Effect of Board Size on Real Earnings Management of Financial Institutions in Nigeria

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Abstract

The study is an assessment of the effect of Board Size on Real Earnings Management of listed firms in Nigeria. The expo-facto research design was adopted with reliance on secondary data from annual report of listed firms. The simple random sampling technique was employed in selecting the 31 firms out of 57 firms for 2009-2018 financial years. To carry out this objective three method of panel regression estimation was used which are pool, fixed effect and random effect by Hausman test which was analyzed using E-views 10. The finding showS that board size has no significant impact on real earning management. The study concludes that the board is corporate governance mechanism that reduces earnings manipulation. The study therefore recommends that there is need for effective corporate governance practices in financial institution in Nigeria to contribute to reduce real earnings management and avert possible collapse of financial institution in Nigeria. Finally the regulatory authorities like Security and Exchange Commission (SEC) and Nigerian Stock Exchange (NSE) should enforce strict compliance with corporate governance best practices.

Keywords: Board Size, Board Independence, Real Earning Management, Financial Institution

1. INTRODUCTION

The separation of ownership from management raises the issue of monitoring managerial activities to ensure investor confidence. Following a spate of well-publish corporate scandals that took its toll with the collapse of once prestigious companies such as Enron and Worldcom reiterated the need for an investigation into the quality of financial reports and increased the clamoring for a better governance mechanism worldwide. It has been observed by accountants and financial economists that central to these corporate failures are systematic deficiencies in accounting standards and governance system that generate financial information (Bowen, Rajgopal & Yenkatachalam; 2003). In a bid to prevent such future failure of companies, most nations across the global introduced new code of best governance practices to align managers interest with the wealth maximization objective of the shareholders and ensure that corporate reports communicate economic measurements of and information about the resources and performance of the reporting entity useful to those having reasonable rights to such information.

Bhuiyan (2009) states that, users of accounting information, such as investors, government agencies, auditors and financial analysts, have focused alomost exclusively on monitoring corporate governance systems. This has led to increased disclosures about corporate governance, demands for the regulation of systems of corporate governance, and consequentially, enhanced internal controls system. Regulators, academics and practitioners around the world now evaluate corporate governance compliance from inception to the implementation of suitable and sustainable system that takes account of the socio-economic environment relevant to any particular company. The integrity of financial disclosure has been an issue of constant concern among regulators, financial analyst and accounting practitioners; especially after the series of high-profile accounting scandals and frauds involving well-known firms such as Worldcom and Enron (US) and One Tel (Australia), Nortel (Canada), Parmalat (Italy) and Transmile Group Berhad (Malaysia), Oceanic bank, Intercontinental bank, Afribank and Cadbury (Nigeria). For firms in Nigeria, poor corporate governance practice have been cited as one of the causes of the corporate collapses noticed among firms in the financial sector (Adeyemi & Fagbemi; 2010). This phenomenon have waned the public confidence, most especially those in the accounting circle. It has consistently raised severe concerns about corporate governance practices in a broad-spectrum. More so, it has also brought to spotlight issues relating to quality of financial reporting and the weak internal control systems among firms, Bello, 2011; Ebrahim, 2007; Kanchanapoomi, 2005.

According to Uwuigbe (2014), the corporate failures of such large organizations in the past have highlighted the intentional misconduct of managers in a wider-spectrum. In addition, there are apprehensions about the weaknesses of corporate governance in the past, as it was not effective enough to protect investors from expropriation. The management of firms' earnings has also been an issue of continuous concern for several years for regulatory bodies and accounting practitioners (Levitt, 1998). They are seen as an important summary statistic of a firm's financial performance and are often used in firm valuation. According to Leuz, Nanda and Wysocki(2003), earnings management is basically described as the alteration of a firms' reported economic performance by insiders either to mislead stakeholders or to influence contractual outcomes. In essence, it basically covers the true financial results and position of businesses and obscures facts that stakeholders ought to know (Loomis, 1999). However, earnings management basically occurs when managers use personal opinion in reporting financial information and in structuring accounting transactions to alter financial reports to either mislead stakeholders on the original economic performance of the company or to manipulate contractual outcomes that depend on reported accounting numbers (Healy & Wahlen; 1999). Thus, the very nature of accounting accruals gives managers a great deal of discretion in determining the earnings a firm reports in any given period because of the information asymmetry relationship that exist between managers and owners. Managers can manipulate or influence earnings in order to maximize their own interests or to signal their private information, thus influencing the informativeness of earnings.

Real earnings management is primarily accomplished through accounting transactions that are designed to achieve desired earnings level. Prior research suggests that managers have both personal and business motivations to display impressive or at the very least satisfactory performance in their reports on a consistent basis (DeFond & Park; 1997; Greenfield, Carolyn, Norman, & Wier; 2008). However, due to a variety of reason, the sustainability of such a performance is sometimes impossible. In these circumstances, managers may decide to use their discretions in the application of accounting principles and procedures which can result in altering the business operations to a more favorable outcome. In the Nigerian corporate environment, the presence and negative effect of earnings management on credibility of financial reporting and corporate failure has also been experienced. For example, a report of creative accounting scandal in African Petroleum PLC showed that the financial statements of the company did not fairly present the company's financial position (Oyejide & Soyibo; 2001). In November 2006, an accounting scandal in Cadbury Nigeria Plc also raised more questions than answer about creative accounting (Itsueli, 2006). Also, earnings management practice has been increasing in recent years in the Nigerian banking industry to attract unsuspecting investors, or obtain undeserved accounting-based rewards by presenting an exaggerated misleading or deceptive state of bank financial affairs.In an environment characterized by imperfect information, a variance in the interest between management and shareholders can lead to sub-optimal management decisions. Such decisions are possible because the actions of managers are largely unobservable and the goals of the managers and their shareholders are not necessarily aligned. Managers are posited to opportunistically manage earnings to maximize their utility at the expense of other stakeholders. The question is to what extent do boards as corporate governanism constraint real earnings management? The objective of this study is to examine effect of board size on real earning management of financial institution in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Concept of Real earnings management

Real earnings management occurs when managers intentionally make operating decisions that have actual cash flow consequences with the goal of altering reported earnings. For example, a firm may offer price discounts and offer more flexible credit terms to customers to boost sales revenues temporarily. In addition, managers may opportunistically reduce research and development expenditures in order to reduce expenses in the income statement (Dechow & Skinner; 2000). Furthermore, managers can delay maintenance expenditures to increase reported earnings. Zang (2012) explains this type of earnings management behaviour as purposeful action taken in order to alter reported earnings in a certain direction by means of changing the timing or structuring of an investment, operation, or financing transaction. This definition aligns with that of Healy and Wahlen (1999).

To obtain the desired earnings level, firms could choose to manage earnings through deviating from the normal business activities although this may affect the future economic performance of the firm negatively (Rowchowdhury, 2006). Previous studies such as those of Bange and De Bondt (1998), Rowchowdhury (2006) and Pincus and Rajgopal (2002) have identified several methods to manage earnings through deviations from normal business activities. These methods can either be divided into deviations from operating and investing activities, and deviations from financing activities. Firms could deviate from operating and investing activities by, for example, altering the level of discretionary expenditures, such as research and development expenditures (R&D) and selling, general and administrative expenditures (SG&A). Under IFRS research and advertising costs are expensed in the period in which they are incurred. Therefore, by reducing these costs reported income is immediately affected. Developments cost are, in first instance, expensed rather than capitalized due to uncertainty issues regarding the developing product or service (IASB 1998, IAS No. 38, para. 57). Therefore, postponing development projects can increase earnings as well. Furthermore, operating and investing activities can be deviated from if firms overproduce, provide price reductions to boost sales volume and build up inventory to lower the cost of goods sold which influence earnings (Rowchowdhury, 2006). If firms overproduce, costs of goods sold per product decrease since the fixed overhead costs will then be spread over a larger number of products. Moreover, firms can also sell fixed assets to manage earnings if the assets are sold with a gain. The last option that researchers identify to alter the operating and investing activities is by restructuring them. For example, firms might enter in business acquisitions or engage either in operational or capital leases with the main objective of increasing reported income (Xu. 2007; Dye, 2002).

Firms might also choose to manipulate earnings by deviating from financial activities. Stock options are granted if actual earnings are just below the earnings target as compensation through stock options does not involve cash (Matsunaga, 1995). Granting these options results in a decrease of earnings per share (EPS). To avoid this decrease or dilution of EPS, stocks are repurchased which then leads to increase in EPS. Firms also acquire financial instruments to hedge themselves from earnings decreases. Debt-to-equity swaps are used as well so that the swap gain increases reported income (Hand, 1989). Several possibilities exist to alter the level of earnings through influencing the cash flow from operations. Moreover, earnings can be manipulated as well by changing the level of accruals. However, there is evidence that firms engage in real earnings management (Daniel, Cohen, Aiyesha, Dey, & Thomas Z-Lys, 2008; Cohen & Zarowin, 2010; Graham, Harvey, & Rajgopal, 2005; Katherine, Ann, Gunny, 2005;

Roychowdhury, 2006; Zang, 2011; Zhang, 2008; Zhu, Lu, Shan, & Zhang) and real earnings management may have greater effects than accrual earnings management because it alters firms' behavior and not just their accounting records.

2.1.2 Real Earnings Management Techniques

There are three broad techniques used to manage earnings: (i) accruals-based earnings management by changing estimates and accounting policies; (ii) real activities-based earnings management that has direct cash flow consequences; and (iii) classification shifting-based earnings management such as shifting the classification of core expenses to special items in the income statement.

2.1.2.1 Accruals-Based Earnings Management

Accruals are the difference between earnings and cash flows and are a standard component of a firm's transactions. As an illustration, if a firm makes a sale on credit, the sale is recognized as earnings regardless of whether cash has been received or not. This leads to the creation of a receivable which is cancelled when cash is received in the future (McVay, 2006). Accounting practices allow discretion for managers in the financial information provided. Managers can exploit this by recognizing revenues before they are earned or delaying the recognition of expenses which have been incurred, which results in accruals. Accruals-based earnings management occurs when managers intervene in the financial reporting process by exercising discretion and judgment to change reported earnings without any cash flow consequences. Firms can be aggressive with their accounting choices by bringing forward earnings from a future period, through the acceleration of revenues or deceleration of expenses, thereby increasing earnings in the current period. This creates what is called discretionary accruals in the literature. Since accruals reverse over time, earnings will be lowered automatically by the amount of earnings that was brought forward in the previous period.

2.1.2.2 Real Activities-Based Earnings Management

Cohen and Zarowin (2010) explain real activities-based earnings management as the actions managers take that deviate from normal business practices, and that these actions are manipulations that affect cash flows. The commonality between these different explanations is clearly the fact that real activities-based earnings management is purposeful in nature and has actual cash flow consequences. Real earnings management occurs when managers intentionally make operating decisions that have actual cash flow consequences with the goal of altering reported earnings. For example, a firm may offer price discounts and offer more flexible credit terms to customers to boost sales revenues temporarily. In addition, managers may opportunistically reduce research and development expenditures in order to reduce expenses in the income statement (Dechow and Skinner, 2000). Further, managers can delay maintenance expenditures to increase reported earning. Zang (2012) explains this type of earnings management behaviour as purposeful action taken in order to alter reported earnings in a certain direction by means of changing the timing or structuring of an investment, operation, or financing transaction, which is consistent with the definition of earnings management presented by Healy and Wahlen (1999).

2.1.2.3 Classification-Based Earnings Management

Classification-based earnings management is an earnings management technique whereby core expenses such as general and administrative expenses are shifted to specific accounts in the income statement (McVay, 2006). While this does not change bottom line net income, it does increase core earnings (i.e. earnings from the firm's main business activities less all expenses and revenues from non-core activities) since core expenses will be shifted to the special items section of the income statement and will not reduce core earnings. While this may not seem effective since bottom line net income remains unaffected, it can in fact mislead users of financial statements interested in the core earnings of a firm since recurring income is the focus of analysts and equity investors.

2.1.2.4 The Substitutability of Earnings Management Techniques

The extant literature demonstrates that both accruals-based earnings management and real activities-based earnings management methods may be employed by firms as substitutes or complements, that is, earnings management is not restricted to being either accruals-based or real activities-based, and scholars document evidence of both occurring simultaneously in firms (Roychowdhury, 2006; Zang, 2012; Cohen and Zarowin, 2010; Doukakis, 2014; and Zhu *et al.,* 2015). Cohen and Zarowin (2010) find that firms use both accruals-based and real activities-based earnings management methods around seasoned equity offerings and that the choice between the two alternative strategies varies predictably as a function of their ability to use accruals manipulation as well as the costs of doing so in a study of US firms over the period 1987-2006. They explain that the costs of using accruals-based earnings management include potential litigation penalties and the scrutiny of regulators and auditors. Similarly, Doukakis (2014) argues that accounting choices are subject to auditor scrutiny.

2.1.3 Concept of Board Size

Board size is viewed as another important element in board characteristics that may have an effect on earnings management. The optimum number of board members should be appropriately determined by the whole board to ensure that there are enough members to discharge responsibilities and perform various functions. Heninger (2001) argued that smaller boards, between four to six members might be more effective since they are able to make timely strategic decisions, while larger boards are capable of monitoring the actions of top management. Large board members with varied expertise could increase the synergetic monitoring of the board in reducing the incidence of earnings management. A reasonable size of the board is expected to be effective in monitoring the activities of firms management (Sanda, Mikailu & Garba 2008). A large size board of directors can improve monitoring mechanism effectively and prevent managers from engage in earnings restatements (Feng & Shiao 2009). Larger boards with competent directors having diverse educational and technical knowhow, have multiple perspectives to improve the quality of firm’s value and more likely to represent the interests of shareholders thereby preventing managers from earnings management (Jian & Ken, 2004). On the contrary Jensen (1993) stated that streamlined boards can operate more effectively in maintaining management.

2.2 Empirical Literature

Heung & Hyun-Min (2017), examined the effect of board characteristics on real earnings management in firm of Korea, which is measured by using three proxies including abnormal cash flows from operations, abnormal discretionary expenses, and abnormal production costs. Specifically, the study investigates how board independence (or board size) affects real earnings management. Additionally, the study investigated the relation between the board characteristics and real earnings management according to before K-IFRS mandatory adoption or after K-IFRS mandatory adoption. The empirical results of this show as follows. First, the relation between board independence (board size) and the absolute value of abnormal cash flows from operations is statistically significant and positive. Second, the relation between board independence (board size) and the absolute value of abnormal production costs is statistically significant and positive. Third, the relation between board independence (board size) and the absolute value of abnormal discretionary expenses is statistically significant and positive. These findings present that the board independence (or board size) does not constrain real earnings management. Thus, these mean that board independence (or board size) does not work as a mechanism to reduce real earnings management. This study contributes to accounting research as it directly tests the relation between the board characteristics and real earnings management in Korea, providing empirical support that a board independence (board size) does not constrain real earnings management as effectively as it constrains accrual earnings management. Country settings of Korea and Nigeria are different and it might likely be difficult to generalize the findings across nations.

Imoleayo, Eddy and Olamide (2016), examine earnings management and board structure: Evidence from Nigeria; the study evaluate the role of board structure plays in curtailing earnings management practices in Nigeriancompanies. This study sampled the data of 137 quoted companies for a period of 8 years (2003-2010). Earningsmanagement was measured using the magnitude of the discretionary accruals as estimated by the performance matchedmodified Jones model. The ordinary least squares (OLS) regression technique was used to measure the research model aswell as the Pearson moment correlation coefficient. The study shows that there is a significant relationship between boardstructure and earnings management practices in Nigeria. The study shows that there is a negative significant relationshipbetween board size, gender, and board composition with earnings management; also, there is a positive significant relationshipbetween board meeting and earnings management practices in Nigeria. There is a positive nonsignificant relationship betweenthe presence of a remuneration committee and the dualization of CEO and chairman positions with earnings managementpractices in Nigeria. This study recommends that regulators at all levels should enforce the preparation and publication of financial reports by companies operating in Nigeria.

Manukaji & Ijeoma (2018) examined corporate governance mechanism and income smoothing on deposit money banks in Nigeria. This study became necessary following the increasing failures of deposit money banks in Nigeria upon the clean bill of health given to them by both internal and external auditors. The study aimed to examine the relationship corporate governance mechanism (CEO duality, board size, ownership concentration and audit committee) and income smoothing. Firm size and leverage were introduced as control variables. This study is anchored on agency theory. The study adopted ex post facto research design. Four deposit money banks were studied for the period ranging from 2012 to 2016. Eckel (1981) index was employed in determining income smoothing. Multiple regression analysis was employed in analyzing the data. The study suggests that income smoothing of deposit money banks largely depends on the corporate governance mechanisms, particularly in the form CEO duality, ownership concentration and the existence of audit committee. Banks with ownership concentration may have higher propensity to smooth income. The empirical results also demonstrate that board size is not effective in monitoring income smoothing. The study concludes that corporate governance has significant relationship with income smoothing in Nigeria deposit money banks. The study contends that corporate governance mechanism should be strictly adhered to by the banks in order to reduce the incidence of artificial income smoothing. This will help to improve the quality and reliability of accounting information in deposit money banks in Nigeria. The study is however limited to one sector of the economy- banking. A study of listed companies could provide greater understanding on the relationship between board size and earnings management in Nigeria.

Atu,Favour, Enegbe and Efosa (2016) also examined the determinants of earnings management using selected quoted companies in Nigeria. The study adopts a cross-sectional research design with an extensive reliance on secondary data from the financial statement of quoted company’s annual report. The simple random sampling technique was employed in selecting the 30 companies for 2007-2014 financial years. Secondary data sourced from financial statements of quoted companies retrieved from the Nigeria Stock Exchange and websites of the sampled companies will be utilized for the study. The study will make use of ordinary least squares (OLS) regression analysis as the data analysis method. In this study we adopted OLS regression techniques to examine how the explanatory variables (Corporate governance, firm size, audit firm type and financial performance) impact on earnings management using discretionary accruals measure. The study finding indicates the existence of negative significant relationship between board size, audit firm type and earnings management In addition, they study also found the existence of a non-significant relationship between firm size, ROA and earnings management. The recommendation is that there is the need for companies to consider the need to increase their board independence. Again companies must ensure that the auditors’ they engage are credible and have a track record of delivering reports that show the actual state of affairs of a company. Finally, Financial Reporting Council should have stiffer penalty for companies caught engaging in the act of earnings management. The study limited it corporate governance of board independence but the size of the board could influence management earnings manipulation potentials.

Huy (2016) assessed he impact of board of directors and ownership characteristics on earnings management of publicly listed firms in VietnamThis study investigates the extent whether board of directors and ownership characteristics are related to earnings management in Vietnamese context. Based on sample of 570 non-financial listed firms from 2010 to 2014, the study find a non-linear association between state ownership and earnings management. Furthermore, firms with higher proportion of foreign ownership are more likely to constrain the manipulative practices exercised by managers. Additional test on interaction between corporate governance and leverage indicate CEO holding the position of chairman is more likely to distort financial reports in a highly geared firm. Higher managerial ownership marginally reduces earnings manipulation in firms subject to considerate debt level. On the other hand, board with higher percentage of non-executive directors and concentrated ownership might not have any effect on earnings management. The association between board size and earnings management is inconclusive due to the fact that the constraining effect of board size on earnings management is only evident in the model with discretionary accruals rather than accruals quality. The study is based on Vietnamese data and Nigeria data can provide evidence that can make one generalize findings across countries.

2.3 Theoretical Review

2.3.1 Stakeholders Theory

Stakeholder theory is considered an extension for the agency theory. The agency theory states that there is an agency relationship between the principal (shareholders) and the agent (management) and that the agent should work on behalf of the principal for their best interest to avoid any conflict that might cause an agency problem (Jensen & Meckling 1976). However, that is a narrow focus that has now developed so managers are now expected to take into account the interests of many different stakeholder groups, like interest groups linked to social, environmental and ethical considerations (Freeman, 1984; Freeman; 2004). So a broader view is created expecting the management to care for the interests of different stakeholders group not only the shareholders in specific (Donaldson and Preston 1995). The stakeholder theory is defined by Freeman (1984) as any group or individual who can influence or is influenced by the achievement of the organization's objectives. So Carroll (1993), add that the term stakeholder may, therefore, include a large group of participants, in fact anyone who has a direct or indirect stake in the business. Examples for direct stakeholders are the shareholders, employees, investors, customers and suppliers, all whose interests are aligned with the interests of the firm, on the other side, the indirect stakeholders are those who are indirectly affected by the functions of the firm and an example for the is the government (Kiel & Nicholson 2003).

2.3.2 Signaling Theory

Signals are considered as observable characteristics of an object that can be manipulated by a signaler to alter and control the perceptions of a receiver (Spence 1973). The Signaling theory is a framework for understanding how two parties deal with the asymmetric information in pre-contractual contexts based on (Wells2011). The theory is further explained as one party; (the signaler) must choose the quantity and method of communicating information, while the second party (the receiver) must interpret the signal (Connelly 2011). The roots of the Signaling theory goes back to the writings of (Veblen 1899) in his book titled "The Theory of the Leisure Class" suggesting that conspicuous consumption and wasteful spending of the wealthy served as a signal of their status as elite. Moreover, in the 1970s, signaling theory was used in evolutionary biology to explain certain behaviors of animals. In addition, (Spence 1973) used signaling theory in the field of economics to explain the role of education as a signal in employer employee relationships. Signaling is based on signals, that serve as indicators of hidden qualities or any kind of information that are either deliberately communicative or have evolved with the intention of communicating the signaler's qualities. The purpose of the Signals is to alter the receiver's beliefs and behavior in ways that benefit the signaler (Donath, 2007).

2.3.3 Information Asymmetry Theory

The effects of information asymmetries have important implications for the decision makers. The main concept of the information asymmetry theory goes back to 1970 that was introduced by (Akerlof) in a paper with a title: "The Market for "Lemons": Quality Uncertainty and the Market Mechanism "that develops asymmetric information with the example case of automobile market the basic argument is that in many markets the buyer uses certain statistics to measure the value of the goods. Thus the buyer sees the average of the whole market while the seller has more intimate knowledge and information. Akerlof argues that this information asymmetry gives the seller an incentive to sell goods of less than the average market quality and so this creates the information asymmetry problem. Based on this example, Information asymmetry theory can be referred to as the disproportionate amount of information that two different parties have during the transaction, and the theory is based on the fact that the party that has more information might behave opportunistically and choose what kind information to provide to a second party and what information to hide (Kirmani & Rao; 2000). Corporate managers are therefore more likely to engage in earnings management to prevent a rosy picture of the operation of the company.

3. METHODOLOGY

The methodology employed is the expo-facto research design. Ex post facto design is a quasi-experimental study examining how an independent variable, present prior to the study, affects a dependent variable. The target population of the study composed fifty seven (57) selected financial institutions in Nigeria between the years 2009-2018, however thirty one (31) firm were randomly selected. The study employed secondary data collection. The study variables were obtained from published audited financial report of these institutions on the internet, for the financial periods stated.

Two method of data analysis were used in this study. The first method is descriptive analysis; the second method is inferential statistics analysis. This analysis involves; correlation analysis which was conducted to determine the strength of the linear association between board sizes on real earnings management (REM) of quoted firms in Nigeria. The major reason for using regression and correlation analysis is to be able to model, examine and identify the relationship between the hypotheses. Statistics Panel Regression Analysis; was used due to the nature of the data. Diagnostic econometrics tests were conducted before and after the regression analysis. This include: unit root test to ascertain the stationarity of the time series data, statistical test (first-order), goodness of fit-test, the F-test and autocorrelation test. The tests also include: residual normality test, autocorrelation LM test, Heteroscedasticity test, and Ramsey's RESET stability test. The multiple regression modelwhich is consistent with Abubakar, Rokiah and Sitraselvi, (2017) was adopted

4. RESULT AND DISCUSSION

Regression Model

$$REM_{it} = \alpha_0 + \alpha_1 BS_{it}, + \alpha_2 BEX_{it}, + \alpha_3 BMF_{it}, + \alpha_4 FD_{it} + \mu_{it}$$

Where:

REM = Real Earning Management
BS = Board Size
BEX = Board Expertise
BMF = Board Meeting Frequency
FD = Female Director
$i = 1, 2, \ldots, 31$ i.e. the *i*th cross-sectional unit (the number of financial company)
$t = 1, 2, \ldots, 10$ i.e *t*th time period (the number of years). Hence, this is a longitudinal panel as the number of cross section exceed the time period
u_{it} = Error term.

Measurement of variables

REM	=	measured using discretionary accruals (DACC)
Board Size	=	measured by number of directors in the company
Board Expertise	=	measured by proportion of directors with accounting and finance qualifications to board size.
Board Meeting Frequency	=	the number of meetings attended by the board members
Female Director	=	measured by the proportion of females on board of director

Table 1: Descriptive Statistics

The analysis continued in this section with the descriptive statistics for board attributes variables. Here the variables are described for the firm combined i.e. the stacked data are analysed as single variable. Thus the heterogeneity of the firms is not considered

Date: 08/15/19
Time: 08:47
Sample: 2009 2018

	REMs	BS	BEX	BMF	FD
Mean	1.36E-10	11.69677	8.880645	5.290323	1.909677
Median	-0.703258	11.00000	8.000000	5.000000	2.000000
Maximum	111.6312	25.00000	31.00000	12.00000	8.000000
Minimum	-95.24745	4.000000	1.000000	2.000000	0.000000
Std. Dev.	10.22352	3.863989	5.263474	1.939098	1.474125
Skewness	2.911724	0.413392	1.449634	1.371271	0.848154
Kurtosis	84.44584	2.597381	5.949031	4.624991	4.196790
Jarque-Bera	77507.80	10.92329	220.9078	131.2609	55.66785
Probability	0.000000	0.004247	0.000000	0.000000	0.000000
Observations	279	310	310	310	310

Source: Computed by the Researcher (2019) Employing E-views 10

From table 1 after stacking the observation for 31 firms in 10 years period the total observation is now 310. However the Real Earning Management (REM), that is the dependent variable has 279 observations. This is as a result of lagging revenue one period in REM derivation. Average real earnings management of Nigerian financial institutions is 1.36. This implies that on the average the institutions manage real earnings management upward. The maximum value of real earnings management is 111.63 and minimum value of -95.24

Correlation Matrix

In this section we discuss correlation analysis, which is used to quantify the association between two continuous variables (e.g., between an independent and a dependent variable or between two independent variables). In correlation analysis, we estimate a sample correlation coefficient, more specifically the Pearson Product Moment correlation coefficient. The sample correlation coefficient, denoted r, ranges between -1 and +1 and quantifies the direction and strength of the linear association between the two variables. The correlation between two variables can be positive (i.e., higher levels of one variable are associated with higher levels of the other) or negative (i.e., higher levels of one variable are associated with lower levels of the other). The sign of the correlation coefficient indicates the direction of the association. The magnitude of the correlation coefficient indicates the strength of the association. The analysis continues in this section in determining the degree of linear association between the boards attributes variables in pairs employing E-views 10 Statistical package. The result of the correlation analysis is presented in table 2.

Table 2: Correlation Matrix between the Boards Attributes Variables

Covariance Analysis: Ordinary
Date: 08/15/19 Time: 08:48
Sample: 2009 2018
Included observations: 279
Balanced sample (listwise missing value deletion)

Correlation Probability	REM	BS	BEX	BMF	FD
REM	1.000000 -----				
BS	0.068152 0.2566	1.000000 -----			
BEX	0.232763 0.0001	0.566885 0.0000	1.000000 -----		
BMF	0.063965 0.2870	0.443983 0.0000	0.234952 0.0001	1.000000 -----	
FD	0.069673 0.2461	0.526086 0.0000	0.329664 0.0000	0.272481 0.0000	1.000000 -----

Source: Computed by the Researcher (2019) Employing E-views 10

The result presented in table 2 confirms that board expertise has a strong, positive and significant correlation with real earnings management. Likewise, board size, board meeting frequency and number of female director are found to have a positive association with real earning management but neither strong nor significant. Therefore, this means that an increase in board size, board meeting, board expertise and female director will result to an increase in real earnings management. In addition, analysis of the result from the correlation as represented in table 2 demonstrate that a positive relationship exist between board meeting, board expertise, female director and board size at 1 percent significant level.

Table 3 : Regression Analysis Results

The first objective of this study is to determine the effect of board size on real earnings management of listed firms in Nigeria during the period of the study. To carry out this objective the three method of Panel regression estimation, that is, Pool, Fixed Effect and Random Effect were estimated and the summary of results presented in table 3 and the detail results is presented in the appendix.

The Effect of Board Attributes on Real Earnings Management

Variables	Pooled	Fixed Effect	Random Effect
BS	-0.342307 (0.1185)	-0.254634 (0.4746)	-0.240519 (0.3197)
BEX	0.605912 (0.0001)	0.128294 (0.6136)	0.51176 (0.0027)
BMF	0.250592 (0.4785)	-0.012235 (0.9789)	0.171907 (0.6508)
FD	0.226708 (0.6445)	-0.464099 (0.4791)	0.033064 (0.9504)
C	-2.814509 (0.1861)	2.824074 (0.5546)	-2.443946 (0.3359)
R-square	0.62753	0.222598	0.34297
Adjusted R-squared	0.4907	0.125029	0.20199
F-statistics	4.586359	2.281451	2.432791
F-Stat (p-value)	0.001337	0.00027	0.04779
Durbin- Watson stat	1.763022	2.100858	1.892725
Hausman Chi Sq. and (p-value)		6.840267 (0.1446)	

Note: Numbers in bracket are P-values. Source: Computed by the Researcher (2019) employing E-Views10

Examining the results of the pooled regression, and applying the conventional criteria, it can be seen that the coefficients of only one of the regressors, that is board expertise (BEX) is statistically significant at 1 percent level of significance and BEX coefficient also has a positive relationship between the regressors and the regressand. The other slope coefficients also have positive signs except for board size which have a negative relationship. The R^2 value of 0.62 is reasonably high and indicates that about 62 percent variation in the regressand is accounted for by the regressors according to this model. In addition the F-Statistic and its associated probability of 4.58 and 0.001 respectively, show that the overall regression is statistically significant. The estimated Durbin–Watson statistic is also in the neighborhood of 2, suggesting that there is no autocorrelation problem in the data. One way to take into account the "individuality" of each company or each cross-sectional unit is to let the intercept vary for each company but still assume that the slope coefficients are constant across firms. Hence the FEM or LSDV was estimated. From the FEM or LSDV results, the estimated coefficients of the regressors are not statistically significant, as the *p values* of the estimated coefficients are very high. In addition the Durbin–Watson statistic and the F-statistic are all plausible indicating that overall the regression is statistically significant at 1 percent level of significance and no serial correlation problem, however the R^2 is low.

4.1 Discussion of Findings

The finding revealed board size has no significant impact on real earning management in Nigeria. From regression result in Table 3, the p-value computed is -0.3197. Since the p-value is less than 5 percent level of significance. The results of the Random Effect Model (REM) or Error Component Model (ECM) follow same pattern as the pool regression It also indicates that the coefficients of only one of the regressors, that is board size is statistically significant at 1 percent level of significance and board size coefficient also shows a negative relationship between the regressor and the regressand, the slope coefficients the other variables also have positive signs except for board size which have a negative relationship. The result of the study show board size does not reduce real earning management which is similar to empirical findings of Atu, Favour, Enegbe and Efosa (2016) and Manukaji and Ijeoma (2018) which suggest that real earning cannot be fully reduced by board size.

5. CONCLUSION AND RECOMMENDATIONS

The widespread failure in the financial disclosure has created the need to improve the financial information quality. Consequently, the factors influencing the occurrence of real earning management have been an intense and inconclusive area of research and an interesting issue of discourse. The factors have been identified to be both exogenous and endogenous to the firm. The exogenous factors have been highlighted to include the reporting standards and institutional environment, economic and financial policies and the board spectrum of variables outside of the firm's control. These factors have also not attracted considerable empirical research attention as controlling for the factors to make them amenable for empirical analysis is as a challenge especially in developing economies. The endogenous factors with the propensity to influence occurrence of real earnings management have been identified also in the literature and these factors are generally regarded as being within the locus of control of the firm. The findings show that board size has no significant impact on real earning management. The study concludes that the board is corporate governance mechanism that reduces earnings manipulation. The study therefore recommends that there is need for effective corporate governance practices in financial institution in Nigeria to contribute to reduce real earnings management and avert possible collapse of financial institution in Nigeria. Finally the regulatory authorities like Security and Exchange Commission (SEC) and Nigerian Stock Exchange (NSE) should enforce strict compliance with corporate governance best practices.

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