

**AN INTERACTION BETWEEN BOARD ATTRIBUTES AND EARNINGS
MANAGEMENT OF LISTED MANUFACTURING COMPANIES IN NIGERIA**

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Abstract

The study investigated an interplay between board attribute and earnings management of listed manufacturing companies in Nigeria. This study tested some board attributes indicators (audit fee, board independence, and board size), and earnings management was proxied using discretionary accruals using a sample of forty-two (42) manufacturing companies listed on Nigerian Exchange Group while purposeful sampling techniques were used to sampled from the population, covering the study period from 2010 to 2021. The data were analyzed using the Generalized method of moment by the use of E-View 12 econometric software and multivariate- regression model. The findings of the study show that there is a positive and statistically insignificant relationship between audit fees and earnings management. The study therefore concludes that a positive and statistical relationship exists between board attributes and earnings management of listed manufacturing companies in Nigeria. The study consequently recommends that ethical standards should be encouraged by the regulatory agencies if not mandated.

Keywords: Audit Fee, Board Independence, Board Size, Stewardship Theory, Earnings Management

INTRODUCTION

Financial reporting is one of the primary responsibilities of management which enables them to give account of their stewardship. Managers of public companies are expected to prepare and present annual financial reports to shareholders, who are owners of the firm and other interested users to enable them to assess the performance and financial position of the reporting entity. The cardinal role of financial reporting therefore is the provision of information on the financial performance and position of the reporting entity that is useful to different users, to enable them to make informed economic decisions (Glautier, Underdown, & Morris, 2011). The Nigerian Code of Corporate Governance (NCCG) (2018) advised companies in Nigeria to engage chief executive officers who are capable in the organization areas of business and to display faithfulness and genuineness to attract board and shareholders' confidence. NCCG 2018 also advocates that CEOs should be accountable to the board. This confirmed that the CEO may need to have a genuine cordial connection with the board to increase the quality of reporting earnings.

In Nigeria, the manufacturing sector contributes significantly to the economic growth of the country. According to the Central Firms of Nigeria (CBN, 2019), the sector contributes about 90% of Nigeria's foreign exchange earnings. Despite its strategic importance, the operations of the manufacturing industries have been associated with allegations of scandalous financial practices recently. Allegations are associated with listed companies in Nigeria as exemplified by the case of African Petroleum (now Forte Oil) Plc, where a credit facility of 24 billion naira was not disclosed in the financial statements of the company (Orbunde, Oyewobi & Musa, 2021; Samaila, 2014). Interestingly, this material omission occurred under the watch of a Big 4 audit firm that is expected to constrain such unscrupulous practices.

It is widely recognized that auditing is a cornerstone in developing and enhancing the global economy in the world of business firms today. In the context of the business environment, auditors are required to provide objective assessments concerning whether companies are managed responsibly and effectively to achieve the intended results. Andersen (2000) suggested that the role of auditors could be classified into four: objectives, reporting lines, profession, and interactions with others. This is important for manufacturing companies to achieve accountability, improve operations, and have confidence among stakeholders.

The manufacturing sector plays an increasingly significant role in the economic emancipation of any nation, acting as a driver of economic growth in both developing and developed economies. Industrialization drives transformation and diversification of the economy to accelerate growth, discourages over-dependency on foreign products, and encourages sustainable development while enabling the state to achieve self-sufficiency (Ikenna, Etim & Yomi, 2022). In this regard, Al-Khaddash, Attar, and Suwaidan (2013) think that stakeholders in the manufacturing sectors need to gain assurance, that the data being reported are properly measured and fairly presented. Accordingly, auditors must raise their capability and independence level, use appropriate tools, and provide advisory services to fulfill each of their roles. The auditing mechanism has become a fundamental requirement in the business environment and has been established as a regulated activity in most industrialized countries (Piot, 2001) due to its important role in offering more confidence and transparency in financial reporting.

According to Hassan (2013), earnings management is the most extensively used measure of a firm financial performance given that financial reporting standards and accounting policies provide managers of a firm with considerable opportunities for manipulating earnings, it is not

surprising that the growing attention in accounting literature has been devoted to understanding the determinants of EM. Abubakar, Abubakar Anuforo, and Baba (2021), Olowokudejo and Oladimeji (2019) asserted that, the collapse of once profitable and prominent corporations (Enron, Xerox, WorldCom, Tyco, Waste Management, Rite Aid to mention a few) because of financial reporting fraud further reveals the harmful nature of EM. EM is the process of taking deliberate steps within the bands of Generally Accepted Accounting Practice (GAAP) to bring about the desired level of reporting performance (Kliestik et al, 2021).

The board of directors is charged with the responsibility of accounting for the activities of firms and rendering proper stewardship on how the financial resources of the shareholders are managed (Goel, 2012). According to Schipper (1989), the director must ensure that the financial statement reported is a reflection of the firm's performance. EM has been a huge and consistent issue among regulators and practitioners and has gained significant attention in the field of accounting, several reasons and techniques exist for EM practice (Bassiouny, 2016).

Earnings management as demonstrated by Dechow & Skinner (2000) is all about self-interested modification of earnings which undermines the quality of earnings, as well as the degree to which financial statements are credible. This occurs when management interferes with the performance of the firm's financial records to meet up with the shareholder expectation and other interested parties (Healy & Wahlen, 1999). In this way, managers succeed when able to manipulate accounting methods and techniques to present a distorted number of their company's earnings (Beneish, 2001). Because of the above, Sevin and Schroeder (2005) maintain that opportunistic earnings management serves the interests of managers at the expense of other stakeholders.

External auditors are responsible for verifying whether the financial statements are fairly presented in conformity with GAAPs or not, and whether the statements reflect the 'true' economic condition and operating results of the entity (Lin & Hwang, 2010). This study is therefore motivated by the fact that this sector in Nigeria has undergone some reforms, particularly from 2010, coupled with the dearth of local empirical studies on the association between audit quality and earnings management practices of the sector, make a study that will enable a better understanding of the nature and extent of the association more desirable.

Globally the genuineness of the reported firm's performance has been put into question in the face of large-scale fraud executed through earnings management which led to several corporate failures (Yasser & Soliman, 2018). Odubuasi, Ofor, and Ilechukwu (2022), Okolie (2014), Badawi, (2008), described those companies found to engage in different financial scandals due to EM notable among such scandals are the famous cases of Enron, WorldCom, and Xerox, African Petroleum (AP), Cadbury Nigeria Plc, African International Firms, Oceanic Firms Plc, Savannah Firms, Afrifirms Plc, Stanbic IBTC Firms Plc. A series of corporate accounting scandals were witnessed at the beginning of the 21st century across Europe and the United States as well as Nigeria in particular, and the cause of these financial scandals was due to the phenomenon of EM (Goncharov 2005).

Managers always aim to secure all the funds needed to keep the business running so that no external party can interfere, and at the same time, managers aim to gain whatever kind of benefit they can from the business (Ozkan, 2018). Since the accounting earnings are of great importance to the stakeholders given the fact that it is the end product of the accounting process and based on the many problems and acts by the managers in practicing earnings management, stakeholders doubt the credibility and reliability of the financial reports (Uwuigbe, Uwuigbe, & Bernard 2015).

The scandals of Enron, WorldCom, Xerox, Cadbury Nigeria Plc, and Oceanic Firms Plc among others have cast doubt on the quality of reported earnings and the ability of the audit process

to effectively constrain earnings management. The manipulative behavior of managers is associated with the deliberate altering of financial statements, through the use of judgments in structuring transactions to either mislead the firm's stakeholders about the economic picture of the firm or to achieve some contractual benefits that are based on reported accounting numbers (Healy & Wahlen, 1999).

Earnings management which has always been the phenomenon at the core of these scandals has received considerable attention in accounting literature. It has been a consistent cause of concern among practitioners and regulators and has become one of the most important challenges confronting corporate governance mechanisms (Habbash & Alghamdi 2017). These issues have brought about a major awareness of the need for more transparency and credible financial reports to protect shareholders and stakeholders. Africa in general and Nigeria in particular have had their share of financial reporting failure, causing the closure and firm and bankruptcy of many organizations (Al-Dhamari & Ismail, 2014).

Mishra and Malhotra (2016) and Bakre (2007) asserted that investors in Nigeria had lost billions of Naira due to manipulations and deliberate misstatement of company's accounts which had thrown companies into severe financial difficulties and market valuation distress. Corporate financial scandals have cast doubt on the quality of reported earnings by companies, which has equally cast doubt on the reported performance of firms globally, Nigeria inclusive (Khalil & Ozkan, 2016; Okolie, 2014).

Due to recent corporate accounting scandals, the quality of reported earnings and the ability of audit quality to effectively control earnings management of firms globally have been questioned and corporate financial scandals have cast doubt on the audit function's truthfulness, reliability, and value relevance (Yulius, Arya & Indra, 2017). The external examination is required to add to the reliability, objectivity, and soundness of financial reports, increase accountability, lessen any astute conduct of the board, and increase the proficiency and adequacy of internal controls, just as the internal audit (Wolnizer, 1995).

DeAngelo (1981) believed that auditors increase the credibility of financial reports through their competency and independent review. Ruddock and Taylor (2006) contended that the value of financial reporting is improved when auditors react to forceful income smoothing. Anderson, Kadous, and Koonce (2001) opined that a director with a higher motive to increase profit, the auditor sees such director as more aggressive, wanting their financial statements to look good, and anticipating that the auditors should concur with their reports, and also auditors will report income smoothing when they are aware that the executives are manipulating earnings. There are concerns by investors, users of financial statements, and the general public about the low audit quality and its negative effect on business, the consequences of poor external audit, and board members with insufficient financial expertise and knowledge to offer guidance on financial matters in most cases manifest in financial scandals and failure of companies (Junaidu and Ahmed, 2018).

The quality of reporting and the ability of external audit to effectively constrain EM of companies across the world and Nigeria in particular, have become considerably questionable due to recent financial scandals (Badawi, 2008; Enofe, 2010). In Nigeria, corporate scandals such as the cases of Oando Oil Plc, which was caught declaring a dividend from unrealized profit and releasing a misleading financial statement, and equally that of Cadbury Nigeria Plc, and Lever Brothers Nigeria Plc to list few, are publicly known reported cases that resulted in misleading financial reports (Okolie & Aggoma, 2008).

Existing literature shows that the size of audit fees is the most critical factor capable of eroding audit quality and audit independence (Warrad, 2017). A higher audit fee is a symbol of

more auditor's work, and hence a greater audit quality. Warrad, (2017) asserted that there is a negative relationship between financial risk and audit fees. The debate on the relationship between audit fees and earnings management is unending because of inconsistent empirical findings. African, Asian, and other developing countries have very high rates of corporate scandals, corporate failure, and corporate firms when compared with other developed nations. Nigeria, for example, is one of the developing nations that reported several cases of earnings manipulation by firms in 2017. Although EM does not violate accounting rules, its practice by managers is unethical (Ana, 2018).

Prior studies are inconclusive about EM. For example, AbuAfifa et al. (2022) and Ghosh et al. (2010) concluded that larger boards lessen EM practices. This conclusion was opposed by (Githaiga et al., 2022; Sarkar et al., 2008). Despite the high levels of attention given to earnings management, most academic studies have remained confined to the developed nations. Studies conducted in this regard include Ozkan (2018), Singapore; Nawaiseh (2016) Jordan; Brazil, Ana (2018) Portugal; Piot and Janin (2005) France; Gul et al (2009) US. However, the findings of affirmation studies may not likely be applicable in the Nigerian context, due to the nation's differences in legal, cultural, accounting practice, development, and religion among others.

Research Questions

This study intends to answer the following questions:

- i. What impact does an audit fee have on the earnings management of listed manufacturing companies in Nigeria?
- ii. What is the impact of auditor's independence on the earnings management of listed manufacturing companies in Nigeria?
- iii. What impact does board independence have on the earnings management of listed manufacturing companies in Nigeria?

The study examines the interplay between board attributes and earnings management of the listed manufacturing companies in Nigeria spanning from 2010-2021. Results from this study will provide an understanding and appreciation of the link between audit fees, auditor independence, board independence, and earnings management. This will enable listed manufacturing firms in Nigeria to reap the benefits of having a quality exercise and board attributes exercise. This study is expected to help standard setters adjust and determine an optimal level of management judgment and discretion to ensure effective communication between managers and investors and to discourage widespread abuse of earnings management.

LITERATURE REVIEW

Auditor Independence: Independence is considered the most complicated and controversial, yet the cornerstone aspect of the auditing profession because it strengthens the profession's commitment to objectivity. The reason for its complication and controversial nature is a result of the many rules and regulations established over time by different professional and regulatory bodies (Eilifsen et al., 2006). Considering the benefits of safeguarding auditor independence, the European Commission has issued standards to be applied throughout the European Union. The USA enacted the Sarbanes Oxley (SOX) Act of 2002, which describes the independence requirements of US auditors (Hayes et al., 2004).

Generally, independence can be of two forms, independence of mind and independence in appearance. The former requires the auditor to have a "*state of mind that permits the provision of*

an opinion without being affected by influences that compromise professional judgment allowing an individual to act with integrity and exercise objectivity and professional skepticism (Hayes et al., 2004).” Independence in appearance requires the auditor to avoid situations that will cause others to conclude that they are not maintaining an unbiased objective attitude of mind (Porter et al., 2003 cited in Nasser et al., 2006).

Therefore, the auditor is charged with the responsibility of carrying out a personal assessment to verify if independence risk can be accepted or not. It is only after the auditor has identified, analyzed, evaluated, and then applied appropriate safeguards to ensure that independence risk is brought to a minimal level before a job can be accepted. If such a task is not performed, then independence is at risk so too is objectivity, thus, the assurance engagement must be terminated. The threats to independence are often very significant and thus undermine the auditor’s effectiveness in rendering the auditing services. It becomes even more challenging when the auditor “over-stays” with a client, these threats may sneak in very gradually over time which in turn, can affect independence (Backer, *et al.*, 1998).

The auditor’s independence is seen as the backbone of the auditor’s profession. It is an important part of the statutory financial reporting process and a necessary condition for adding value to all audited financial reports. Izedonmi (2000) opines that independence is of the mind, characterized by objectivity and integrity on the part of the auditor. An auditor’s independence is an important ingredient in audit practice. Simunic (1984) and De Angelo (1981) posit that there is an understanding that auditors face substantial economic costs when there is an occurrence of audit failure but in contrast Becker, Defond, Jiambalio, and Subramayan (1998). DeFond, Raghuraman, and Subramanyam, (2002) say that independence could be influenced because auditors are reluctant to bring up issues about the preparations of the financial statement at the risk of losing lucrative fees from its clients thereby making the subject theoretically ambiguous.

Audit Fee: Gammal (2012) defines audit fees as the amount of costs (wages) charged by the auditor for the audit process to the company (auditee). Determination of audit fees is usually based on the contract between the auditor and his client following the time of the audit process, services, and the number of staff needed for the audit process. Audit fees are usually determined before starting the audit process.

Yuniarti (2011) states that the amount of the audit fee depends on the risk of the task, the complexity of the services provided expertise and other professional considerations. Therefore, a higher fee will improve audit quality, because audit fees obtained in one year and estimated operational costs needed to carry out the audit process can improve audit quality. While a small fee can limit the time and cost of conducting audit procedures. This shows that the amount of audit fees can affect the independence of public accountants (Wati and Subroto, 2003).

Suharli and Nurlaela (2008) define audit fees as fees charged by public accountants to clients for financial audit services. This is consistent with the opinion of the SEC regarding the Final Rule that audit fees are fees paid for annual audits and reviews of financial statements for the latest fiscal year (Yuniarti, 2011).

In the Code of Professional Ethics in the 2008 Public Accountant Section 240 mentioned in negotiating the professional services provided, practitioners can propose the amount of compensation for professional services deemed appropriate. Some facts reveal professional accountants can offer lower fees than others, it is not a violation of the professional code of ethics. However, threats to adherence to the basic principles of professional ethics can occur from the proposed high fees for professional services.

Earnings Management: According to Healy and Wahlen (1999), earnings management takes place when managers use judgment in financial reporting and in structuring transactions to modify financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers. Thus, this definition points to management as the faction responsible for making those decisions that fall under the general management of earnings. However there are two weak points in this definition: it does not establish a distinct limit between earnings management and normal activities, the result of which is earnings; not all earnings management is deceptive. Carikci and Sami (2019) submit that earnings management is an attempt by firms to achieve the desired earnings figures by departing from ordinary operative undertakings.

Ronen and Yaari (2011) define earnings management as a set of managerial decisions that result in not reporting the true short-term, value-maximizing earnings as known to management. In their opinion, earnings management can be: Beneficial - it signals long-term value; Pernicious - it conceals short- or long-term value and Neutral - it reveals the short-term true performance. The managed earnings follow as the consequence of taking production/investment actions earlier than earnings are realized.

Review of Empirical Studies

Klein (2002) conducted a study in New York to find out whether audit committee independence and board of directors characteristics are related to earnings management by the firm. The study found a negative relationship between audit committee independence and abnormal accrual, and a negative relationship was found between board independence and abnormal accruals. Yasser and Soliman (2018) found that audit firm size, and industry specialist auditors have no significant impact on earnings management. The only proxy that showed a significant impact on the discretionary accruals was the audit tenure.

A study by Rajeevan and Ajward (2020) found a positive relationship between CEO chair duality and earnings management in Sri Lanka. Norazida, Erlane, Kamaruzaman, and Mazurina (2021) used auditors from big4 and nonbig4 audit firms, to know whether the characteristics of the auditor influence the audit quality on earnings management. Findings suggested that audit reputation and audit fees do not influence the quality of audit on EM, rather auditor's skepticism influences the quality of audit on EM. Earlier researches demonstrate that the CEO performs a vital role in preparing the annual report of the company (Bouaziz et al., 2020; Habib et al., 2022; Jiang et al., 2013). Sani et al. (2020), and Chou and Chan (2018) posit that the probability of reducing earnings management can be achieved by appointing a CEO who has the potential of increasing the firm's resources.

Stewardship Theory suggests that, since managers are not opportunistic and acting in the best interest of the owners, they should give autonomy based on trust and this will reduce the cost of monitoring and controlling their behavior. Stewardship theory considers monitoring agents by the owners less important, as managers are not opportunistic and will always act in the best interest of the shareholders (Donaldson & Davis, 1994). Stewardship theory attracted criticism from those who believe that the interest of the managers cannot be accorded with the interest of shareholders. As such high-quality auditors are necessary for cutting information asymmetry between shareholders and managers, to reduce earnings management (Albrecht, 2004). He further argues that relying on the relationship between owners and stewards based on this theory could attract opportunities for management to commit fraud.

METHODOLOGY

The study uses an ex post facto research design. The design helps to investigate possible cause-and-effect relationships by identifying some existing consequences and searching back by analyzing causal factors. Ex-post facto research design was applied to the study because the nature of the data to be used in the study involves events that have already taken place (Asika, 2006). This is because the study will make use of annual reports and financial statements of listed manufacturing companies in Nigeria to examine the impact of board attributes on earnings management. Earnings management being the dependent variable will be measured by discretionary accruals as used in the Modified Jones Model (Dechow et al., 1995) with also an introduction of firm size as a moderating variable. The population of this study includes the one hundred and eleven (111) manufacturing companies listed on the Nigeria Stock Exchange (NSE) as of 31st December 2021.

The sample size of the study was determined through a purposive sampling technique and the sample size was restricted to manufacturing companies in Nigeria listed on the Nigerian Stock Exchange spanning from 2010-2021. Using the purposive sampling technique, a sample of forty-two (42) manufacturing companies listed on the Nigerian exchange group were selected.

The study used panel data with the aid of the Generalization Method of Moments (GMM) estimator to address heteroskedasticity, unobserved heterogeneity, and endogeneity. The study uses the GMM estimator because it has the highest power to deal with endogeneity. The study estimates the model using GMM, a dynamic panel data estimator introduced by Arellano and Bond, (1991). GMM transforms data to remove the effects of all sources of endogeneity, unobserved heterogeneity, simultaneity, and dynamic endogeneity (Ullah, Aktar & Zaefarian, 2018).

RESULTS

Correlation Analysis of the Models

It is critical to understand the correlation coefficient of the variables before estimating a regression analysis. This is because selecting the variables to be included in the model will depend on an understanding of the correlation coefficient's nature. Correlation analysis may also be used to detect the presence of multicollinearity. Hence, the test results are shown in Table 1.

Table1: **Correlation Coefficients of the Models**

Variables	DLLP	LAF	LBI	LBS
DLLP	1.000			
LAF	-0.0522	1.000		
LBI	0.1569	0.2476	1.000	
LBS	-0.0643	-0.1800	-0.0211	1.000

Source: Author's computation using E-Views version 12

Evaluating the correlation between the variables will help the researcher determine whether the variables are multicollinearity. The parameter estimations may contradict the theory due to the unexpected effect of multicollinearity among the independent variables (Agang, 2009; Hamsal,

2006). Tabachnich and Fideli (1996), on the other hand, believe that two or more variables with a bivariate correlation of 0.7 or higher should not be included in the same model since the two variables may be related due to the values of their coefficients. Furthermore, Iyoha (2004) and Asterious and Hall (2011) said that when the correlation coefficient is larger than 0.95, there is multicollinearity among variables.

Following the above explanations, Table 1 of this study presents the correlation analysis of the variables. According to the results audit fees, audit tenure, board size, gender diversity, and audit firms' size are negatively correlated with earnings management going by the correlation coefficient of -0.0522, -0.0643, and -0.0211 respectively. This implies that an increase in these variables is associated with a decrease in earnings management over the sample period. On the other hand, board size is positively correlated with earnings management with a correlation coefficient of 0.1569. This indicates that a rise in board size is associated with the upsurge in earnings management in the selected firms. As indicated by the results, this study concludes that there is no presence of multicollinearity among the variables, and the variables are well-suited to be included in the models for analysis. This is because there is no variable with a correlation coefficient above 0.7.

Cross-Section Dependency Test

This sub-section presents the outputs of the cross-dependency test of the model measuring the effects of board attributes on the earnings management of listed firms in Nigeria. Thus, the results are presented in Table 2.

Table 2: Results of Cross-Section Dependency Test

Test	Statistic	Prob.
Breusch-Pagan LM	82.84446	0.0787
Pesaran scaled LM	1.466122	0.1426
Pesaran CD	-1.017796	0.3088

Source: *Computed by the author using EViews version 12.*

From the results presented in Table 2, the test shows that there is no evidence of cross-section dependency among the variables. This is because the probability values of two out of the three approaches are not statistically significant at the 10% level. Therefore, the null hypothesis of no cross-section dependence in residuals will be accepted. Hence, based on the results, this study concludes that there is no presence of cross-section dependence among the variables. Therefore, the first-generation unit root test approaches are appropriate in testing the behavior of the variables and second-generation unit root test approaches are not appropriate. Thus, the tests are conducted and the results are presented in Table 3.

Panel Unit Root Tests

After determining the descriptive nature, correlation behaviors of the variables, and cross-section dependency test, this study goes further and investigates the stationary nature of the series. Table 3 summarizes and tabulates the findings.

Table 3: Panel Unit Root Tests

Variables	Levin, Lin and Chu Test		Im, Pesaran and Shin Test	
	Level	First Diff.	Level	First Diff.
DLLP	-4.6904	-10.4037***	-0.5714	-2.1556**
LAF	-3.2705	6.5639***	0.5734	-2.0448**
LBI	2.1714	-8.6593***	-0.9516	-3.0221***
LBS	-0.9239	-3.6496***	-0.2438	-2.6048***

Note: ***, **, and *are significant at 1%, 5% and 10% respectively.

Source: Computed by the author using EViews version 12.

The results of the Levin, Lin, and Chu test reported in Table 3 indicate that earnings management, audit fees, board independence, and board size are all stationary at first difference. On the other hand, the Im, Pesaran and Shin test shows that earnings management, board independence, and board size are found to be integrated into order 1. This suggests that firms strive to maintain ongoing operations.

Panel Cointegration Tests

Panel cointegration tests can be done based on the results of the panel unit root tests to assess the presence or absence of cointegration. The Kao panel cointegration test was utilized to augment the approach in this investigation, and the results are reported in Tables 4.

Table 4: Kao Residual Cointegration Test Results

t-Statistic	P-value
2.694516	0.0035***

Note: *** significant at 1%.

Source: Author's computation using EViews version 12.

Table 4 shows that there is evidence of cointegration among the variables. This is because the t-statistic coefficient is statistically significant at the 1% level. As a result, the null hypothesis is rejected, and this study infers that the variables are cointegrated.

Panel Estimation Test (GMM)

This section presents the result of the panel GMM using Pool OLS, fixed effect, difference GMM, and system GMM for the estimation of the impact of board attributes on the earnings of selected manufacturing firms in Nigeria.

Table 5 Results of the GMM Regression

Dependent Variable: DLLP				
Variables	Pool OLS	Fixed Effects	Diff. GMM	System GMM
DLLP(-1)	-0.0271	0.6494	-0.1124***	-0.0453
LAF	-0.1321	-0.0010	-0.2858	0.0375
LBI	1.2570	3.1113	0.1432	1.5324**
LBS	-0.7211	-1.1885	0.9305	0.5249
R ²	0.73	0.64		

Adj. R ²	0.72	0.63		
D.W	2.22	2.25		
AR (1)			-1.2368 (0.2162)	
AR (2)			0.0931 (0.9258)	
J. Stat.			1.1403 (0.8878)	1.7328 (0.7847)

*Note: ***, **, and * indicate significance at 1%, 5%, and 10% respectively. WD= Durbin Watson Statistic, AR = Autocorrelation, and J-Sta. = Sagan Test. EViews version 12.*

Source: Author’s Computation, 2023

As indicated in Table 5, the results show that the system Generalized Method of Moment (GMM) is more appropriate. This is because the coefficient of lag value (-0.1124) of the dependent variable (earnings management) is less than the coefficient of the fixed effect regression. Thus, the results suggest that difference GMM is downward biased, and the system GMM should be used. Hence, for the sake of comparison, results obtained using different GMMs are also reported. Based on the foregoing, this study will only interpret the results of system GMM regression. According to the result, there is a negative and statistically insignificant relationship between the previous value (lag value) of earnings management and current earnings management.

This implies that an increase in previous earnings management by 1% will lead to a decrease in the current earnings management by 0.11% over the sampled period. Consequently, the result is not statistically significant and this study infers that the previous value of earnings management has no significant impact on current the value of earnings management.

Similarly, the result reported in Table 5 shows that there is a positive and statistically insignificant relationship between audit fees and earnings management. An increase or decrease in audit fees will lead to an increase or decrease the earnings management over the study period. Hence, the result is not statistically significant and this study concludes that audit fees have no significant influence on earnings management.

Furthermore, the result reported in Table 5 shows that there is a positive and statistically significant relationship between board independence and earnings management at a 1% level. This explains that an increase or decrease in board independence will lead to an increase or decrease the earnings management. On the other hand, when board independence rises by 5%, earnings management of the selected manufacturing firms in Nigeria will increase by almost 1.52% over the study period.

It is also acknowledged by the result reported in Table 5 that there is a positive and statistically insignificant relationship between board size and earnings management of the firms. This shows that an increase or decrease in board size does not increase or decrease the earnings management (discretionary loan provision) of the selected manufacturing firms in Nigeria. Finally, the autocorrelation diagnostic test and Sargan (J-Statistics) tests reveal that the result is free of serial correlation and that the model is not over identified. This is because the probability values for the two tests are not statistically significant even at the 10% level.

Panel Causality Test

This section presents the result of the panel causality test and the results are summarized and reported in Table 6.

Table 6: Results of the Panel Causality Test

Null Hypotheses	F-statistics	P-values
LAF does not Granger Cause DLLP	0.19317	0.9008
DLLP does not Granger Cause LAF	0.09472	0.9628
LBI does not Granger Cause DLLP	2.5028	0.0644
DLLP does not Granger Cause LBI	0.20804	0.8906
LBS does not Granger Cause DLLP	4.96147	0.0031
DLLP does not Granger Cause LBS	0.05285	0.9839

Source: Author's Computation, 2023

As presented in Table 6, the Granger causality result shows that there is no evidence of causality between audit fees and earnings management of the sampled firms. This is because the F-statistic is not significant even at a 10% level. Therefore, null hypotheses could be accepted by their respective p-values of 0.9008 and 0.9628. Furthermore, the result revealed that there is an existence of unidirectional causality running from board independence to earnings management of the selected manufacturing firms in Nigeria over the sample period. This is signified by the significant probability value of the test (0.0644).

Per.	DLLP	LAF	LBI	LBS
1	100.00	0.0000	0.0000	0.0000
2	86.599	1.8356	0.0003	1.7454
3	6.2313	9.1933	0.1166	15.9616
4	0.4403	10.5767	0.1896	17.3762
5	0.3291	10.6506	0.1945	17.4264
6	0.3225	10.6573	0.1949	17.4289
7	0.3220	10.6578	0.1950	17.4291
8	0.3219	10.6578	0.1950	17.4292
9	0.3219	10.6578	0.1950	17.4292
10	0.3219	10.6578	0.1950	17.4292
11	0.3219	10.6578	0.1950	17.4292

Source: Author's Computation, 2023

Meanwhile, impulse response functions measure the relative influence of shocks among the variables in the system equation, variance decomposition approach, on the other hand, quantifies the proportionate changes of error variance in one variable explained by the innovations in itself and the other variables. Based on the estimate, the result from Table 7 shows that the shock to earnings management accounts for 100% of its shock in the 1st period (short run), it decreases to 6.23% in the 3rd period and continues to decline until it reaches a 0.32% in the 11th period. Similarly, a 1% variation in audit fees can cause about 1.83% fluctuations in earnings management in the short run. In the long run, however, audit fees account for about 10.65% of changes in the earnings management of the sampled firms in Nigeria.

Additionally, the innovation or variation of board independence to earnings management accounts for almost 0.11% in the short run (period three) and further moves up to 0.19% in the 11th period (long run). Also, board size exerts about 15.96% variation of earnings management in the short run (period three) and such variation keeps up increasing to 17.42% in period eleven.

CONCLUSION AND RECOMMENDATIONS

It has been discovered that board attribute plays a significant role in mitigating against earnings management of listed manufacturing companies in Nigeria. Even though there is no violation of any law, it has portrayed the company's image in an unethical manner. This study therefore concludes specifically that there is a positive and statistically insignificant relationship between audit fees and earnings management. However, a positive and statistically significant relationship exists between board independence and earnings management of listed manufacturing companies in Nigeria. The study consequently suggests that ethical standards should be encouraged by the regulatory agencies if not mandated. In addition to this, the Financial Reporting Council of Nigeria should explore the principles of the deep-pocket hypothesis whereby stiffer disciplinary measures (litigation and claims for damage) are seen to be meted out against erring auditors where a case of negligence is proved against anyone. This is expected to strengthen the institutional framework of the audit firm, while also discouraging firms from hiding behind big-4 audit firms to practice earnings management.

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