

Kaoje, Abdulsalam Nasiru; Alkali, Mohammed Yusuf; Modibbo, Abubakar

## Article

# The effect of audit committee characteristics on earnings management in Nigerian listed firms

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## Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/econis-archiv/>

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Abdulsalam Nasiru Kaoje,  
Mohammed Yusuf Alkali,  
Abubakar Modibbo

## THE EFFECT OF AUDIT COMMITTEE CHARACTERISTICS ON EARNINGS MANAGEMENT IN NIGERIAN LISTED FIRMS

*This study focuses on the effect of audit committee characteristics on earnings management among Listed Firms in Nigeria with aim to ascertain whether audit committee characteristics has effect on earnings management. Audit committee in an organization is to support firm's governance and oversight functions with the regard to financial reporting, risk management system internal control structure, ethical accountability and internal and external audit functions. Earnings management is an attempt by managers to alter financial information either for their private gain or for the gain of stockholders. The study population was 190 firms listed in the Nigerian Stock Market. The study sample was 150 firms because 40 firms could not provide the needed data for the study as at 2014 to 2019. The study data was generated from the Thomson Reuters Data stream and other variables were handpicked from the firm's annual reports covering the period of 2014–2019. A Generalized Least Square (GLS) estimator was used in estimating the parameters. The study provides positive and significant relationship between Audit Committee Independence (ACIND), Audit Committee Meetings (ACMT) and Earnings Management of listed Nigerian Firms in Nigeria. However, negative relationship between Audit Committee Size, Audit Committee Financial Expertise, Firm Size and Earnings Management was reported among the Listed Firms in Nigeria. Policy maker should provide policy on the composition of Audit for the committee members to clearly spelt out to enable members perform their functions effectively. Further study should look at diversity of audit committee, ethnicity, and religious influence because of the Nigerian diversity on ethnicity and religion.*

**Keywords:** audit committee, financial expertise, firm size, earnings management, discretionary accruals, Listed Firms in Nigeria.

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### 1. Introduction

One of the critical success factors of any corporate entity is the adequate and effective controls over its financial management. This is so, as lack of proper controls affects an organization adversely. For instance, some of the high profile financial scandals and the collapse of Enron and WorldCom were as results of ineffective controls to detect and report the unethical accounting practices. One of such contemporary unethical issues in accounting is earnings manipulations serves as a strategic tool used by management under the pretext of maximizing firm's value and reducing risks. This is possible by distorting the application of Generally Accepted Accounting Principles (GAAP). Earnings management has being receiving attention from the regulators, accounting standard setting bodies and researchers from all parts of the world. This is because the practice, according [1] audit committees with accounting and financial expertise can reduce earnings management.

Nigeria has had its own share of financial reporting failures in Cadbury Nigeria Plc in 2009, Afribank Nigeria Plc faced problem of financial reporting in 2009, and Intercontinental Bank Plc in 2009 and in 2017 the cases of Oando Oil Plc and Arik Airline. These cases of accounting failures in most countries has necessitated the review of the existing corporate governance codes as well as the reform of the entire financial reporting framework to address governance and financial reporting anomalies. In Nigeria, the regulatory authorities have responded by compelling companies to comply with stringent corporate governance codes, from Security and Exchange Commission (SEC) code of corporate governance 2003 to the reviewed codes of 2018 and to the most recent codes of 2020, to guide the operation of public companies listed in the Nigeria Stock Exchange (NSE) market. Owing to the above, every public company in Nigeria is required under section 359 (3) and (4) of the CAMA 2020, to establish an Audit Committee. It is the responsibility of the Board to ensure that the committee is constituted in

the manner stipulated and is able to effectively discharge its statutory duties and responsibilities.

Studies such as [2] shown that the role of Audit Committees in monitoring management is necessary and financially rewarding. These studies provide different perspectives on the direction of their association, the outcome of the studies, which are mostly, conducted in developed nations motivated more studies in the area in order to investigate whether Audit Committee characteristics can reduce earnings management in different economics. This is because despite the attention given by practitioners and regulators to corporate failure, the issue has become the order of the day. This further necessitates the need to investigate the likely impact of Audit Committee characteristics on earnings management of listed food and beverages Firms in Nigeria.

Therefore, *the main objective of this paper* is to examine audit committee characteristics and earnings management of listed food and beverages firms in Nigeria. The audit committee characteristics that were used covers audit committee size, audit committee independence and audit committee financial expertise.

## 2. Materials and Methods

**2.1. The concept of audit committee.** According to Corporate Finance Institute (CFI), An Audit Committee is a sub-group of a company's board of directors vested with the responsibility of oversight of financial reporting and related internal control including the disclosure process. To be successful, the audit committee should be aware of the processes and internal controls in the organization, it essence to entrench the culture of financial probity in an organization. Audit Committee varies according to the objectives, functions and responsibilities given to them [3]. Define audit committee as «a group of persons selected from members of the board of directors who are responsible for retraining independence of auditors». Therefore, the primary objective behind the establishment of audit committee is to improve quality of audit and check the board of directors thereby increasing the quality of financial reporting.

**2.2. The concept of earnings management.** Earnings management is a vital aspect of life of any firm. There is no consensus on the concept of earnings management. This is because different scholars define earnings management in different perspectives. To begin with, author of [4] defined earnings management as «a purposeful intervention in the external financial reporting process with extent of obtaining some private gain». Author of [5] opined that «earnings management occurs when management has the opportunity to make accounting decisions that change reported income and exploit those opportunities». Additionally, authors of [6] indicate that earnings management occurs when managers use judgment in financial reporting and in structuring transaction to alter financial report either to mislead some stakeholders about the underlying economic performance of the company or influence contractual outcomes that depend on reported accounting numbers. Authors of [7] mentioned earnings management as the use of accounting methods to provide financial information that presents an excessively positive view of company business activities and financial position.

**2.3. Measurement of earnings management.** Measurement of earnings management is an integral part of firms towards probity and effective financial management. Various methods have been developed to measure and test earnings management. Authors of [6, 8] used selection of accounting procedures and changes in accounting policies to detect earnings management. Authors of [9] use specific accounting transactions as a device for detecting earnings manipulations. Authors of [10] recommended the use of small earnings measures or small profits to detect whether Firms manage earnings in order to meet earnings bench-marking. Authors of [11] suggested that a widely accepted measure of earnings management is the discretionary accruals; and this was adopted by authors of [12, 13].

**2.4. Review of empirical studies.** Audit committee plays an important role in monitoring management to protect shareholders' interest. The code of best governance practice in Nigeria requires that the committee largely independent, highly competent and possess high level of integrity. It is responsible for the review of the integrity of financial reporting and oversees the independence and objectivity of the external auditors. Audit committee vis-a-vis earnings management has been explored literature using various constructs of audit committee effectiveness such as size of the board [13], composition and independence [14], audit committee meetings [15] financial expertise of committee member [16], and financial motivation of independent directors [12].

Authors of [17] investigated on voluntary audit committee characteristics incentives and earnings management in New Zealand. The study used a sample of 194 Firms out of 393 Firms listed in New Zealand Stock Market for the period 2004. They adopted performance adjusted modified Jones model in measuring discretionary accruals. Their finding showed a significant positive relationship between audit committee size and earning management. This is consistent with the with the proposition by [18] that streamlined boards can operate more effectively in maintaining management and can be extended to audit committee size. This indicates that smaller audit committee is more efficient in monitoring the financial reporting process, thereby reducing earnings management.

Authors of [19] investigated the impact of audit committees' size and financial expertise on the discretionary loan loss provision of listed Deposit Money Banks in Nigeria. The study employed correlation research design using a sample of 14 banks for a period of 5 years (2009–2013). Ordinary Least Squares multiple regression technique of data analysis was employed and the study found a significant association between discretionary loan loss provision and Audit Committee characteristics. The results indicated that audit committee size of the sampled Deposit Money Banks has significant negative impact on the discretionary loan loss provision. Similarly, the study found that the audit committee financial expertise of the sampled Deposit Money Banks has significant negative impact on the banks' discretionary loan loss provision. Based on the findings from this study, the study recommends that listed Deposit Money Banks in Nigeria should increase the size of their Audit Committees' membership. Such increment in the number should be watched in order not to be too large at the expense of economies of scale and increment in cost related to the committee operations. Similar results

were found using real earnings management in the Nigerian banks by [20], who examined the effect of audit quality and corporate governance on earnings management of banks in Nigeria. Correlation research design was adopted using a cross-section of 15 banks for a period of 10 years (2004–2013), while Generalized Least Squares (GLS) technique of analysis was used and the study found that audit committee (size, independence and financial knowledge) has a significant negative effect on earnings management proxy by cash flows manipulations during the period. Overall, the results indicated a significant relationship between aggregate real earnings management and audit committee variables.

Authors of [21] examined the impact of corporate governance mechanisms on financial reporting quality under Indian GAAP and Indian Accounting Standards (Ind. AS). A sample of 97 companies listed on the Bombay Stock Exchange is selected. Corporate governance mechanisms have been considered as independent variables, and financial reporting quality is the dependent variable. Corporate governance is measured by board effectiveness (board size, independence, diligence, and expertise), audit committee attributes (size, independence, diligence, and expertise), foreign ownership, and audit quality. Descriptive statistics, correlation, and OLS regression are conducted to estimate the results. The studies results reveal that board characteristics and audit committee attributes, except for audit committee diligence, have a significant effect on financial reporting quality. However, the impact of board diligence and audit committee attributes is negative. Foreign ownership has no contribution to financial reporting quality, but audit quality has a significant effect. The findings of the study have considerable implications for regulators, policymakers, managers, investors, analysts, and academicians.

Several studies support the negative association between audit committee independent and earning management which include among others [12] who investigated corporate governance and earnings management using two groups of US Firms, one with relatively high and one with relatively low levels of discretionary accrual in the year 1996 and showed that income increasing earning management is negatively associated with a large proportion of outside members who are not managers in other Firms, a clear mandate for overseeing both the financial statements and the external audit and a committee composed of only independent directors that meet more than twice a year. Consequently, audit committee composed of only independent directors will be negatively associated with earning management.

Author of [22] aimed at establishing the effect of audit committee characteristics on quality of financial reporting in non-commercial state corporations in Kenya. Specifically, the study established the effect of audit committee independence, diversity, financial competence and meetings on quality of financial reporting. The study used census on all 72 state corporations. Regression analysis was employed to measure relationships between dependent and independent variables. The findings from both correlation and regression analysis revealed that audit committee independence, audit committee diversity, audit committee financial competence and audit committee meetings had statistical significant relationship with the quality of financial reporting. The results revealed that audit committee independence, audit committee diversity, audit committee financial competence and audit committee meetings reduced the ratio of queried transactions to annual budget

of non-commercial state corporations in Kenya. From the findings, the study concluded that audit committees of non-commercial state corporations must have high level of independence, diversity, financial competence and hold quality meetings in order to enhance the quality of their financial reporting.

Authors of [23] investigate the impact of corporate governance mechanisms on financial reporting quality in India. The study uses data of a sample of some Indian listed companies in Mumbai Stock Exchange from 2012 up to 2016. Four regression models from previous studies [24–27] are employed to evaluate the impact of corporate governance mechanisms on financial reporting quality in India. The study examines three aspects of corporate governance mechanisms namely; board of directors (size, composition, and diligence), audit committee (size, composition, and diligence) and audit quality. It has found that corporate governance mechanisms have no impact on contribution to the quality of financial reporting. It is recommended that models of financial reporting quality need to be developed and the role of corporate governance should be revised in order to improve its role in financial reporting quality and avoid earning management or any future scandals.

Authors of [28] investigated the influence of audit committee characteristics on the likelihood of financial restatements by firms in Malaysia. Annual reports of 350 firms that have restated their financial statements in the year 2008 and 2009 are analyzed. An additional 350 firms that did not restate their financial statements are considered, resulting in a total of 700 observations. Regression analysis identifies audit committee characteristics such as its independence, size, expertise and activity as statistically significant in explaining the likelihood of financial restatements. Authors of [29] investigated the effectiveness of the role of audit committees in Yemeni commercial banks, by investigating the basic requirements for them to effectively carry out their primary roles. Also, to check the extent of audit committees roles in strengthening the independence of external auditors, and their contributions in enhancing the financial reports quality. The researchers designed a questionnaire that was distributed to internal, external auditors, regulators, and the people who are responsible for financial statements in seven commercial banks regulated by central bank of Yemen. The results showed that the audit committees do not have most of the basic requirements necessary for their effective functioning. They found out that their roles do not significantly contribute to improving the financial reporting quality, and do not also support the independence of external auditor.

Authors of [15] documented that audit committees also face incentives to effectively monitor managers in form of legal liability in reputational work. As such, financial expertise is directly linked with better financial reporting quality [30]. Also [31] who studied the relationship between audit committee financial expertise and earnings management found that audit committee with both financial expertise and high relative status are more effective at determining earnings management as measured by accounting irregularities and abnormal accruals.

Authors of [32] analyzed the effect of accounting expert of audit committee on earnings management. They also assessed the role of audit committee on earnings management with audit committee status as moderating variable. The population is all of firms listed in Indonesia Stock

Exchange. Purposive sampling is used to collect data. Data used financial statements and annual report companies from Indonesia Stock Exchange website. Moderated Regression Analysis (MRA) was used to analyze the hypothesis. The result shows that accounting expert of audit committee has negative effect on earnings management. Yet, variable of audit committee status cannot moderate the relationship between accounting expert of audit committee and earnings management in Indonesia.

Author of [33] examined the possibility of a relationship between the manipulation of results and the quality of the audit, based on the study of the behavior of discretionary accruals in Portuguese non-listed companies. The study used a sample of 4723 companies from 2013 to 2015. Using a multiple linear regression results of the study indicated that there is a relationship between audit quality and earnings manipulation. The level of earnings management is significantly lower among companies contracting a Big 4 audit firm, as compared to companies using a non-Big 4 audit firm.

Authors of [34] investigated the impact of audit committee expertise on earnings management practices of quoted food and beverages manufacturing firms in Nigeria. Data was collected from the annual reports of 15 sampled firms using convenience sampling. The study covered the period 2006 to 2016. Earnings management was measured by discretionary accruals using Modified [24] model. Ordinary Least Square regression was applied in the analysis, and the study found that audit committee size was redundant due to constancy of data points, meeting frequency failed the test of statistical significance at 5 % level, while the relationship between committee expertise and earnings management was negative and significant. In addition, the results show that firm size has a positive but insignificant impact on earnings management. The study concluded that audit committee expertise can restrain earnings management practices of quoted food and beverages manufacturing firms in Nigeria, and that the larger a firm gets, the greater the tendency of its managers to manage earnings. Authors of [35] examined the influence of audit price on the relationship between audit committee attributes and cosmetic accounting in the listed Nigerian firms. The study used pooled logistic regressions to analyse 624 firm-year observations of the sample firms from 2008 to 2016. The study found that audit committee financial accounting expertise, audit committee legal expertise and audit committee female membership were negatively related to cosmetic accounting. The negative relationship is highly pronounced when a firm incurs higher audit fees.

Authors of [36] examined the association between audit committee characteristics and financial reporting quality of listed consumer goods firms in Nigeria. This study adopts correlational research design. The population of the study is all the twenty-one (21) consumer goods companies listed on the floor of the Nigerian Stock exchange. Data utilized for the study are collected from the annual reports of companies from 2013 to 2018. The study employs multiple regression techniques for the purpose of data analysis and the result show that audit committee expertise and frequency of meeting have positive and significant effect on financial reporting quality while audit committee size and audit committee gender have no significant relationship on the financial reporting quality. The study concludes that audit committee is a veritable tool for improving financial reporting quality of companies. Based on the findings the study recommends that more accounting and

finance experts should be appointed to audit committees of consumer goods companies in Nigeria.

Authors of [37] indicated a negative association between audit committee meetings and earnings management. Regular audit committee meetings, which represent the degree of assiduousness and scrutiny of committee members, demand audit committee members to be proactive and inquisitive about the financial reporting process. In contrast, authors of [38] examined audit committee characteristics and corporate disclosure of Nigerian deposit money bank using ordinary least square. The result showed a positive but insignificant relationship between corporate governance disclosure level and frequency of meetings.

Authors of [39] examined the effect of audit committee on earnings management in Nigerian quoted companies. Data for the study were sourced from annual reports of 131 companies quoted on the Nigerian Stock Exchange over the period of 2008–2014. The multivariate regression technique was utilized to estimate the model. The study found that audit committee independence, audit committee frequency of meetings and audit committee meeting attendance had a negative significant impact on earnings management. This implies that audit committee independence, audit committee frequency of meetings and audit committee meeting attendance are useful in reducing to the barest minimum, management's tendencies for opportunistic behaviour to manipulate earnings.

Authors of [40] examined the relationship between audit committee characteristics and FRQ of food and beverage firms using secondary data obtained from Nigeria Stock Exchange from 2011–2014. Audit committee financial expertise and audit committee independence were regressed against FRQ measured by relevance and reliability while controlling for number of attendance at audit committee meetings, firms age, firm size, and audit committee tenure. The study found that increase in audit committee independence, financial expertise of members, firm age and frequency of meetings increases FRQ. While increase in audit committee size and firm size decreases FRQ.

Authors of [41] investigated the prediction of audit physiognomies on selected Nigerian banks' income smoothing following the alarming rate of corporates failures which culminates into the inability of organizations to meet the expectations of their various interested parties. The population of the study comprised of 15 quoted deposit money banks listed on the Nigerian stock exchange, for a period of seven years from 2010 to 2017. Data for the study was extracted from the firms' annual reports and accounts. Multiple regressions technique of analysis was used and the study found that audit committee characteristics have a significant effect on earnings management of listed deposit money banks. While audit committee size and committees' financial expertise showed insignificant relationship with earnings management, audit committee's independence and frequency of meetings are positively and significantly related to earnings management. The study recommended among others that the audit committee meeting should be more than four times a year because the more the meetings the better the monitoring and regulators should have a statutory position on the maximum number of audit committees meetings, as SEC code of corporate governance is silent on this.

**2.5. Theoretical framework.** This paper used a panel data analysis that utilizes secondary dataset over the period



2014 to 2019 for the estimation of the parameters. A Classical Linear Regression Model (CLRM) was employed in establishing the existence or otherwise of the relationship, degrees of the relationship, if any, between the audit committees and earnings management. The audit committee was defined by Audit committee size, Audit Committee Independence, Audit Committee financial expertise, Audit Committee meetings and a control variable Firm size of Firm. Earnings management was defined by discretionary accruals.

The study population of this paper covered 190 Listed Firms in Nigeria. However, a sample of one hundred and fifty (150) Firms was used for this study. This is because forty (40) firms could not provide enough data for the study. An econometric test which includes descriptive statistics, inferential statistics such as correlation analysis, Ordinary Least Square (GLS) estimation techniques and diagnostic test were conducted.

This paper adopted Agency theory as its underpinning theory for the study. Agency theory originated from the work [42]. They explored the concept of agency and the applications toward the development of large corporations. They found out how the interest of the directors and managers differ from the owners of the firm, thereby using the concepts of agency-principal which explained the genesis of those conflicts.

Authors of [43] further on the work [42], to develop agency theory as a formal concept. They also formed a school of thought, arguing that corporations are structured to minimize the costs of getting agents (agency costs) to follow the direction and interests of the principals. Hence, the Agency Theory for this study will provide and insight on whether audit committee has any significant impact managers' earnings management.

**2.6. Model Specification.** This paper used econometric model with modification, which is in line with the work of [2, 44, 45]:

$$DACC_{it} = \beta_0 + \beta_1 ACSIZ_{it} + \beta_2 ACINP_{it} + \beta_3 ACFEP_{it} + \beta_4 ACMET_{it} + \beta_5 FSIZ_{it} + \epsilon_{it},$$

where  $\beta_0$  – Constant;  $ACSIZ$  – Audit Committee Size of firm  $i$  in time  $t$ ;  $ACINP$  – Audit Committee Independence of firm  $i$  in time  $t$ ;  $ACFEP$  – Audit Committee Financial Expertise of firm  $i$  in time  $t$ ;  $ACMET$  – Audit Committee Meetings of firm  $i$  in time  $t$ ;  $FSIZ$  – Firm Size of firm  $i$  in time  $t$ ;  $\epsilon$  – other factors that were not captured by the model.

Audit committee size, Audit Committee Independence, Audit Committee Financial Expertise, Audit Committee Meetings and a control variable Firm Size of firm.

### 3. Results and Discussion

**3.1. Descriptive statistics.** Table 1 is for the characteristics of the variables for the study. There are 150 observations from the firms used for the study. In the Table it has shown that ACFEP has the highest mean of 18.9879 with the minimum 0.8752 and max of 996.7195. This shows that ACFEP provide evidence of significance of financial expertise on audit committee for earnings management. The result of Skewness and Kurtosis was within the range of  $-0.96$  to  $0.78$  and  $1.96$  to  $3.27$  respectively. The Skewness and Kurtosis are within acceptable limits and would not affect the results of the regressions.

**Table 1**

Descriptive Statistics

Variables	Obs	Mean	Medium	Min	Max	Skew	Kurt
<i>ACSIZ</i>	150	16.7114	59.3596	0.4400	898.0000	0.62	2.81
<i>ACIND</i>	150	17.1659	29.8743	0.7518	356.6106	0.77	3.68
<i>ACFEP</i>	150	18.9879	25.4875	0.8752	7.000	0.77	3.68
<i>ACMTN</i>	150	11.1979	26.6795	10.0038	23.5048	0.09	2.98
<i>FSIZ</i>	150	5.9690	21.5732	0.0001	6.3043	0.6	3.1

**Notes:** Panel A: All variables in the table are based on the annual report published by firms listed in the Nigerian stock market. *SP* – Share Prices three months after the fiscal year for firm  $i$ ; *ACSIZ* – Audit Committee Size of firm  $i$  in time  $t$ ; *ACINP* – Audit Committee Independence of firm  $i$  in time  $t$ ; *ACFEP* – Audit Committee Financial Expertise of firm  $i$  in time  $t$ ; *ACMET* – Audit Committee Meetings of firm  $i$  in time  $t$ ; *FSIZ* – Firm Size of firm  $i$  in time  $t$

**3.2. Correlation analysis.** Pearson's correlation matrix is a primary source of providing relevant information on accounting [46]. A summary of Pearson's correlation statistics for the dependent and independent variables are presented in the section. All variables of the same objectives correlation coefficient were presented in the section.

Table 2 presented variables that are positively, negatively or not associated with EM. In the Table 2, the variable ACSIZ had a positive correlation of 0.4080 at a 1 % significance level with EM signifying that an increase in ACSIZ will provide an incremental increase in EM. Also, a negative correlation with a coefficient of  $-0.1292$  existed for ACIND at a significance level of 1 % with the stock price. This shows that a decrease in interfering in ACIND will provide an increase in EM. Also, ACFEP provide a positive association with EM having a coefficient of 0.1498 at a 1 % significant level. This shows that providing financial experts in the audit committee will provide more EM. The variable ACMTN has a coefficient 0.1197 with a significant level of 1 % showing frequent meetings has association with the increase in EM. The FSIZ has a coefficient of 0.0389 but there is no evidence of association with EM. This means the size of a firm do not have any association with the increase in EM. This study is consistent with several studies in accounting with either positive, negative or no association between dependent and independent variable [47–49].

**Table 2**

Pearson's Correlation Analysis

Variables	EM	ACSIZ	ACIND	ACFEP	ACMTN	FSIZ
<i>EM</i>	1.000	–	–	–	–	–
<i>ACSIZ</i>	0.4080***	1.000	–	–	–	–
<i>ACIND</i>	-0.1292***	-0.0181	1.000	–	–	–
<i>ACFEP</i>	0.1498***	0.0584	0.9910***	1.000	–	–
<i>ACMTN</i>	0.1197***	0.0595	-0.0123	-0.0052	1.000	–
<i>FSIZ</i>	0.0389	0.2428***	-0.0045	0.0216	-0.004	1.000

**Notes:** Panel A: All variables in the table are based on the annual report published by firms listed in the Nigerian stock market. *SP* – Share Prices three months after the fiscal year for firm  $i$ ; *ACSIZ* – Audit Committee Size of firm  $i$  in time  $t$ ; *ACINP* – Audit Committee Independence of firm  $i$  in time  $t$ ; *ACFEP* – Audit Committee Financial Expertise of firm  $i$  in time  $t$ ; *ACMET* – Audit Committee Meetings of firm  $i$  in time  $t$ ; *FSIZ* – Firm Size of firm  $i$  in time  $t$

**3.3. Multiple Regression Analysis (GLS Test).** The result of the multiple regression analysis for the estimation of the impact of audit committee characteristics and earnings management of listed food and beverage firms in Nigeria was presented in Table 3.

Multiple Regression Results

Table 3

Depdt. Variable: Earnings Management (DACC)			
Ind. variable	Coefficient	Std. error	p-value
<i>ACSIZ</i>	-0.0206	-0.0883	0.020
<i>ACIND</i>	0.1449	0.0661	0.028
<i>ACFEP</i>	-0.1904	0.06221	0.002
<i>ACMTN</i>	0.0162	0.0083	0.051
<i>FSIZ</i>	-0.0253	0.0083	0.002
Constant	0.5717	0.1588	0.0000

**Notes:** Panel A: All variables in the table are based on the annual report published by firms listed in the Nigerian stock market. *SP* – Share Prices three months after the fiscal year for firm *i*; *ACSIZ* – Audit Committee Size of firm *i* in time *t*; *ACIND* – Audit Committee Independence of firm *i* in time *t*; *ACFEP* – Audit Committee Financial Expertise of firm *i* in time *t*; *ACMET* – Audit Committee Meetings of firm *i* in time *t*; *FSIZ* – Firm Size of firm *i* in time *t*

Table 3 shows that there is negative and significant relationship between Audit Committee Size, Audit Committee Financial Expertise (ACFEP), Firm Size and Earnings Management (DACC). This implies that an increase in Audit Committee Size, Audit Committee Financial Expertise (ACFEP), Firm Size affects earning management negatively. Other result from the study indicated that there is positive and statistically significant relationship between Audit Committee Independence (ACINDP), Audit Committee Meeting (ACMET) and Earnings Management (DACC). This means that Audit Committee Independence (ACINDP), Audit Committee Meeting (ACMET) influence earning management positively.

### 3.4. Discussion of the results

#### 3.4.1. Audit Committee Size and Earnings Management.

Table 3 shows that there is a negative and statistically significant relationship between audit committee size and earnings management of listed food and beverages firms in Nigeria. This can be observed from the coefficient of -0.020 (0.21 %) with *p*-value of 0.020 which is significant at 5 %. This indicates that the size of audit committee members is negatively impacting on earnings management of listed food and beverages firms in Nigeria. The implication of this result is that, larger audit committees are better at reducing earnings management of listed food and beverages firms in Nigeria.

**3.4.2. Audit Committee Independence and Earnings Management.** The result from the findings revealed that there is positive and statistically significant association between audit committee independence and earning management of listed food and beverages of firms in Nigeria. This means that audit committee independence is positively and statistically significantly associated with earnings management of listed food beverages Firms in Nigeria with probability value of 0.028, that is 5 % level of significance and beta coefficient of 0.1449. This implies that audit committee

independence may not serve as a means of reducing earnings manipulation by managers.

This is in conformity with the work of [50] that showed that audit committee independence is positively and significantly associated with earnings management.

**3.4.3. Audit Committee Financial Expertise and Earnings Management.** The model revealed an evidence of a significant negative relationship between audit committee financial expertise and earnings management of listed food and beverages Firms in Nigeria. This can be deduced from the coefficient of -0.1904 and *p* value of 0.002, indicating 5 % level of significance. This implies that financial expertise as one of the proxies of audit committees is negatively related to earnings management, which means that audit committee financial expertise reduces the possibility of earnings management of listed food and beverages Firms in Nigeria.

#### 3.4.4. Audit Committee Meetings and Earnings Management.

The result from the finding revealed that audit committee meetings have significant positive relationship with earnings management of listed food and beverages firms in Nigeria at 10 level of significance. This is observable from Table 3 containing a beta coefficient of 0.016 with 0.051 *p*-value. This implies that meetings up to four times do not guarantee better monitoring of earnings management of listed food and beverages firms in Nigeria. This supports the findings of [37] which indicated a negative association between audit committee meetings and earnings management. The result contradicts the findings of [51] that the number of meetings of the audit committee members has no effect on earnings management.

**3.4.5. Limitations of the study.** The study area was on the audit committee effect on earnings management. The study has provided evidences of relationships that are both positive and negative. Data was collected from Data Thomson Reuters Data stream and some were collected from or handpicked from firm's published annual reports, it would have been better if one method was used in the data collection. The Classical Linear Regression Model used for the study has been used on this type of study, there is need to have a more robust method like GMM if a different result could be obtained.

The study sample was enough but some of the firms not used for the study were large and can provide more information if used in the study. The discretionally accruals used as a proxy for earnings management used in the study would not be enough to justify the effect of audit committee on earnings management. Further study should look at the other proxies of earnings management to see if different result could be obtained.

The periods of the study was for six years from 2014 to 2019 during the new accounting period. This period some firms were on the period of recessions and inflation particularly in the year 1998 to 1999. Therefore, further study should look at the period of commencement of IFRS in Nigeria to 2022 which is 10 years period.

## 4. Conclusions

The presence of negative significant relationship between audit committee size and earnings management of listed food and beverages firms in Nigeria made conclude

that larger audit committee members are more effective in monitoring the activities of the management, and they are also better at maintaining the financial reporting process. Similarly study also submits that audit committee members with financial knowledge are better in detecting earnings management there by reducing the likelihood of aggressive earnings management provided by managers. It was further established that audit committee independence might not guarantee that managers would not manipulate earnings.

Additionally, the study concluded that, Audit Committee Meetings more than four times will not result in more effective monitoring. This was the reason why this study found positive relationship between audit committee meetings and earnings management of Listed Firms in Nigeria, as some firms held up to five meetings within a particular period of time.

Also, this relationship was strengthened by the Agency Theory in providing evidence of manager's control by the audit committee on earnings management. It provides evidence of strong relationship between audit committee and earnings management.

The paper also concluded that larger firms have strong internal control systems and governance mechanisms which allow them to access high quality services from large audit firms. This will go a long way in reducing earnings management established by managers. In the vein, audit committee characteristics of listed food and beverages influence earnings management since the proxies of these committees are significantly associated with earnings management of Listed Firms in Nigeria.

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### Conflict of interest

The authors declare that they have no conflict of interest in relation to this research, whether financial, personal, authorship or otherwise, that could affect the research and its results presented in this paper.

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### Data availability

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### References

- Handriani, E. (2020). Earning Management and the Effect Characteristics of Audit Committee, Independent Commissioners: Evidence From Indonesia. *Research in World Economy*, 11 (3), 108–123. doi: <https://doi.org/10.5430/rwe.v11n3p108>
- Jamil, N. N., Nelson, S. P. (2011). An Investigation on the Audit Committees Effectiveness: The Case for GLCs in Malaysia. *Gadjah Mada International Journal of Business*, 13 (3), 287. doi: <https://doi.org/10.22146/gamaijb.5484>
- Arens, A. A., Elder, R. J., Beasley, M. S. (2009). *Auditing and assurance services: An integrated approach*. New Jersey: Prentice Hall.
- Schipper, K. (1989). Commentary on earnings management. *Accounting Horizons*, 3, 91–102.
- Roman, L. W. (2009). Quality of Earnings and Earnings Management. *Journal of AICPA*, 2–4.
- Healy, P. M., Wahlen, J. M. (1999). A Review of the Earnings Management Literature and Its Implications for Standard Setting. *Accounting Horizons*, 13 (4), 365–383. doi: <https://doi.org/10.2308/acch.1999.13.4.365>
- Valaskova, K., Durana, P. (2020). Global context of disparities in earnings management among enterprises: Evidence from Slovakia. *SHS Web of Conferences*, 74. doi: <https://doi.org/10.1051/shsconf/20207401034>
- Sweeney, A. P. (1994). Debt covenant violations and managers' Accounting Responses. *Journal of Accounting and Economics*, 17 (3), 281–308. doi: [https://doi.org/10.1016/0165-4101\(94\)90030-2](https://doi.org/10.1016/0165-4101(94)90030-2)
- McMullen, D. A., Raghunandan, K. (1996). Enhancing audit committee effectiveness. *Journal of Accountancy*, 182 (2), 79–86.
- Holland, D., Ramsay, A. (2003). Do Australian companies manage earnings to meet simple earnings benchmarks? *Accounting & Finance*, 43 (1), 41–62. doi: <https://doi.org/10.1111/1467-629x.00082>
- Kothari, S. P., Leone, A. J., Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39 (1), 163–197. doi: <https://doi.org/10.1016/j.jacceco.2004.11.002>
- Chtourou, S. M., Bédard, J., Courteau, L. (2001). Corporate governance and earnings management view. *SSRN Electronic Journal*. doi: <https://doi.org/10.2139/ssrn.275053>
- Xie, H. (2001). The Mispricing of Abnormal Accruals. *The Accounting Review*, 76 (3), 357–373. doi: <https://doi.org/10.2308/accr.2001.76.3.357>
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33 (3), 375–400. doi: [https://doi.org/10.1016/s0165-4101\(02\)00059-9](https://doi.org/10.1016/s0165-4101(02)00059-9)
- Beasley, M. S., Carcello, J. V., Hermanson, D. R., Neal, T. L. (2009). The Audit Committee Oversight Process. *Contemporary Accounting Research*, 26 (1), 65–122. doi: <https://doi.org/10.1506/car.26.1.3>
- Kalbers, L. P., Fogarty, T. J. (1993). Audit committee effectiveness: an empirical investigation of the contribution of power. *Auditing: Journal of Practice and Theory*, 12 (1), 24–49.
- Sharma, V. D., Kuang, C. (2013). Voluntary Audit Committee Characteristics, Incentives, and Aggressive Earnings Management: Evidence from New Zealand. *International Journal of Auditing*, 18 (1), 76–89. doi: <https://doi.org/10.1111/ijau.12013>
- JENSEN, M. C. (1993). The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *The Journal of Finance*, 48 (3), 831–880. doi: <https://doi.org/10.1111/j.1540-6261.1993.tb04022.x>
- Abubakar, S., Abubakar, M., Shehu, A. S., Nahari, P. M. (2015). Do Audit Committee Size and Financial Expertise impact on Discretionary Loan Loss Provision? Evidence from Deposit Money Banks in Nigeria. *Abuja Journal of Business and Management*, 1 (3), 101–111.
- Abubakar, M. (2016). Effect of Audit Quality and Corporate Governance on Real Activities Manipulation in Nigerian Banks. *6<sup>th</sup> Economics & Finance Conference, OECD*. Paris. doi: <https://doi.org/10.20472/efc.2016.006.001>
- Almaqtari, F., Abdullah Hashed, A., Shamim, M., M. Alahdal, W. (2020). Impact of corporate governance mechanisms on financial reporting quality: a study of Indian GAAP and Indian Accounting Standards. *Problems and Perspectives in Management*, 18 (4), 1–13. doi: [https://doi.org/10.21511/ppm.18\(4\).2020.01](https://doi.org/10.21511/ppm.18(4).2020.01)
- Mwangi, K. (2018). Effect Of Audit Committee Financial Competence On Quality Of Financial Reporting Among Non-Commercial State Corporations In Kenya. *Archives of Business Research*, 6 (10), 435–555. doi: <https://doi.org/10.14738/abr.610.5386>
- Almaqtari, F. A., Al-Homaidi, E. A., Ahmad, A. (2018). Impact of corporate governance mechanisms on financial performance of hotel companies: Empirical evidence from India. *Asian Journal of Management Applications and Research*, 8 (2), 96–110.
- Jones, J. J. (1991). Earnings Management During Import Relief Investigations. *Journal of Accounting Research*, 29 (2), 193–228. doi: <https://doi.org/10.2307/2491047>



25. Dechow, P. M., Dichev, I. D. (2002). The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review*, 77 (s-1), 35–59. doi: <https://doi.org/10.2308/accr.2002.77.s-1.35>
26. McNichols, M. F. (2002). Discussion of the Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review*, 77 (s-1), 61–69. doi: <https://doi.org/10.2308/accr.2002.77.s-1.61>
27. Collins, D. W., Kothari, S. P. (1989). An analysis of intertemporal and cross-sectional determinants of earnings response coefficients. *Journal of Accounting and Economics*, 11 (2-3), 143–181. doi: [https://doi.org/10.1016/0165-4101\(89\)90004-9](https://doi.org/10.1016/0165-4101(89)90004-9)
28. Wan Mohammad, W. M., Wasiuzzaman, S., Morsali, S. S., Zaini, R. M. (2018). The Effect of Audit Committee Characteristics on Financial Restatements in Malaysia. *Journal of Asia-Pacific Business*, 19 (1), 4–22. doi: <https://doi.org/10.1080/10599231.2018.1419043>
29. Hazaea, S. A., Zhu, J., Alsharab, N., Khatib, S. F. A., Yueying, L. (2020). On the Effectiveness of Audit Committee Characteristics in Commercial Banks: Evidence from Yemen. *Journal of Critical Reviews*, 7 (18), 2096–2115. doi: <https://doi.org/10.31838/jcr.07.18.263>
30. Krishnan, G. V., Visvanathan, G. (2008). Does the SOX definition of an accounting expert matter? The association between audit committee directors' accounting expertise and accounting conservatism. *Contemporary Accounting Research*, 25 (3), 827–858. doi: <https://doi.org/10.1506/car.25.3.7>
31. Badolato, P., Donelson, D. C., Ege, M. (2013). Audit Committee Financial Expertise and Earnings Management: The Role of Status. *SSRN Electronic Journal*. doi: <https://doi.org/10.2139/ssrn.2335632>
32. Suprianto, E., Suwarno, S., Murtini, H., Rahmawati, R., Sawitri, D. (2017). Audit Committee Accounting Expert and Earnings Management with «Status» Audit Committee as Moderating Variable. *Indonesian Journal of Sustainability Accounting and Management*, 1 (2), 49–58. doi: <https://doi.org/10.28992/ijssam.v1i2.16>
33. Lopes, A. P. (2018). Audit Quality and Earnings Management: Evidence from Portugal. *Athens Journal of Business & Economics*, 4 (2), 179–192. doi: <https://doi.org/10.30958/ajbe.4.2.4>
34. Agwor, T. C., Osinachi, O. J. (2018). Audit Committee Expertise and Earnings Management of Quoted Food and Beverages Firms in Nigeria. *International Journal of Economics and Financial Management*, 3 (1), 44–55.
35. Bala, H., Amran, N. A., Shaari, H. (2019). Audit committee attributes and cosmetic accounting in Nigeria. *Managerial Auditing Journal*, 35 (2), 177–206. doi: <https://doi.org/10.1108/maj-06-2018-1897>
36. Emmanuel, O. G., Olatunji, O. L., Inuwa, F. M. (2020). Effect of Audit Committee Characteristics on Financial Reporting Quality of Quoted Consumer Goods Companies in Nigeria. *UNIBEN Journal of Accounting*, 4 (1), 12–27.
37. Inaam, Z., Khamoussi, H. (2016). Audit committee effectiveness, audit quality and earnings management: a meta-analysis. *International Journal of Law and Management*, 58 (2), 179–196. doi: <https://doi.org/10.1108/ijlma-01-2015-0006>
38. Ebirien, G. I., Chukwu, G. J., Ohaka, J. (2019). Audit Committee Characteristics and Corporate Governance Disclosure of Nigerian Deposit Money Banks. *Asian Journal of Economics, Business and Accounting*, 9 (3), 1–14. doi: <https://doi.org/10.9734/ajeba/2018/46100>
39. Sylvester, E., James, O. (2016). Effects of characteristics of audit committee on earnings management in Nigerian quoted companies. *Sokoto Journal of Management Studies*, 10 (1), 139–159.
40. Umobong, A. A., Ibanichuka, E. A. L. (2017). Audit committee attributes and financial reporting quality of food and beverage firms in Nigeria. *International Journal of Innovative Social Sciences & Humanities Research*, 5 (2), 1–13.
41. Ezeokoli, C. F., Caleb, D. A., Jesuwunmi, Onyinye, E. M. (2019). Nigerian Deposit Money Banks' audit committee Physiognomies and Earnings Management. *Canadian Contemporary Research Journal*, 1 (1), 4–20.
42. Berle, A., Means, G. (1932). *The modern corporation and private property*. New York: Macmillan.
43. Jensen, M. C., Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3 (4), 305–360. doi: [https://doi.org/10.1016/0304-405x\(76\)90026-x](https://doi.org/10.1016/0304-405x(76)90026-x)
44. Yang, J. S., Krishnan, J. (2005). Audit Committees and Quarterly Earnings Management. *International Journal of Auditing*, 9 (3), 201–219. doi: <https://doi.org/10.1111/j.1099-1123.2005.00278.x>
45. Baxter, P., Cotter, J. (2009). Audit committees and earnings quality. *Accounting & Finance*, 49 (2), 267–290. doi: <https://doi.org/10.1111/j.1467-629x.2008.00290.x>
46. Barth, M. E., Landsman, W. R., Lang, M. H. (2008). International Accounting Standards and Accounting Quality. *Journal of Accounting Research*, 46 (3), 467–498. doi: <https://doi.org/10.1111/j.1475-679x.2008.00287.x>
47. Mohammed, Y. A., Lode, N. A. (2015). The Value Relevance of Accounting Disclosures among Nigerian Financial Institutions after the IFRS Adoption. *Mediterranean Journal of Social Sciences*, 6 (1), 409–418. doi: <https://doi.org/10.5901/mjss.2015.v6n1p409>
48. Abdulsallam, N., Abubakar, M. Y., Alkali, M. Y., Bala, S. A. R. (2016). Quality of Accounting Reporting After the IFRS Adoption in Nigeria. *International Journal of Business, Economics and Management*, 3 (11), 160–172. doi: <https://doi.org/10.18488/journal.62/2016.3.11/62.11.160.172>
49. Shittu, A. M., Mohammed, Y. A. (2016). Price to Earnings Multiple and Stock Selection: Evidence from Malaysian Listed Firms Akademia Baru Price to Earnings Multiple and Stock Selection: Evidence from Malaysian Listed Firms. *Journal of Advanced Research in Social and Behavioural Sciences*, 3 (1), 96–103.
50. Fodio, M. I., Ibikunle, J., Oba, V. C. (2013). Corporate governance mechanisms and reported earnings quality in listed Nigerian insurance Firms. *International Journal of Finance and Accounting*, 2 (5), 279–286.
51. Handayan, Y. D., Ibrani, E. Y. (2020). The Effect of Audit Committee Characteristics on Earnings Management and its impact on Firm Value. *International Journal of Commerce and Finance*, 6 (2), 104–116.

**Abdulsalam Nasiru Kaoje**, PhD, Department of Accounting, Usmanu Danfodiyo University Sokoto, Sokoto, Nigeria, ORCID: <https://orcid.org/0000-0002-0992-2875>

✉ **Mohammed Yusuf Alkali**, PhD, Head of Department of Accountancy, Waziri Umaru Federal Polytechnic Birnin Kebbi, Kebbi, Nigeria, e-mail: [yusufalkali68@gmail.com](mailto:yusufalkali68@gmail.com), ORCID: <https://orcid.org/0000-0002-7875-9397>

**Abubakar Modibbo**, Lecturer, Department of Accounting, Federal University Birnin Kebbi, Kebbi, Nigeria, ORCID: <https://orcid.org/0000-0003-3143-5720>

✉ Corresponding author