-Statistics	5.516			
Prob (F-Statistics)	0.001			
Hausman P-value	0.3623			
Lagrange Multiplier Test	0.0404			
Normal Test	0.84			
Heteroskedasticity Observer R-square	0.3091			
Serial Correlation LM Test	0.4389			

Source: Authors' Analysis (2023) (Dependent Variable: DACC).

DACC = -0.016758-0.050865MDAC-0.120938ACGD-0.193503ACFE-0.006948ACFM + 0.028106FRSZ is shown by the regression line. This regression line indicates that discretionary accruals (DACC) will decrease by 0.050865 units for each unit increase in multiple directorships The audit committee (MDAC) decreased by 0.120938 units for each 1 unit increase in gender diversity of the audit committee (ACGD), decreased by 0.193503 units for each 1 unit increase in financial competence of the audit committee (ACFE), decreased by 0.006948 units for each unit increase in financial expertise of the audit committee (ACFE). Gender diversity coefficient of the audit committee and the financial expertise of the audit committee are negative and significant, which means that they have an indirect impact on discretionary accruals, it indicates that they minimize the management of earnings, thereby increasing the efficiency of the audit.

The multiple directorships of the audit committee and the frequency of meetings of the audit committee do not have statistical significance on discretionary accruals because their p-value is greater than the t-value of 0.05 and 0.5036, respectively. However, the coefficient of multiple directorships of the audit committee and the

frequency of meetings of the audit committee are negative, suggesting that they have an indirect effect on discretionary accruals though they are not statistically significant.

5.516 F-Statistic and its corresponding 0.001 P-value suggest that the model is acceptable. The Determination Coefficient (R^2) of 0.534 indicates that approximately 53% of the DACC variance can be explained by audit committee multiple directorships, gender diversity, the financial experience and frequency of meetings of the audit committee. The Hausman Specification Test shows that the P-value of 0.3623, which is more than the critical value of 0.5, the Random Effect Model is better matched to the Fixed Effect Model. The choice between the pooled OLS and the random effect model of the panel depends on the Lagrange multiplier LM test probability value. The p-value for the Lagrange multiplier LM test LM test is 0.0404; this value is less than 5%, so that the approval of the panel random effect model can be inferred.

Discussion of Findings

The influence of multiple directorships of the audit committee on discretionary accruals is negative, which means that multiple directorships of the audit committee will minimize earnings management, even though this effect is negligible. This result is highly consistent with research conducted by Ghafran (2013); Bhasker (2018); but contradicts Adeyemi et al. (2012); Atu et al. (2013); Baccouche et al. (2013); Vlaminc and Sarens (2015); Mishra and Malhotra (2016) and Jaafar (2016) empiric works.

The adverse effect of the gender composition of the audit committee on discretionary accruals shows that women-represented audit committees are less likely to engage in earnings management. This proof is consistent with that of Ittonen et al. (2011), Salleh et al. , (2012); Ismail and Abdullahi (2013); Mulder (2017); Overmans (2017); Nwangi et al . (2017), but they refute Adagye (2019) findings.

There is a stronger propensity for the audit committee with adequate experience and expertise in financial management to minimize earnings management. Bala and Gugong (2015); Umobong and Ibanichuk (2017); Agwor and Onukogu (2018); Alkilani, Hussin and Salim (2019) are also in line with this finding. This finding contradicts the empirical studies of Musa et al. Research (2014); Muhammad et al. (2016); Kibiya et al. (2016); Mbobo and Umoren (2016); Osarumwense and Aderemi (2016); Anis and Indira (2017); Salaou et al. (2017).

The result also suggests that audit committee that meets regularly would be able to conduct monitoring tasks more efficiently than those that do not meet regularly. This result is consistent with previous research results, such as Mbobo and Umoren (2016); Moses (2016); Salawu et al. (2017); Khudhair et al. Sukma and Bernawati (2018). Study by Bala and Gugong (2015); Mishra and Malhotra (2016); Osarumwense and Aderemi (2016); Shankaraiah and Amiri (2017) contradicts the results.

5. CONCLUSION AND RECOMMENDATIONS

Conclusion

The study concludes that the gender composition of the audit committee and the financial competence of the audit committee have a substantial negative influence on the discretionary accruals of listed cement firms in Nigeria, although multiple directorships and the frequency of meetings of the audit committee have significant negative effects on the discretionary accumulation of listed cement firms in Nigeria. The following conclusions are therefore taken on the basis of the results of the study;

When audit committee members hold external directorship positions, the audit committee can provide effective monitoring of earnings management, Audit committee of listed cement companies with female members have higher audit quality and are less likely to participate in earnings management, Listed cement manufacturing firms are capable of obtaining quality financial reporting with audit committee members with accounting and financial expertise, Lastly, meetings of the audit committees will result in more efficient monitoring.

Recommendations

Based on the findings of the study, the research offers the following recommendations:

The audit committee of listed cement companies should be composed of members who hold external directorships because members of the audit committee with external directorships have the reputation, skills and experience that will be brought to bear in their duties as members of the audit committee. The presence of female directors in the audit committee and gender diversity in the composition of the audit committee will enhance corporate governance and protect investors, Members of the audit committee should be selected on the basis of their accounting and finance knowledge, as this study has shown that the financial expertise of the audit committee improves the audit quality of listed cement firms in Nigeria, Finally, the increase in the number of meetings of the audit committee, since it has been found that the

increase in the number of meetings helps to improve the quality of the audit, will make the audit committee more active in monitoring and improving the quality of the audit.

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