Effect of Board Attributes on Earnings Management of Listed Health Firms in Nigeria

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Abstract

Board attribute has become an important agenda for listed companies in any stock exchange market globally. This study examined effect of board attribute on earning management of listed health firm in Nigeria covering the period of ten (10) year 2011-2020. The study adopted ex-post facto research design and secondary data was used for analysis which was obtained from Nigerian Exchange Group. Panel regression analysis technique was used to analyse research data. The result showed that when taken individually and collectively, board size (BS), board frequency meeting (BFM) used as proxies for board attribute has a positive and significant effect on discretionary accrual also taken as a measure of earning management. The study therefore concludes that board size and board frequency meetinghas a significantly positive effect on earnings management and does substantially reduces the earnings of listed health firms in Nigeria. The study recommend thatboard size of listed health firms in Nigeria should be increased and also add more non-executive directors so that they can pay more attention in monitoring management to avoid earning manipulation.

Keywords: Board size, Board frequency meeting, Earning Management, Discretionary Accrual, Firm

INTRODUCTION

High-quality reporting information is critical because it had a beneficial effect on the procuring, financing and related distribution decisions that enhance overall market success of resource producers and other stakeholders. The business's success, which was seen by company profits, produces a firm valuation in the short and long term. Corporate income is very directly connected to corporate valuation (Edi & Vera, 2020). Adegbie, Salawu and Shiyanbola (2019) have stated that the firm earning was the cornerstone, as they are essential areas of concern for growth and sustainability enabling management to make profits more significant and has increased earnings. Earning is one of the most important items in financial statements. This is because, users of financial statements mostly focus on the company's earnings before looking at other variables. Earnings represent the image of a company on the eyes of many investors and other financial statements' users for decision-making purposes. Earnings indicate the extent to which a company has engaged in value added activities. Therefore, increase in earnings represents an increase in company's value, while decrease in earnings signals a decrease in that value (Lev, 1989). Accounting deals with measurement and communication of economic information that involves the determination of net income (accounting earnings). Accounting's earnings serve as a major constituent of corporate information required in the capital market for assessing firm performance and for stock valuation (Musa, Ibikunle& Oba, 2013). Therefore, accounting earning information need to be more reliable. This is because, the integrity of financial reports depends on the reliability of earnings being reported by firms; and the capital market needs precise and unbiased financial reporting to value securities and revive investors‟ confidence (Roodposhti&Chasmi, 2011).

The users of accounting information, such as investors, government agencies, auditors and financial analysts, have focused 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), (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 Investor's from expropriation.

The profits of organizations differ when their governance is influenced, as effective management leads to a good financial performance (Nkanbia-Davies, Gberegbe, Ofurum& Egbe, 2016). Effective business management leads to a good financial performance (Nkanbia-Davies, Gberegbe, Ofurum&Egbe, 2016). Effective corporate governance was a general notion that boosts the economic health of listed companies and increases customer trust and confidence (Rahman & Mohammed, 2016; Basha, 2018). This thought affected regulators and attracted much attention from both scholars and practitioners. The results of Yusoff, Ahman and Darus (2019) indicate that reinforced corporate governance system, which also affected the performance of businesses and organizations, were also improved. This was similarly applicable with both corporate and public companies. Although the Board still had a responsibility to monitor the leadership closely because of the ever-present danger of opportunistic activity. This was one of the key roles of corporate governance (Elyasiani, Wen, & Zhang 2017).Several corporate crises in the past have been blamed on company managers taking undue advantage of their position to influence or manipulate earnings to their personal interests. Even where such actions are taken in the interest of the organization, the benefits are most likely to be short lived. Thus, in the long run, investors in the company are the once who suffer the consequences of managers influencing earnings to suit their interest. However, earnings management can only occur where there are loopholes in accounting laws and regulations that manager can take advantage. A typical example is a situation where management is allowed to change accounting rules or given a 'choice' whether to and when to adopt a certain standard. Thus, this study examine effect of board attribute on earning management of listed health firms in Nigeria and the basic hypothesis underlying this study are stated below;

H_O1: Board size has no significant effect on earnings management of listed health firms in Nigeria
H_O2: There is no significant relationship between Board frequency meeting and earnings Management of listed healthfirms in Nigeria

LITERATURE REVIEW

Conceptual Framework

Board Attribute

Research on board composition and board leadership structure has been dominated by a focus on company performance (Dally & Dalton, 1999), which is consistent with the institutional investment community's demands for more independent board structures. The general notion is that boards with higher proportion of nonexecutive/independence directors are generally objective and independent in their monitoring function (Bello, 2011). The Nigerian Code of Corporate Governance (Code of Corporate

Governance for Public Companies in Nigeria 2011 issued by the Securities and Exchange Commission (replaced 2003 SEC Code); stipulates some requirements for the composition of board members in companies. The Code stipulates that the board should be composed in such a way as to ensure diversity of experience without compromising compatibility, integrity, availability, and independence. It states that the board should comprise of a mix of executive and nonexecutive directors, to be headed by a chairman of the board, and the composition of the board should not exceed 15 persons or be less than five persons in total. Members of the board should be individuals with upright personal characteristics and relevant core competences, preferably with a record of tangible achievement, knowledge on board matters, a sense of accountability, integrity, and commitment to the task of corporate governance and institution building, while also having an entrepreneurial bias.

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 firm's management (Sanda, Mikailu&Garba 2008). A large size of board of directors can improve monitoring mechanism effectively and prevent managers to 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 according to Jian and Ken (2004).

Board frequency meeting

The Nigerian Code of Corporate Governance (Code of Corporate Governance for Public Companies in Nigeria 2011 issued by the Securities and Exchange Commission (replaced 2003 SEC Code); stipulates the required number of times members of the audit committee are expected to meet in a year. It states that the members of the board must meet at least once in a quarter, which means they are expected to meet at least 4 times in a year for the board to be effective in the discharge of its duties. Past research shows that the frequency of board meetings has an effect on earnings management trend in companies (Xie, Davidson, &DaDalt, 2003). Gulzar (2011) found that if the frequency of board meetings is more, then the value of discretionary accruals is lower; they stated that higher frequency of board meetings will improve the board monitoring. Sarkar, Sarkar, and Sen (2006) argued that it is not board independence, but board quality that is important for earnings management; they further identified that diligent boards are associated with lower earnings manipulation, whereas boards that have large number of multiple directors exhibit higher earnings management. This, therefore, connotes that board that meets often and discharges its duty diligently and effectively may help in the reduction of earnings management.

Board Frequency Meetings is presumed to be a good proxy for the corporate governance to control managers' behaviour. Board that meets frequently are expected to solve the problem effectively. Effective board is expected to meet regularly to stay on top of accounting and control related matter to make sure financial reporting process is functioning properly (Zhou & Chen, 2004). On the contrary, Jensen (1993) argues that most of the Board Meetings are not very effective, since the board is often forced to engage in high frequency activities to resolve corporate matters. Nigerian SEC code provided that board of directors should at least meet four times every financial year. But looking at the meetings held by these companies within the period under review, one can attest that there is a lack of consistency in the number meetings held. Some of them held meetings below the minimum requirement while some above (up to eight times).

Earnings Management

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). Further, managers can delay maintenance expenditures to increase reported earnings. Zang (2009) 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).

Discretionary Accrual

Actually, accounting conservatism can be divided into two types which are conditional conservatism and unconditional conservatism. However, discretionary accruals and unconditional conservatism accounting have a very close relationship. Accounting conservatism is accounting policy based on conservatism principle, which allows managers to employ their judgment to estimate some financial information, affecting on accounting record. Thus, it is an opportunity for managers to distort financial information by accrual basis or discretionary accruals. Unconditional accounting conservatism term used as a representative of earning quality in term of the difference between accounting profits and operating cash flow as a component of the accrual profits. Thus, the zero accrual profits implied the high earning quality because accounting profits and operating cash flows profits are the same. In the other word, the accrual profits represents low earning quality. Thus, accounting accrual basis is a tools impacting on business earning quality. Schipper and Vincent, (2003) defined conservatism accounting as the use of discretion under uncertainty in order to make the financial statements reliable so that the figures of the assets or income should not report too high, while the liabilities or expenses should not report too low called the principle of conservatism.

Empirical Review

Umar and Sani (2020), examined the effect of corporate governance on the performance of quoted deposit money banks in Nigeria. The study employed panel data analysis using regression model to investigate the connection between corporate governance proxy (Board size, Board composition and Firm size) and Return on Asset (ROA) of quoted deposit money banks in Nigeria for a period of 5 years (2015-2019). Data for the study was obtained from audited annual reports of fifteen (15) listed banks on floor of the Nigeria Stock Exchange (NSE, 2017). Findings revealed that there is significant relationship between board composition, board size and firm size and the ROA of deposit money banks in Nigeria. They concluded that board composition has a positive impact on performance suggesting an increase in the number of NEDs would result in increased performance of quoted deposit money bank, while board size has a negative impact on the performance signifying that an increase in board size decreases performance of quoted deposit money banks. The study recommends efforts at improving corporate governance should emphasize more on the board composition, as it is positively associated to return on asset of Deposit Money Banks. Also, more measures should be put in place to ensure mandatory compliance with the code of corporate governance, particularly the one issued by the Central Bank of Nigeria. Finally, the National Bureau of Statistics (NBS) should be empowered or a unified independent establishment should be created to be responsible for collecting and analyzing corporate governance related data and constructing the pertinent indices to ease corporate governance research in Nigeria.

Akinleye, Olarewaju and Fajuyagbe (2019) examined corporate governance and financial performance of selected Nigerianmultinational firms from 2012 to 2016. Specifically, the study focused on the effect of board size, activism and committee activism on return on asset and firm growth rate. The data were analyzed using static panel estimation techniques. While board size and board activism exerted significant negative impact on return on asset, committee activism exerted insignificant impact. The results of the

study further showed that board size and board activism exert insignificant negative impact on firm's growth rate, while committee activism insignificantly spurs firm's growth rate. Decisively, discoveries from this study reflect that corporate governance has significant negative impact on return on asset but has insignificant influence on the growth rate of Nigerian multinational firms. Based on these findings, the authors recommended that corporate governance dynamics in firm's world over should be reconsidered, such that it gives credence to more than just numbers of persons or meetings held, but the main reasons and deliberations in such meetings. They also recommended that excessive increase in magnitude or frequency of meetings held by board of directors cum committee should be avoided.

Manukaji and 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.

Orjinta, Onuora, and Agubata, (2018), examined Audit Committee and Classification Shifting of Earnings Management: Evidence from Sub-Sahara African Firms.This study investigated whether managers use classification shifting to reclassify recurring expenses into non-recurring ones, placing more emphasis on the effect of audit committee in curbing such opaque manipulations. A sample of 75 quoted non-financial firms from three Sub-Sahara African countries (Nigeria, Kenya and South Africa) was used for the period of ten years spanning 2008 to 2017. The study employed ex-post facto and cross-sectional research design in analyzing secondary data collected. Using a multiple regression and a sample of 750 Sub-Sahara African firm-year observations, our result revealed that classification shifting is less prevalent in firms whose audit committee is characterized by more meetings, more financial expert members and more independent directors as this leads to lower levels of recurring items misclassification. Specifically, our result discovered that audit committee independence has negative and significant effect on classification shifting which was statistically significant at 10% level of significance while audit financial expertise and audit committee diligence have negative and significant effect on classification shifting at 1% and 5% levels of significance respectively. The findings showed that about 68.4% of changes in total variation in the classification shifting of earnings management can be attributed to the joint effect of all the explanatory variables while about 31.6% was unaccounted for thereby captured by stochastic error term.

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.

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.

Huy and Nguyen (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 found 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. Awaisu and Rabi'u (2015) examined effect of Board the Size and Audit Committee the Size on Earnings Management in Nigerian Consumer Industries CompaniesBoard and audit committee the size are important governance mechanisms that affect companies' reported earnings due to the managers' effort to manipulate the earnings in order to meet their predetermined target. The objective of this study is to examine the relationship between board the size, the audit committee the size and earnings management in Nigerian consumer industries companies. A total of 29 companies in the consumer sector of the Nigerian stock exchange were analyzed using multiple linear regressions. Data was obtained from secondary sources alone using annual report and account of the companies for the periods of 2010 to 2013. The results show that audit committee the size is negatively and significantly affects earnings management, the result further suggests that larger board is not efficient to minimize the tendency of managing earnings, therefore it is recommended that the audit committee should be increased to minimize the likelihood of earnings management.

Hussaini and Gugong (2015) examined effect of board characteristics and earnings management of listed and beverages firms in Nigeria. There are different opinions in literature on the relationship between board characteristics and earnings management. The study examines the influence of board characteristics and earnings management of listed food and beverages firms in Nigeria. The study covers the period of six years 2009 to 2014. Data for the study were extracted from the firms' annual reports and accounts. After running the OLS regression, a robustness test was conducted for validity of statistical inferences, the data was empirically tested, and first the dependent variable was generated using two steps regression in order to determine the discretionary accrual of listed food and beverages firms in Nigeria through modified Jones model of Dechow& Sloan (1995). A multiple regression was employed to test the model of the study using Random Model. The results from the analysis revealed an inverse relationship between board size, board meetings and board financial expertise, and earnings management of listed food and beverages firms in Nigeria, while and board composition and women directorship are positively significantly related to earnings management of listed food and beverages firms in Nigeria. Ibrahim (2015), examinedboard characteristics and earnings management of listed foods and beverages firms in Nigeria. As a response to some financial scandals and corporate failures in Nigeria and around the globe which are linked to earnings management, certain characteristics of Board of Directors that can improve their monitoring function are suggested in the literature as corporate governance mechanisms. Thus, the study concentrated on three board characteristics' proxies, namely: Board Competency, frequency of Board Meetings and Gender Mix and their relationships with earnings management (because, they have not yet been studied extensively in Nigeria). Therefore, the study investigated the impacts of Board Competency, frequency of Board Meetings and Gender Mix on Earnings Management (in the context of agency relation) of listed foods and beverages firms in Nigeria from 2007 to 2013. The estimation of discretionary accruals (proxy for Earnings Management) is by using modified Jones (1991) model. The sample size of the population is nine (9) firms. Both correlational and ex-post factors research design were used. A multiple regression technique was employed to determine the impact of Board Characteristics on Earnings Management. The result was interpreted using fixed effect- least square dummy variables. The results reveal that Board Competency has no significant impact on Earnings Management. The impact of frequency of Board Meetings and Gender Mix on Earnings Management were however found to be negative and statistically significant. The study concluded that increase in number of board meetings and the proportion of women directors in the board constrain the level of discretionary accruals; while directors' knowledge of accounting and/or finance (board competency) does not guarantee quality of earnings.

Theoretical Framework

Stakeholder's theory

Freeman (1998) as cited in (Branco and Rodrigues, 2007) defined stakeholders as groups and individuals who benefit from, or are harmed by, and whose right are violated or respected by corporate actions. Clarkson (1995) distinguishes primary and secondary stakeholders. Primary stakeholders are those "without whose continuing participation the corporation cannot survive as a going concern" (Shareholders and investors, employees, customers and suppliers, and also government and community that "provides infrastructures and markets, whose laws and regulations must be obey, and to whom taxes and other obligations may be due") Whereas secondary stakeholders are " those who influence or affect, or are influenced or affected by, the corporation, but are not engage in transactions with the corporation and are not essential for its survival.

Institutional Theory

Institutional theory posits that organizations should align their practices and characteristics with social and cultural values so as to get legitimacy. Dimaggio and Powell (1983) believes that organization are subject to rules and regulations and these must be complied with so that the organization can obtain legitimacy upon which they can survive. It is argued that organization change their institutional practices

out of pressure from stakeholders to make them legitimate and not necessarily to monitor management. According to institutional theory, corporate governance is viewed as structure put in place by the organization to confirm that the corporation is bond to an environment (Alghamdi, 2012). Stedham and Beekun (2000) posit that under institutional theory the role of board of directors of the company is twofold; serves as a linkage between the corporation and the environment, administrative role of overseeing the performance of top management especially the chief executive officer (CEO). They assert that institutional theory and agency theory can be used to explain role of directors in corporate governance. In a similar argument, Kury (2007) suggests that institutional theory can be used to explain earning management because incentives for earnings management may come as a result of formal or informal pressure from the environment. Essentially institutional theory concerns itself with organizations conforming to set rules and regulations to obtain legitimacy and consequently have access to resources and survive (Dimaggio& Powell 1983).

Agency theory

The agency Theory is a common practice in research that explains the relationship between the principal (shareholders) and the agent (managers). The origins of the agency theory can be traced back to Jensen and Meckling (1976) and the discussion of the problem of the separation of ownership and control. They suggested that managers of other people's money cannot be expected to watch over it with the same anxious vigilance one would expect from owners and that negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company. They defined the relationship between the principals, such as shareholders and agents such as the managers and held that managers will not on their own act to maximize the returns to shareholders unless appropriate governance structures are implemented to safeguard the interests of shareholders. Separation of ownership and control leads to potential conflicts of interest between both parties. This may be because the parties may have different goals, and the managers may not act on behalf of the best interests of the shareholders (Bukit &Iskandar, 2009; Jensen &Meckling, 1976). Gerayli, Yanesari and Ma'atoofi (2011) confirmed that this agency problem leads to the demand for external auditing.

METHODOLOGY

This study adopted the ex post facto research design since the study is a secondary data research. The population of the study consists of ten (10) listed health firms operating on the Nigeria Exchange Group (NGX) as at 31st December 2020. The sample size is 8 and purposive sampling techniques were adopted. Data required for this study were obtained from audited financial statements and annual reports of the listed health firmsin Nigeria 10 years (2011-2020) under consideration and from the Nigerian Exchange Group fact book. The inferential analyses will also involve the application of the appropriate statistical technique of Panel Regression Analysis; this is due to the nature of the data. The Panel regression model is stated as;

$DACC = \beta_0 + \beta_1 BS + \beta_2 BFM + \epsilon_{it}$..………………(1)

Where:

DACC = Discretionary Accrual
BS = Board Size
BFM= Board Frequency Meeting
ϵ_{it} = Stochastic Error term

Table 1: Study Variables and their Measurement

Variable Acronym	Variable Name	Variable types	Measurement	Source

DACC	Discretionary Accrual	Dependent	Discretionary Accrual: Residual from Modified Jones' Model by Dechow, (1995)	Hassaini&Gugong , (2015)
BS	Board Size	Independent	Number of directors on the board	Manukayi&Ijeoma (2018)
BFM	Board Frequency Meeting	Independent	Number of meetings held by the board of directors	Huy& Nguyen (2016)

Source: Researcher Compilation 2022

The Modified Jones Model

This model uses a modification of the original Jones (1991) model as proposed by Francis, Huang, Rajgopal & Zang (2008). They included the change in accounts receivable in the estimation model for normal or non-discretionary accruals (i.e., equation (1) above). This was done based on the reasoning that, not doing so, would produce values for abnormal (discretionary) accruals that are not centre on zero when the mean ΔREV is not zero (Francis; 2008). The equation (1) above became;

$TAit / Ait\text{-}1 = ai \{1/Ait\text{-}1\} + \beta 1i \{\Delta REV\ 1/Ait\text{-}1\} + \beta 2i \{PPEit/Ait\text{-}1\} + \varepsilon\ i,t$ Where: TAit = Total accruals in year t for firm i; (measured by operating profit after tax-cash flow operations).
Ait-1 = Total assets in year t-1 for firm i;
ΔREVit = Revenues in year t less revenues in year t-1 form firm i;
PPEit = Gross property, plant and equipment in year t for firm I; ε i,t = Error term in year t for firm

RESULT AND DISCUSSION

Descriptive Statistics

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations obtainable. The table below shows the descriptive statistics for the variables applied in the study. An analysis of all variables was obtained using the E-view 10 software for the period under review

Table 2: Descriptive Statistics Result

	DACC	BS	BFM
Mean	4.407250	4.287500	3.900000
Median	4.235000	4.000000	4.000000
Maximum	42.85000	6.000000	5.000000
Minimum	-44.16000	3.000000	2.000000
Std. Dev.	11.96224	0.829728	0.408765
Skewness	-0.556741	0.361023	-2.976576
Kurtosis	6.967148	2.673766	14.14876
Jarque-Bera	56.59368	2.092597	532.4496
Probability	0.000000	0.351235	0.000000
Sum	352.5800	343.0000	312.0000
Sum Sq. Dev.	11304.53	54.38750	13.20000
Observations	80	80	80

Source: E-View 10 Output (2022)

Table 2 presents the descriptive statistics for the dependent and independent variables Discretionary accruals (DACC), board size (BS) and board frequency meeting (BFM). The standard deviation of the variables ranges from 0.40876 to 11.9622. Board frequency meeting have the lowest standard deviation of

0.40876 followed by board size 0.82972 and Discretionary accruals 11.9622. The Table also indicated an average value of 4.40725 for discretionary accruals. Since earnings management is measured by absolute value of discretionary accruals in this study, the value of 4.40725 is an indication that sampled companies were involved in earnings manipulations during the study period. The minimum and maximum values of discretionary accruals during the study period are -44.16 and 42.85 respectively. These values imply that some sampled companies were actually not involved in earnings manipulations during the study period while the highest manipulation of earnings by the sampled companies during the study period stood at 42.85. This further corroborates the inference of manipulation of earnings earlier revealed by the mean of DACC.

More also board size and board frequency meeting has an average value of 4.2870 and 3.90000 respectively. The minimum and maximum values of board size and board frequency meetingduring the study period are 3.0000 and 2.0000 for minimum while maximum is 6.0000and 5.0000 respectively. The implied that the minimum and maximum board size and board frequency meeting on the sampled companies during the study period

Table 3: Correlation Matrix

	DACC	BS	BFM
DACC	1.000000		
BS	-0.55006	1.000000	
BFM	0.167434	-0.02613	1.000000

Source: E-View 10 Output (2022)

In table 3 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 presented above confirms that board size -0.5500 and board frequency meeting 0.1674 have a strong positive and negative

Table 4: Hausman Test (Test between Fixed and Random)

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	18.828894	2	0.0001

Source: E-View 10 Output (2022)

The Result of Hausman test shows that chi-square statistics value is 18.828 while the probability values of 0.0001. This implies that there is enough evidence to reject the null hypothesis which states that random

effect is most appropriate for the Panel Regression analysis. It thus stands that error component model (fixed effect) estimator is the most appropriate because the fixed effects are well correlated with the regressors. Thus, the most consistent and efficient estimation for the study is the fixed effect cross-sectional model. Consequently, the result suggests that the fixed effect regression model is most appropriate for the sampled data because the Hausman test statistics as represented by corresponding probability value is less than 5%.

Decision Rule: The decision rule for accepting or rejecting the null hypothesis for any of these tests will be based on the Probability Value (PV) and the Probability (F-statistic). If the PV is less than 5% or 0.05 (that is, if PV < 0.05), it implies that the regressor in question is statistically significant at 5% level; and if the PV is more than 5% or 0.05 (that is, if PV > 0.05), it is categorized as not significant at that level.

Table 5: Panel Regression Result (Fixed Effect)

Dependent Variable: DACC
Method: Panel Least Squares
Date: 03/16/22 Time: 05:20
Sample: 2011 2020
Periods included: 10
Cross-sections included: 8
Total panel (balanced) observations: 80

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-25.03380	15.41125	-1.624384	0.1088
BS	-0.970654	2.457460	-0.394983	0.6941
BFM	8.616085	2.945028	2.925638	0.0046
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.495520	Mean dependent var		4.407250
Adjusted R-squared	0.430658	S.D. dependent var		11.96224
S.E. of regression	9.026081	Akaike info criterion		7.354582
Sum squared resid	5702.910	Schwarz criterion		7.652336
Log likelihood	-284.1833	Hannan-Quinn criter.		7.473960
F-statistic	7.639631	Durbin-Watson stat		1.430305
Prob(F-statistic)	0.000000			

Source: E-View 10 Output (2022)

The panel regression result (PRR)result for the sampled health firm as presented in table 5 above showed that there is a negative relationship between board size and discretionary accruals as explained by a coefficient value of -0.9706 and a t-Statistic of -0.390 with a corresponding P value of 0.6941. This revealed that a one unit increase in board size lead to 0.9706 units decrease in discretionary accruals, more also board frequency meeting (BFM) of the sampled health firms during the study period has a positive relationship with discretionary accruals as explained by the coefficient of 8.6160 and a t-Statistic of 2.925 with a corresponding P-Value of 0.0046. The result implies that board frequency meeting is not able to constrain but rather increase earnings management practices of the firms.However, respective probability values, the parameter estimate for BZ is not statistically significant, given that the individual probability is 0.6941which is greater than 5%, while that of BFM is statistically significant, given that the individual probability is 0.0046 which is less than 5%. However, when taken collectively, the regressors

(BZ and BFM) against the regressed (DACC), the value of F-statistic is 7.6396and the value of the probability of F-statistic is 0.0000. This result implies that the overall regression is both positive and statistically significant at 5%.

Discussion of Findings

This study examined effect of board attribute on earnings management of listed health firms (HFs) in Nigeria. Specifically, this study sought to determine the effect of board size and board frequency meeting on earnings management of listed HFs in Nigeria. Therefore, the findings of this study is on the basis of formulated hypotheses, models and analysis carried out. This study found that generally, board attribute measured as board size and board frequency meeting significantly affect earnings management of listed HFs in Nigeria. However, the findings from this study are compared with that of previous studies in subsequent paragraphs.

Firstly, assessment of effect of board attribute (proxy with board size) on earnings management (proxy with discretionary accruals) of listed HFs in Nigeria revealed that a negative significant effect of board size on discretionary accruals of listed HFs in Nigeria, The findings are in agreement with the findings of Akinleye, Olarewaju&Fajuyagbe (2019) who documented evidence of a negative association between board size and earnings management of firms. The result however, disagrees with those of Umar & Sani (2020) who documented a positive relationship between board size and earnings management of firms. Secondly, investigation on effect of board frequency meeting on discretionary accruals of listed HFs in Nigeria revealed that board frequency meeting has positive and significantly effect on discretionary accruals of listed HFs in Nigeria. The result agrees to the findings of Imoleayo, Eddy &Olamide (2016) who found a positive association between board frequency meeting and earnings management of firms. The result however, contradicts the findings of Hussaini&Gugong(2015) who documented a negative relationship between board frequency meeting and earnings management of firms.

CONCLUSION AND RECOMMENDATIONS

The study was basically undertaken to examine the effect of board attribute on earnings management of listed health firms in Nigeria from 2011-2020 in Nigeria. The board attribute and variables have a significant effect on the earning management in Nigeria which has caused a reduction in the earning management. Board of directors characteristics particularly inside directors were found to be important monitoring and control device for deterring managers' opportunistic behaviour of list health firm in Nigeria. The study confirms the importance of corporate board meetings in enhancing the monitoring function of Board of Directors. The significant positive effect of Board Frequency Meetings on Earnings Management was an indication that more frequency of Board Meetings reduces Earnings Management of selected quoted financial firms in Nigeria. This is possible when board members meet frequently to discharge their duties in accordance with shareholders' interest. Therefore, the study conclude that firms with board of directors' meetings that are more frequent are associated with low earnings management.
Based on the findings of this study and the conclusion made, the following recommendations are made to reduce earnings management in health firm in Nigeria:

i. The study recommend that the board size of listed health firms in Nigeria should be increased and also add more non-executive directors so that they can pay more attention in monitoring management to avoid earning manipulation.
ii. The study recommends that SEC should encourage adherence to at least the minimum requirement (four times in a financial year) by making it mandatory to hold meetings at least four times in a year. The SEC should encourage more frequent meetings by Board of Directors

Reference

Abbadi, S. S., Hijazi, Q. F., & Al-Rahahleh, A. S. (2016). Corporate governance quality and

earningsmanagement: Evidence from Jordan. *Australasian Accounting, Business and Finance Journal*, 10(2), 54-75

Abdul Rahman, R., &Haneem Mohamed Ali, F. (2016). Board, audit committee, culture and earnings management: Malaysian evidence. Managerial Auditing Journal, 21(7), 783-804.

Abdullah, S. N., & Ismail, K. N. I. K. (2016). Women directors, family ownership and earnings management in Malaysia. *Asian Review of Accounting*, 24(4), 525-550.

Adegbie, Salawu and Shiyanbola (2019) Effect of corporate governance on earnings quality of quoted financial and non-financial firms in Nigeria.*Journal of Research in Business and Management* 7 (3) (2019) pp: 40-51

Akeju, J.B. and Babatunde, A.A. (2017) Corporate governance and financial reporting quality in Nigeria. *International Journal of Information Research and Review*, 4(2), 3749-3753,

Akinleye, A.O.,Olarewaju, E.U &FajuyagbeB. B (2019). Impact of corporate governance and financial performance of selected Nigerianmultinational firms. *Journal of Business and Management Review,* 3 (2), 23-35.

Akinyomi, J. (2013). Effect of capital structure on firm performance: Evidence from Nigerian manufacturing industry. *International Journal of Innovative Research & Studies*. 2. 468-480.

Akter, M. (2019). Effect of audit quality and credit rating on earning management. *Asian Journal of Finance and Accounting*, 6(1), 24-49.

Andrzej, P. &Ewa, G. (2019). "The influence of a company's ownership structure on upward real earnings management," Sustainability, *MDPI, Open Access Journal*12(1), 1-24,

Atu, O. O, Favour, F. O, Enegbe O. P &Efosa. C. (2016). Determinants of earnings management in Nigeria quoted companies. *Igbinedion University Journal of Accounting*, 1 (1), 9-20.

Awaisu A. S, &Rabi'u, S. J. (2015). Effects of board size and committees on earning management in Nigeria Consumer Industries Companies. *International Journal of Innovative Research and Development.* 4(3), 84-91.

Bataineh, H., Abuaddous, M., &Alabood, E. (2018). The effect of family ownership and board characteristics on earnings management: Evidence from Jordan. *Academy of Accounting andFinancial Studies Journal* 86:159-176.

Calomiris, C. W., & Carlson, M. (2016). Corporate governance and risk management at unprotected banks: National banks in the 1890s. *Journal of Financial Economics*, 119(3), 512-532.

Diri, Costas and Mohammad (2020) Corporate governance and earnings management in concentrated markets. *Journal of Business Research* 108 291–306

Edi and Vera, J. (2020). The effect of firm characteristics and good corporate governance characteristics to earnings management behaviour. *Journal of Accounting, Finance and Auditing Studies* 6(2), 31-49

Egbunike, A. P., Ezelibe, C. P., &Aroh, N. N. (2015). The influence of corporate governance on earnings management practices: A study of some selected quoted companies in Nigeria. American*Journal of Economics, Finance and Management*, 1(5), 482-493

Ejeagbasi, G. E., &Nweze, A. U. (2015). Corporate governance and audit quality in Nigeria: Evidence from the banking industry. *European Journal of Accounting, Auditing and Finance Research*, 5(1), 18-39.

Fadzilah, N. S. B. M. (2017). Board of directors characteristics and earnings management of familyowned companies.*International Journal Of Accounting & Business Management*, 5(2), 68-83.

Hussaini, B., &Gugong, B. K. (2015). Board characteristics and earning management of Listed food and beverages firms in Nigeria. *European Journal of Accounting, Auditing and Finance Research.* 3(8), 25-41.

Huy I.O & Nguyen I. (2016). Impact of board of directors and ownership characteristics on earnings management of listed firms in Vietnam. *Journal of Management Science,* 9(3), 890-998.

Hyejeong and Su-In (2019). The effect of corporate governance on earnings quality and market reaction to low quality earnings: *Korean Evidence. Sustainability*, 11, (102), 1-17

Imoleayo, F. O, Eddy, O. O & Olamide, A.O (2016). Earning management and board structure; Evidence from Nigeria. Online publication. https://us.sagepub.com

Ishak, R., Amran, N. A., &Manaf, K. B. A. (2017). Leadership structure, gender diversity and audit quality influence on earnings management in Malaysian listed companies.*InternationalReview of Management and Marketing*, 6(8), 342-345.

Manukaji I. J., &Ijeoma O. N (2018). Corporate Governance and Income smoothing in the Nigerian Deposit Money Banks. *International Journal of Business and Law Research*, 6(1), 27-38.

Omoye, A., &Eriki, P. (2014). Corporate governance determinants of earnings management: Evidence from Nigerian quoted companies. *Mediterranean Journal of Social Sciences*, 5(23), 553

Onuorah, A.C. and Imene, O.F. (2016). Corporate governance and financial reporting quality in selected Nigerian company. *International Journal of Management Science and Business Administration,* 2(3), 7-16,

Otuya, S., &Ofeimun, G. (2017). Effects of board globalizing on financial performance of banks in Nigeria. *International Journal of Academic Research in Accounting, Finance and ManagementSciences*, 7(4), 1-10.

Owojori, A. A., Akintoye, I. R., &Adidu, F. A. (2011). The challenge of risk management in Nigerian banks in the post-consolidation era. *Journal of Accounting and Taxation*, 3 (2), 23-31.

Patrick, E. A., Paulinus, E. C., &Nympha, A. N. (2015). The influence of corporate governance on earnings management practices: A study of some selected quoted companies in Nigeria. *American Journal of Economics, Finance and Management*, 1(5), 482-493.

Rauf, F. H. A., Johari, N. H., Buniamin, S., & Rahman, N. R. A. (2012). The impact of company and board characteristics on earnings management: evidence from Malaysia. *Global review of Accounting and Finance*, 3(2), 114-127.

Shafi, Adamu, Ooi and Kwong (2020), Corporate governance and earnings management: evidence from listed Malaysian firms. *Journal of Critical Reviews* 7(3) 90-96

Shahzad, F., Rauf, S. A., Saeed, A., & Al Barghouthi, S. (2017). Earning management strategies ofleveraged family and non-family controlled firms: an empirical evidence*, International Journal of Business & Society*, 2(7), 1-17.

Shittu, I., Ahmad, A. C., & Ishak, Z. (2016). Board characteristics and earnings per share of Malaysian Islamic banks. *International Journal of Economics and Financial Issues*, 6(6), 135-137.

Shubita (2020) Earnings management and corporate governance evidence from Jordanian Banks. *International Journal of Recent Technology and Engineering* 8(5), 1724-1731.

Umar A. I. & Sani D. (2020) Effect of Corporate Governance on the Performance of Listed Deposit Money Banks in Nigeria.*Science Journal of Business and Management*, 8(1), 35-40.

Uwuigbe, O. &Fakile, A. (2012). The effects of board size on financial performance of banks: A study of listed banks in Nigeria. *International Journal of Economics and Finance*. 4(1) 1-10.

Uwuigbe, U., Uwuigbe, O. R., & Okorie, B. (2015). Assessment of the effects of firms' characteristics on earnings management of listed firms in Nigeria. *Asian economic and financial review*, 5(2), 218-228.

Yodbutr, A. (2017). Corporate governance and earnings quality: The case of Thai financial institutions. *International Journal of Management and Applied Science*, 3(3), 98-102.

Younis, S. A., Hashmi, S. H., Khalid, G. K.,& Nazir, M. I. (2016). Impact of corporate governance measures on earnings quality: Evidence from Pakistan. *Research Journal of Finance and Accounting,* 7(3), 9-16.

Yusoff, H., Ahman, Z., & Darus, F. (2019). The influence of corporate governance on corporate social responsibility disclosure: A Focus on Accountability. *Academy of Accounting and FinancialStudies Journal*, 23, 1-16.