



EFFECT OF BOARD FINANCIAL EXPERTISE ON EARNINGS QUALITY OF QUOTED FIRMS IN THE NIGERIAN NON-FINANCIAL SECTOR

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Abstract

The purpose of this study was to examine the effect of Board Monitoring Capacity using internal corporate governance mechanism of board financial expertise on earnings quality, measured using modified Jones discretionary earnings management (DAC). This study employed *ex-post facto* design and collected secondary data from eighty-four (84) non-financial firms quoted on the Nigeria Exchange Group Limited from 2010 to 2021. Panel Fixed effect regression was employed to test the hypothesis of the study, and the panel regressions were estimated using the Estimated Generalized Least Square (PEGLS) and Panel Corrected Standard Error (PCSE) models. The regression result on board financial expertise had negative but significant effect on earnings management. The results imply that board of directors with financial expertise is associated with lower earnings management, and consequently higher earnings quality. Board financial expertise is viewed as a critical element in board characteristics that has a significant effect on earnings management. To monitor the financial reporting process, the directors must have accounting knowledge and skill, in order to control manipulation and to make information more transparent. Empirical studies support our results that show that financial expertise is an important determinant of quality financial statements. Siam, Laili & Khairi (2014) suggested that to do their tasks effectively the boards must have the ability for “asking management tough questions, actively helping to set corporate strategy, monitoring risk management, contributing to CEO successions plan and ensuring that companies set and meet their financial and operating targets”. So far, this can only be achieved if the board has the vital expertise to fully embrace such duties. Conclusively, board monitoring capacity acted as a disincentive to false practices of corporate report of the earnings by management of the firms under study. It was therefore recommended that more directors with financial expertise be appointed into corporate boards.

Keywords: Phytonutrients, Earnings Quality, Audit Committee Diligence, Board Monitoring Capacity, Corporate Earnings, Unethical Accounting Practices

1.0 Introduction

1.1 Background of the Study

The underlying idea is that the earnings report should faithfully represent changes in wealth. This represents the accruals quality or earnings management perspective and hence, the analyst view of faithful representation in accounting. It is about how faithfully accruals accounting has been applied. Earnings quality is linked to the usefulness of information provided by financial accounting. Higher earnings quality are reported earnings that provide more information about the features of a firm's financial performance that are relevant to a specific decision made by a specific decision-maker (Dechow, Ge & Schrand, 2010). The quality of the reported earnings is relevant for all types of users of the reported earnings. It is not only relevant for its shareholders and debt holders, but also for the management itself since compensation contracts are based on earnings, which means that overstating earnings will result in overcompensation of managers (Schipper & Vincent, 2003). According to Kelton and Yang (2008), the capacity of the board to execute its monitoring role relies upon its independence from management and thus independent boards have a greater capacity to limit managerial opportunistic behavior and reduce managements' ability to withhold information. The quality of the earnings can be improved, by limiting the actions of the earnings management, hence a supervisory mechanism is needed for these management actions, and the monitoring mechanism is known as board monitoring capacity which is an internal control mechanism. Issues of corporate performance (earnings) have received serious empirical consideration in recent times. The board of directors has a part to play in corporate governance as their main duty is that of supervising the management to ensure proper accountability to shareholders and other

stakeholders. Since the board of directors is vested with the responsibility of monitoring the interest of shareholders, they ought to have greater interest in the appointment of managing directors to ensure that educated, qualified and experienced directors are appointed (Bairathi, 2009). According to Erah and Ikhu-Omoregbe (2017), the earnings of a firm amount to the profit accruing from its business activities. It represents the net reward for the firm's business efforts and the reason for shareholding which comes to the shareholder in the form of dividend and enhanced share value. Earnings quality refers to the extent to which the earnings figure as contained in the financial report represents the actual or fundamental earnings of the firm for the period being reported. The fundamental or actual earnings is that which faithfully represents the true economic performance of the firm and thus, fairly reflects the current operating performance of the firm and useful in directing forecast accuracy about the future performance and profitability of the firm (Mohammadi, 2014).

1.2 Statement of the Problem

Earnings manipulation or management has become an effort of some firms to cosmetically conceal their earnings in order to achieve desired motive. The recent collapse of some large companies resulting partially from accounting manipulation has created an argument in terms of the effectiveness of corporate governance mechanisms toward investor protection. Therefore, boards have a fiduciary responsibility to monitor the management and to protect shareholders' interest. From the observations of Isa and Farouk (2018) and Madugba and Ogbonnaya (2017) majority of Nigerian firms are driven by the need to make more and more profits to the detriment of other stakeholders, as a result, managers may engage in earnings manipulation

to meet or beat analysts forecast. When ownership is separated from control in firms, it creates the potential for conflict of interest between the directors and shareholders but the presence of active internal corporate governance mechanism practice can mitigate such conflict. As stated by Ashbaugh, Collins, & LaFond, 2006; a firm with stronger corporate board is linked with more information disclosures, lower earnings manipulation and higher earnings quality. The corporate governance framework specifies the distribution of rights and responsibilities peculiar to the different participants in the firm such as; the board, the managers, shareholders, audit committee and other stakeholders, and spells out the rules and procedures for decision making on corporate affairs (Adetunji & Olawoye, 2009). It should be noted however that, there are still cases of earnings manipulation and unethical accounting practices by managers which have implications on earnings quality of firms in Nigeria (Shehu & Musa, 2014). Cases of unethical accounting practices have brought to the fore the need for the practice of board monitoring as a means to checkmate earnings manipulation through discretionary accruals to ensure earnings quality of quoted firms on the Nigeria Exchange Group Ltd. According to Onuoha, Okpanachi, Suleiman & Agabi (2021) when looking at the earnings quality of financial reports, it is important to look at the factors that shape the quality of earnings. The factors have been categorized into the internal and external factors. The internal factors include: accounting and auditing functions, internal controls and corporate governance. The external factors are factors which are outside the financial reporting system of the firm that includes the state of the economy, macroeconomic conditions, nature of the business, the industry the firm belongs, and

the operating environment. The external factors are not within the control of the management to manipulate in achieving a discretionary purpose.

1.3 Objectives of the Study

The broad objective of the study examined the effect of board monitoring capacity on earnings quality among selected quoted non-financial firms in Nigeria; the specific objective of the study was to examine the effect of board financial expertise on earnings quality of selected quoted firms on the Nigeria Exchange Group Ltd in the Nigerian non-financial sector.

1.4 Research Questions

To aid the research the following question was posited.

1. To what extent does board financial expertise affect earnings quality of quoted non-financial firms in Nigeria?

1.5 Research Hypothesis

The research hypothesis is stated in the null form as follows:

H₀₁: board financial expertise does not have a significant effect on earnings quality of non-financial firms quoted on the Nigeria Exchange Group Ltd.

1.6 Scope of Study

This research investigated the effect of board financial expertise on earnings quality of non-financial firms quoted on the Nigeria Exchange Group Ltd over a twelve year period spanning from 2010 to 2021. The study focused on quoted non-financial firms that meet the board characteristics, board financial expertise and earnings quality data criteria at the end of December 31, 2021. The study period was suitable because it witnessed series of accounting scandals that affected some quoted companies on the Nigeria Exchange Group Ltd.

During the period of corporate frauds, the Nigeria Securities and Exchange Commission reviewed the Code of Corporate Governance established in 2002 to ensure higher standards of corporate governance among quoted firms on the Nigeria Exchange Group Ltd. This work focused on internal corporate governance mechanism provided by board monitoring capacity to investigate quoted Nigerian firms collectively in the non-financial sector. The non-financial sectors for this study are: Agriculture and Natural Resources, Conglomerates, Oil and Gas, Information Communication Technology, Consumer Goods, Industrial Goods, Health Care; and Services.

1.7 Significance of the Study

The study would be significant to the academic community in improving literature by examining internal corporate governance mechanism of board monitoring capacity through board financial expertise. The result would assist in explaining the effect of board financial expertise on the reported quality of earnings of non- financial firms quoted on the Nigeria Exchange Group Ltd. The research results will inform stakeholders, regulators and investors, to make new regulatory frameworks and better investment decisions.

1.8 Limitations of the Study

Some firms of the Nigeria Exchange Group Ltd did not qualify for analysis due to unbalanced panel data while some had incomplete data or missing data; as such these firms were dropped from the data set. However, this is deemed not limiting enough because such firms listed are very few.

2.0 Literature Review

2.1 Conceptual Review

2.1.1 Board Financial Expertise

The Blue Ribbon Committee (2009), defined financial expertise as previous employment experience in finance or accounting, the requisite professional certification in accounting, or any other comparable experience or background which has resulted in the individual's sophistication, including being or having being a CEO or other senior rank officer with financial oversight responsibility in a particular firm. The Nigerian Code of Corporate Governance [NCCG: 2018] stipulated that the board of directors should promote expertise in its membership across a variety of attributes relevant to promoting better decision making and effective governance. One of such attributes as stipulated in the code of conduct is the field of relevant knowledge.

As asserted by Guner, Malmendier & Tate (2008), it is pertinent for board members to have an understanding of accounting principles and financial statements which leads to a better board oversight. Hambrick and Manson (1984) stated that there are two types of essential competencies requisite for the top management team of a firm including a firm's directors:

- (i) Functional knowledge; and
- (ii) Firm-specific knowledge

Functional knowledge covers knowledge in accounting, finance, legal, marketing and economics,

whilst firm-specific knowledge relates to detailed information about the firm and its operation.

Similarly, Abernathy, Beyer, Masli & Stefaniak (2014) classified financial expertise into three groups:

- (i) accounting expertise;
- (ii) non- accounting expertise; and
- (iii) non-financial expertise

It was opined by Aifuwa and Embele (2018) that to become an expert on a board, a director must possess adequate educational and professional experience in areas of accounting, finance and auditing.

Agrawal and Chadha (2005), posited that non-experienced members in the field of accounting and finance are not capable of discerning problems in the financial reports compared to experienced members. The experienced directors through experiential learning are capable of monitoring and advising because they positively contribute to a company's outcomes. Directors with reasonable financial backgrounds are more effective in providing internal control system mechanisms to control firm performance (Conger & Ready, 2004; Kor & Sundaramuthy, 2009). When the board of directors comprises of experts, there is always a level of confidence in the financial statements reported (Onourah & Imene, 2016). Board experience assists in creating transparent financial reports as it facilitates a comparison of knowledge and experience with respect to other firms (Dahya, Lonie & Power, 1996). Board members' requisite knowledge obtained through directorship experience is significant in explaining the effectiveness of a particular board, thus directors who lack experience are incapable of contributing fully to a firm's strategy (Kroll, Walters & Wright, 2008).

2.1.2 Earnings Quality

The fundamental or actual earnings is the faithful representation of the true economic performance of the firm and thus, reflects fairly the current operating performance of the firm and useful in forecasting accurately the future performance and profitability of the firm (Mohammadi, 2014).

The basic idea is that the earnings report should faithfully represent changes in wealth. This represents the accruals quality or earnings management perspective and thus the analyst view of faithful representation in accounting. Earnings quality about how faithfully accruals accounting has been applied.

Earnings quality reflects the usefulness of information provided by financial accounting. Higher earnings quality provides more information about the features of a firm's financial performance that is relevant to a specific decision made by a specific decision-maker (Dechow, Schrand & Ge 2010). Earnings quality is relevant for all types of users of the reported earnings. It is relevant for its shareholders, debt holders, and the management itself since compensation contracts is based on earnings, which means that overstating earnings would result in overcompensation of managers (Schipper & Vincent, 2003).

Earnings quality itself is a wide notion and can be referred to in three features (Dechow *et al.*, 2010):

1. Earnings quality relates to the decision-relevance of the provided information.
2. Earnings quality relates to the informativeness of the earnings with respect to the firms' financial performance.
3. Earnings quality relates to the ability of the accounting system to measure performance.

There are other views of earnings quality; all bordering on a variety of perspectives. Hence, it has been argued by Dichev, Graham, Harvey & Rajgopal (2013) that the meaning of earnings quality is contextual; that to understand it properly, we have to look at it generally from the perspectives of the different users of the

earnings information and decision usefulness perspective.

Existing literature in accounting research has presented many of such views on earnings quality.

Some examples on the common ones will help broaden our horizon on this:

i. Debt holders such as creditors and suppliers who are earnings information users are concerned with how easily the earnings can be converted to cash flows. From their own perspective, earnings quality is high if it can easily be realized as cash flows; as against a growing gap between accrued earnings which is indicative of artificial earnings and cash flows. This creates doubts as to the ability of the firm to meet its debt obligations. This view also borders on faithful application of accruals accounting (Dichev *et al*, 2013).

ii. Auditors, standard setters and regulators view earnings quality from the perspective of conformity to the requirements of Generally Accepted Accounting Principles (GAAP) and Financial Reporting Standards (FRS). For them, earnings are of high quality when they are derived according to GAAP and FRS requirements. This reflects their need of earnings report useful for both performance and stewardship valuations based on faithful application of principles and standards (Dichev *et al*, 2013).

iii. Contractors would want to know whether the earnings figure is reliable enough to serve as an indication of management's performance to deserve compensation.

iv. Managers would want a high earnings figure that is persistent for it to be regarded as high quality because it would enhance their reputation for good performance. Forecasters share the same view that earnings figures must

be persistent to be able to make predictions about the future earnings of the firm.

v. For investors earnings that are persistent are of a high quality as it enables them to make investment decisions as whether to buy, hold or sell their stakes in the firm (Dichev *et al*, 2013). Again, from investment perspective, earnings quality is also viewed in terms of increase or decrease in returns compared to the scale of operations, which centers on firm operating performance. A low earnings quality serve as a signal to reconsider resource allocation; but then, the figure must be reliable enough to reflect the actual performance of operations which would rightly direct the allocation of resources to investments (Onuoha, Okpanachi, Suleiman & Agbi, 2021).

vi. Other users may view earnings quality in terms of the relevance and reliability of the earnings report. To be of high quality, the earnings report must be relevant and reliable to meet the decision needs of the user. Relevance also connotes timeliness for decision-making (Onuoha *et al*, 2021). According to Dechow and Schrand (2004), this will only hold true if the earnings figure is reliable and if it persists in the future.

In all the aforesaid perspectives of earnings quality and with regard to other perspectives not mentioned herein, the bottom line remains that reliability of earnings report boils down to true representation of the economic performance of the business operations. This is consistent with the view of Dechow and Schrand (2004) that fraudulent reporting is low earnings quality; while a high quality earnings report reflects the true economic performance of the firm and can be relied upon for decision making and in arriving at accurate evaluations on the performance of management in running the business of the firm (Onuoha *et al*, 2021). According to Omoye and Eriki (2014), earnings management is attempts by management to

manipulate reported earnings by using specific accounting methods or accelerating expense or revenue transactions, or using other methods designed to influence short-term earnings. In order for earnings to be relevant, among other things, current earnings numbers must be persistent and have predictive values. As for the reliability, earnings information must be faithfully represented and free from errors and bias. Al-Dhamari & Ismail, (2014) posit that earnings persistence, predictability and informativeness are used in representing earnings quality because the features are important characteristics of reliable and relevant earnings information. Earnings information should be relevant in helping investors make correct asset pricing and investment decisions (Yuan & Jiang, 2008).

2.1.3 Measures of Earnings Quality

Since earnings quality is qualitative in nature, several proxies are to be used to measure it. Persistence and predictability of earnings are viewed as two principal characteristics of earnings numbers which help investors to predict future earnings and cash flows. Earnings are of high quality when they are persistent. It is argued that the importance of the predictive nature of accounting earnings is manifested when taking into consideration, the evaluation of the equity of firms (Velury & Jenkins, 2006). On the other hand, earnings informativeness refers to the ability of earnings to influence the expectations of investors with respect to the quality of earnings figures, as reflected in changes in share price (Kormendi & Lipe, 1987). Accrual proxies represent the kind of defects that internal control mechanisms such as the board can monitor and prevent, and not external control like the external audit. There have been attempts by researchers to classify the measures. Some of the common measures

of earnings quality available include models to measure earnings quality based on persistence, predictability, smoothness and faithful representation perspectives of earnings quality (accruals quality). Others include variability, the of ratio of accrual to cash flow, ratio of cash flow from operation to income, value relevance, timeliness, conservatism, et cetera. Onuoha *et al*, (2021) categorized them into accounting-based and market-based measures. The accounting-based measures uses accounting information only in the measurement of earnings quality, as accounting information can be influenced by management to achieve a discretionary purpose. The measures include accruals quality, persistence, predictability and smoothness. While the accruals quality measure can be seen as an information reliability or earnings management measure indicating high earnings quality (reliability) when earnings management is reduced, the persistence, predictability and smoothness are regarded as information enhancing measures as they indicate high quality of earnings when less noisy items or less misleading fluctuations in earnings are reflected in order to achieve a more useful earnings report. The market-based measures which rely on the relationship between the financial report and the stock market make use of both accounting information and market-based information in their measurement. They include value relevance and timeliness. The argument is that earnings should also reflect income in terms of stock returns due to increase or decrease in earnings which leads to fluctuations in the share price of the firm. The market-based information cannot be influenced by management to achieve a discretionary purpose. This study view earnings quality from the perspective of the accruals quality (information reliability or earnings management perspective) of the

reported earnings, this research adopts accruals quality in the measurement of earnings quality of quoted non-financial firms on the Nigeria Exchange Group Ltd. This is also in agreement with the theoretical construct of the study as the board of directors is an internal control mechanism to monitor and prevent management from opportunistic accruals management that erodes earnings quality. Studies has found out that management usually prefers influencing or managing accruals because it provides them cover in their application of accounting methods and standards, without being detected. Therefore, as a measure of earnings quality, the accruals quality model measures the extent to which reported accruals represent the actual accruals of the firm for the period under review; that is, the extent to which reported accruals represent the truth, because it is the extent to which the accruals have been influenced by management that determines the earnings quality of the report, and that is what the accruals quality model seeks to establish (Wambui, 2018).

Developing a generally acceptable metrics under the accruals model has not been an easy one for researchers because earnings quality through accruals quality cannot be observed directly. In developing the accruals model, scholars categorized accruals into two components. According to Dechow *et al* (2010), the objective is to identify the component that is the result of management's discretion or manipulation or due to error (the discretionary component), from the component that reflects the actual or fundamental earnings of the firm (the non-discretionary component). The effort is directed towards isolating the discretionary component (which serves as a measure of earnings quality) from the total accruals using regression techniques. Obtaining

a higher level of the discretionary component suggests low earnings quality.

2.2 Theoretical Framework

Several theories explain the effect of board independence on earnings quality.

This research was anchored on the Agency theory.

2.2.1 Agency Theory

The agency theory was postulated by Mitnick in 1973 and spread by Jensen and Meckling in 1976. The theory posit that the agency relationship is a contractual agreement between the principal who engage another person (the agent) to carry out certain service(s) on his behalf including delegation of some decision making authority (Jensen & Meckling, 1976). When the interests of the owners of a firm (principal) and managers (agents) diverged then agency theory suggests that there is potential for "managerial mischief". In 1976 Jensen and Meckling identified three agency costs that the principal is likely to incur, which are: the total monitoring cost incurred by the principal to limit the deviant activities of the agent; the bonding cost by the agent which gives assurance that certain actions of the agent shall not be harmful to the principal or to ensure compensation of the principal if such actions occur; and the residual dollar equivalent loss to the drop in welfare as a result of the discrepancy between the agent's decisions and those decisions that maximizes the welfare of the principal.

The Agency theory posits that because people have self-interest there would be conflicts of interests over some issues any time the agent and principal attempt to engage in any cooperative venture. The major crux of agency relationship is to align the interest of shareholders and managers with a view to

resolving the inherent conflict between the agent and the principal (Fama & Jensen, 1983). According to Mitnick (1973), agency problems occur in three ways: the principal's problem, the agent's problem, and the policing instruments and incentives. The principal's problem assists to motivate the agent to act in a way that will achieve the principal's goals. The principal, through audit supervision, ensures that the agent acts in a way beneficial to the principal's interest and report the true state of the company's affairs. The agent problem deals with decisions to act either in the principal's interest, his own interest, or compromise between the two interests when they do not coincide. Agency theory in relation to corporate governance assumes two levels of control, manager control-agent and owner's control-principal to reveal actual earnings quality to shareholders (Omoye & Eriki, 2014). Critics of agency theory such as Segrestin and Hatchuel (pp. 487-488):2011), who posit that the "agency theory and its applications to the issues of corporate governance focus on such problems as unrealistic premise concerning managers' motivations and actions, ineffective recommendations inferred from the theory and dubious legal interpretations of corporate governance being made on its basis.

In summary, the relevance of this theory to this study is that it helped to explain how management as the agent was expected to perform their ideal fiduciary duty of acting in the best interest of the principal and to prepare and present earnings reports to the principal. Thus, agency theory is believed to offer a solid theoretical foundation for the broad objective as well as specific objectives one to five of this study.

2.3 Empirical Review

Kantudu and Alhassan (2021) carried out a study on audit committee and financial reporting quality in listed non-financial firms in Nigeria. The paper evaluated the effect of the audit committee on financial reporting quality in Nigeria. The ex-post facto research design was adopted utilizing data from 41 non-financial firms listed in the Nigerian Stock Exchange (NSE) from 2011 to 2019. The Generalized Method of Moments (GMM) technique was employed. The paper revealed that audit committee size, shareholders and financial experts' inclusion in audit committee conveyed a significantly negative relationship with earnings management, thereby reducing discretionary accruals and increase financial reporting quality. The paper recommended that the board of directors should ensure appointment audit committee members with adequate financial knowledge and shareholders should be included as this will enable them to perform their oversight functions effectively and create good atmosphere for the statutory audit. A research was carried out by Kapkiyai, Cheboi & Komen (2020) on audit committee effectiveness on earnings management among publicly listed firms in Kenya. The paper investigated the role of an effective audit committee in controlling earnings management practices. Explanatory research design was adopted. A panel data was sourced from 35 listed firms on Kenyan Nairobi Securities Exchange in a total of 490 firm-year observations for the periods between 2004 and 2017 and analysed using a panel regression model. The paper revealed that audit committee effectiveness proved an important monitoring mechanism for earnings management. The audit committee independence, meeting frequency, and financial expertise revealed a negative and significant effect on earnings management. The

paper recommended that firms need to ensure that their audit committees operate independently and effectively with a higher number of members with financial expertise and optimal meeting frequency for fewer earnings management.

Juhmani (2017) studied audit committees' effectiveness in monitoring management's intent to manipulate earnings. Measurement variables for the audit committees' characteristics were size, independence, financial expertise and diligence, whereas, discretionary accruals were proxy for earnings quality. Secondary data were obtained from 31 listed firms in Bahrain from 2012 to 2014. Analysis was done using bivariate and multivariate regression tools respectively. Findings showed that earnings manipulation lessens the quality of earnings. Similarly, earnings manipulation has a negative association with the size and financial expertise of audit committees, though there was no significant relationship between earnings management and the level of independence and meetings of audit committees.

3.0 Methodology

3.1 Research Design

Table 1: Population distribution

Sector	Number of companies
Agriculture	5
Conglomerate	5
Construction	8
Consumer Goods	21
Health Care	7
ICT	9
Industrial goods	13
Natural gas	4
Oil and Gas	10
Services	24
Total	106

Source: Nigeria Exchange Group Ltd, 2021

The study employed Ex-post facto design. This research design was adopted because the study depended grossly on secondary data collected from the annual report and accounts of non-financial companies quoted on the Nigeria Exchange Group Ltd. A quantitative portion of this study involved the use of multiple regressions, T-test, and correlation. The regression was subjected to diagnostic tests.

3.2 Population

The target population for this study consists of the 106 non-financial companies quoted on the Nigeria Stock Exchange within the period of 2010 to 2021 financial years. The proportions of the companies are listed in Table 1 below. The study adopted purposive sampling technique due to missing and partly unavailable data for some companies. 12 companies had listing periods less than the periods covered by this study, hence leaving an initial sample of 94 quoted companies. The 94 companies were subjected to further selection, based on companies that reported adequate data for measuring the variables of the study. About 10 companies were further removed.

The final sample size of the study was 84 quoted non-financial companies.

Table 2: Sample distribution

Sector	Number of companies
Agriculture	8
Conglomerate	5
Consumer Goods	16
Health Care	7
ICT	5
Industrial goods	11
Oil and Gas	8
Services	24
Total	84

Source: Researcher’s Computation, 2022

3.3 Data and Data Sources

In achieving the set objectives of this study, only secondary data from the audited financial statements of non-financial companies quoted on the Nigeria Exchange Group Ltd was used covering the period from 2010 to 2021 in order to fully enrich its fitness in the regression. In order to collect relevant data, the data collection matrix was designed in such a way that every variable was captured so as to collect only relevant data. The procedure involved visiting the websites of the individual non-financial company to download their audited financial statements; this was to ensure that all the relevant years were complete. Thereafter the required information to measure the variables extracted and processed for further analysis. The information obtained from the audited financial statement of the quoted companies was compared with the documentation of the Security and Exchange Commission and Nigeria Exchange Group Ltd fact books to ensure accuracy in data collection.

3.4 Model Specification and Description of Study Variables

3.4.1 Dependent Variable

Earnings quality is the ability of earnings to meet the primary objective of financial reporting, providing relevant and reliable information to stakeholders. Also, it is the capability of reported earnings (income) to predict an organization’s future earnings and it reveals a company’s financial wellbeing, which improves capital market efficiency (Boulton, Smart & Zutter., 2011).

In this study, Earnings quality (EQ) as the dependent variable was measured by the absolute value of the discretionary accruals (DA) using Yoon et al. (2006) model as found in previous studies. The studies by Yoon, Canli & Schwarz (2006) and Al-Rassas and Kamardin (2015) clearly signified the non-robustness of the modified Jones model by Dechow and Sloan (1995). The model for Yoon et al. (2006) proposes that the sum of the accruals is directly associated with changes in cash revenue or sales, non-cash expenses off depreciation expenses, cash expenses, and retirement benefit expenses. Thus, discretionary accruals were termed as the difference between the total accruals and non-discretionary accruals as stated below:

$$\frac{ACC_{it}}{REV_{it}} = \beta_0 + \frac{\beta_1(\Delta REV_{it} - \Delta REC_{it})}{REV_{it}} + \frac{\beta_2(\Delta EXP_{it} - \Delta PAY_{it})}{REV_{it}} + \frac{\beta_3(\Delta DEP_{it} + \Delta RET_{it})}{REV_{it}} + \epsilon_{it}$$

Where:

ACC = Total accruals

REV = Sales Revenue

REC = Accounts receivables

EXP = Sum of cost of goods sold, administrative expenses and selling expenses, excluding non-cash expenses

PAY = Accounts payables

DEP = Depreciation and amortization expenses

RET = Retirement benefits expenses

Δ = Change (measured as difference between current year value and last year value)

$$DA_{it} = \frac{ACC_{it}}{REV_{it}} - \left[\beta_0 + \frac{\beta_1(\Delta REV_{it} - \Delta REC_{it})}{REV_{it}} + \frac{\beta_2(\Delta EXP_{it} - \Delta PAY_{it})}{REV_{it}} + \frac{\beta_3(\Delta DEP_{it} + \Delta RET_{it})}{REV_{it}} \right] + \epsilon_{it}$$

Where:

DA= discretionary accruals

The absolute value of the discretionary accruals is equal to earnings management since earnings management is either income-increasing or income-decreasing accruals. It was also suggested that the absolute value of the abnormal accruals is a significant proxy in relation to the joint effect of income-increasing and/or income-decreasing earnings management (Bedard, Chtourou & Courteau

2004; Abdul Rahman & Ali, 2006). Thus, it could be clearly stated that the high absolute value of the discretionary accruals relatively shows a low earnings quality and the reverse is the case.

3.4.2 Independent Variable

The independent variables are described in the Table 4 below:

Table 3: Description of Independent variable

Board Financial Expertise (BDFEX)	The proportion of board members who have an accounting background and financial experience.
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Source: Rusmin, (2011); Badolato, Donelson & Ege., (2013); Musa, Debnarova, Musova & Kristofik, (2017).

3.4.3 Control Variables

The control variables are described below:

1. Firm Size (FSIZE): measured as natural logarithm of total assets
2. Leverage (LEV): measured as total liabilities to total assets
3. Firm Growth (FGROW): measured as change in assets

3.4.4 Model Specification

The regression model specified to test the hypothesis is specified here:

$$EQ = F (BMC)$$

Where:

EQ = Earnings Quality

BMC = Board Monitoring Capacity; proxy by
BFEX = Board Financial Expertise

However, EQ is measured as Discretionary accruals (DA), while Board Financial Expertise is measured as BFEX.

The model is mathematically expressed as:

$$DA = \beta_0 + \beta_1 BFEX + \beta_2 CON + e$$

Where:

DA = Discretionary Accruals

BFEX = Board Financial Expertise

CON = Control variables, including Firm Size, Firm growth and Leverage

3.5 Method of Data Analysis

To allow for the use of multiple linear regressions, there were preliminary checks to ensure the data present the best, linear unbiased estimators for use. Accordingly, the assumptions of normality, linearity, homoscedasticity, and non-multicollinearity

and non-serial correlation were checked using the relevant statistics. To ascertain the non-collinearity of data set and to be certain that OLS assumptions are addressed, Variance Inflation Factors (VIF) was used on the variance of an estimator. The VIF formula is $1/(1-R^2)$. The guiding rule is that a VIF that exceeds 4 will indicate the need for further investigation, while A VIF of 1 will imply the absence of correlation among predictors but serious multicollinearity sign will be revealed when VIF exceeds 10 (Gujarati, 2004).

Serial correlation or Autocorrelation was tested with the use of Durbin Watson (DW) test which is considered appropriate for this study because the samples are Panel data. DW test findings show serial correlation when the test result is different from 2 and no autocorrelation when the result is around 2. Nevertheless, a Newey-West method which is an extension of White's test for detecting heteroscedasticity and corrects standard error for autocorrelation at the same time was employed because of its suitability for a large sample (Gujarati & Forter, 2010). The descriptive statistics include simple mean, median, and standard deviation. This study used panel fixed effect regression analysis for quantifying the influence of various simultaneous influences upon a single dependent variable. T-test and F-Statistic at 5% level of significance was used to examine the significance of coefficients of variables in the model. To ascertain the explanatory power of corporate governance mechanisms on earnings quality for the total period of observation, the adjusted coefficient of determination (R^2) was performed. Furthermore, the study employed Fixed and Random Effects Models for the purpose of addressing the heterogeneity of the sample data (Omokhudu & Ibadin, 2015). In

order to determine the efficiency of either random or fixed effect models, Hausman's (1978) specification test was performed to ascertain the effects of model that was more appropriate for the study. The Fixed Effect Model was selected because it was more appropriate for the study. A second possible model specification check for the consistency of variables in the data which is the Fixed Effect Redundancy test was also performed.

4. Results and Discussions

4.1. Data Presentation

The data used in this section were categorized into the dependent, independent and moderating variables of the study. The construct for Corporate Governance Mechanism used is the Board Financial Expertise. Discretionary Accrual (DAC) was used as proxy or measure

of earnings quality, which is earnings management. The control variables include: Firm Size (FSIZE), Leverage (LEV) and Firm Growth (FGROW).

4.2 Data Analyses

Three sets of analyses are presented in this section: descriptive analyses, correlation analyses and multicollinearity analysis.

4.2.1 Descriptive Analyses

This section captures the descriptive statistical analyses of all variables and constructs, revealing their mean, median, standard deviations, maximum and minimum values. Table 4 presents the data:

EFFECT OF BOARD FINANCIAL EXPERTISE ON EARNINGS QUALITY OF QUOTED FIRMS IN THE NIGERIAN NON-FINANCIAL SECTOR

Jacob Sackey

Table 4: Descriptive Statistics of pooled data Variables

	DAC	BIND	BGDIV	BFEX	ACIND	ACFK	ACDIL	FSIZE	LEV	FGROW
Mean	-0.035	4.733	2.772	4.922	3.831	4.694	9.360	7.090	0.348	4.955
Median	-0.031	4.000	3.000	5.000	4.000	5.000	9.000	6.990	0.274	0.002
Maximum	0.937	12.00	5.000	11.00	7.000	9.000	14.00	9.661	0.620	0.987
Minimum	-0.992	2.000	0.000	3.000	2.000	3.000	4.000	3.481	-0.017	-0.999
Std. Dev.	0.153	1.710	0.899	1.373	1.067	1.146	1.972	0.928	0.331	66.10
10 th Perc.	-0.171									
90 th Perc.	0.090									
Observations	1002	1002	1002	1002	1002	1002	1002	1002	1002	1002

Earnings management through Discretionary Accrual (DAC), Board independence (BIND), Board Gender Diversity (BGDIV), Board Financial Expertise (BFEX), Audit Committee Independence (ACIND), Audit Committee Financial Knowledge (ACFK), Audit Committee Diligence (ACDIL), Firm Size (FSIZE), Leverage (LEV) and Firm Growth (FGROW).

Table 5: Sectorial analysis is presented in the Table 5 below:

Descriptive Statistics of variables for different sectors

VARIABLE	Stat	SEC1	SEC2	SEC3	SEC4	SEC5	SEC6	SEC7	SEC8
bs		8	5	5	11	7	8	16	24
No. of firms)									
DAC	Mean	-0.021	-0.090	-0.021	0.052	-0.060	-0.086	-0.053	-0.034
	Med	-0.314	-0.076	-0.022	0.053	-0.068	-0.084	-0.045	-0.031
	Max	0.937	0.118	0.219	0.329	0.589	0.549	0.809	0.754
	Min	-0.582	-0.967	-0.432	-0.397	-0.402	-0.635	-0.992	-0.908
BIND	Mean	4.116	4.203	3.397	5.160	4.938	4.115	5.053	5.045
	Med	3	4	3	5	4	4	5	5
	Max	6	6	4	12	8	6	9	9
	Min	2	3	2	2	4	3	3	2
BGDIV	Mean	2.716	3.203	2.207	2.419	2.556	2.625	2.709	3.122
	Med	2	3	3	2	3	3	3	3
	Max	4	4	3	4	3	3	4	5
	Min	2	2	1	0	2	2	1	1
BFEX	Mean	5.379	7.767	4.397	4.428	5.617	2.948	4.746	4.739
	Med	4	8	4	4	5	4	5	4
	Max	9	11	5	6	7	6	6	6
	Min	3	5	4	3	4	3	3	3
ACIND	Mean	4.116	4.203	3.259	2.947	4.160	4.094	4.550	3.521
	Med	3	4	3	3	4	4	5	4
	Max	6	6	6	4	6	6	7	5
	Min	2	3	2	2	3	3	3	2
ACFEX	Mean	5.379	4.797	4.069	4.435	5.593	3.948	4.746	4.642
	Med	4	5	4	4	5	4	5	4
	Max	9	8	5	6	7	6	6	6
	Min	3	3	3	3	4	3	3	3
ACDIL	Mean	10.894	7.593	10.414	9.023	7.864	9.115	8.011	10.517
	Med	12	8	9	9	7	8	8	11
	Max	12	8	14	12	9	12	12	14
	Min	4	6	8	6	7	6	6	7

Earnings management through Discretionary Accrual (DAC), Board independence (BIND), Board Diversity (BDIV), Board Financial Expertise (BFEX), Audit Committee Independence (ACIND), Audit Committee Financial Expertise (ACFEX), Audit Committee Diligence (ACDIL), Firm Size (FSIZE), Leverage (LEV) and Firm Growth (FGROW).

SEC 1 = Oil and Gas sector; SEC 2 = ICT sector, SEC 3 = Conglomerate sector, SEC 4 = Industrial goods sector, SEC 5 = Health sector, SEC 6 = Agricultural sector, SEC 7 = Consumer goods sector, SEC 8 = Service sector.

The data revealed that on average, the non-financial firms quoted on the Nigeria Exchange Group Ltd had average discretionary accruals of -0.035, with a median of -0.031. The values indicated that overall, the sampled non-financial firms in Nigeria engaged discretionary earnings management during the study period. The maximum value of 0.94 and minimum value of -0.99 indicated that the selected firms engaged in both aggressive discretionary earnings management (indicated by positive DAC), and conservative earnings management (indicated by negative DAC). The analysis of data revealed that out of 1002 observations, about 660 observations engaged in conservative earnings management, while 342 observations engaged in aggressive earnings manipulation. More so, of the 342 observations that managed earnings upwards, a higher level of aggressive discretionary earnings management was on the average greater in the covid-19 pandemic year (2020). This is because firms were faced with severe economic conditions that eroded their profits, and consequently managed earnings upwards to meet earnings benchmarks, thereby ensuring that stakeholders' confidence is not eroded. This agrees with the findings of Lassaud and Khanchel (2021), and Abdul et al (2021). Furthermore, by using the 10th and 90th percentiles in each industry-year as the lower and upper benchmarks, about 202 firm-year observation had extremely high level of aggressive earnings management and extremely high value of conservative earnings management, with 101 observations exceeding the highest industry aggressive DAC value of 0.09, and highest industry discretionary DAC value of -0.171 respectively. Analyses of the eight (8) industries examined in this study are highlighted below.

First, the average DAC of Oil and Gas firms is -0.027, with a median of -0.037. About 66 observations out of 96 had negative DAC, indicating that majority of the Oil and gas firms engaged in conservative discretionary earnings management during the period of the study. About 14 observations exceeded the 10th and 90th percentile EM benchmark, indicating that 14 observations carried out extremely high levels of aggressive and conservative earnings management, with maximum and minimum DAC values of 0.937 and -0.582 respectively.

Second, the average DAC of ICT firms is -0.090, with a median of -0.076. About 51 observations out of 60 had negative DAC, indicating that about 85 percent of firm-year observations in the ICT sector engaged in conservative discretionary earnings management during the period of the study. Apart from the financial sector which pays the highest tax in the Nigerian economy, the ICT sector is a major sector that pays high amount of taxes (Wali, 2021). The result may imply that the high level of conservative DAC engaged by the ICT sector could be to reduce the high tax burden. In order to reduce tax payments, about 12 observations exceeded the 10th and 90th percentile EM benchmark, indicating that 6 observations carried out extremely high levels of aggressive and conservative earnings management respectively, with maximum and minimum DAC values of 0.118 and -0.907 respectively.

Third, the average DAC of Conglomerate firms is -0.022, with a median of -0.022. About 38 observations out of 60 had negative DAC, indicating that about 63 percent of firm-year observations in the Conglomerate sector engaged in conservative discretionary earnings management during the period of the study. About 8 observations exceeded the 10th

and 90th percentile EM benchmark, indicating that 4 observations carried out extremely high levels of aggressive and conservative earnings management respectively, with maximum and minimum DAC values of 0.219 and -0.433 respectively.

Fourth, the average DAC of Industrial Goods firms are 0.052, with a median of 0.053. About 29 observations out of 132 had negative DAC, indicating that only about 22 percent of firm-year observations in the Industrial Goods sector engaged in conservative discretionary earnings management during the time frame of the study. Contrary to the high levels of conservative discretionary accruals engaged in by firms in other sectors examined, firms in the Industrial Goods sector of Nigeria engaged more in aggressive or income increasing DAC, indicated by 78 percent. Almeida et al (2022) reported that industrial firms can play a relevant role in motivating aggressive or income-increasing earnings management practices as a result of the high competition, growth propensity, and financing prospects. Only about 12 observations exceeded the 10th and 90th percentile EM benchmark, indicating that 6 observations carried out extremely high levels of aggressive and conservative respectively, with maximum and minimum DAC values of 0.219 and -0.433 respectively.

Fifth, the average DAC of Health firms is -0.060, with a median of -0.068. About 66 observations out of 82 had negative DAC, indicating that about 80 percent of firm-year observations in the Health sector engaged in conservative discretionary earnings management during the period of the study. A high number of observations (32) exceeded the 10th and 90th percentile EM benchmark, indicating that 16 observations carried out extremely high levels of aggressive and conservative respectively, with maximum and

minimum DAC values of 0.589 and -0.402 respectively.

Sixth, the average DAC of Agricultural firms is -0.086, with a median of -0.084. About 77 observations out of 96 had negative DAC, indicating that about 80 percent of firm-year observations in the Agricultural sector engaged in conservative discretionary earnings management during the period of the study. A high number of observations (36) exceeded the 10th and 90th percentile EM benchmark, indicating that 18 observations carried out extremely high levels of aggressive and conservative earnings management respectively, with maximum and minimum DAC values of 0.549 and -0.635 respectively.

Seventh, the average DAC of Consumer Goods firms is -0.052, with a median of -0.045. About 129 observations out of 189 had negative DAC, indicating that about 63 percent of firm-year observations in the Consumer Goods sector engaged in conservative discretionary earnings management during the period of the study. 38 observations exceeded the 10th and 90th percentile EM benchmark, indicating that 19 observations carried out extremely high levels of aggressive and conservative EM respectively, with maximum and minimum DAC values of 0.809 and -0.992 respectively.

Finally, the average DAC of Service firms is -0.052, with a median of -0.045. About 203 observations out of 288 had negative DAC, indicating that about 70 percent of firm-year observations in the Service sector engaged in conservative discretionary earnings management during the period of the study. 50 observations exceeded the 10th and 90th percentile EM benchmark, indicating that 25 observations carried out extremely high levels of aggressive and conservative earnings

management respectively, with maximum and minimum DAC values of 0.754 and -0.908 respectively.

Overall, the results reveal that discretionary earnings management differs from one industry to another in the Nigeria Exchange Group Ltd. On average, all sectors excluding Industrial goods sector had higher conservative or income-decreasing discretionary accruals earnings management, with greater income-reducing EM found in the ICT sector.

4.2.2 Correlation Analyses

The matrix of correlation analyses captured in this section used the Pearson Moment correlations to describe the relationship between variables, and the presence of multicollinearity amongst the independent variables.

The analysis of Pearson moment Matrix Correlation is presented in the Table 7 below.

Board financial expertise (BFEX) has a negative and significant association with discretionary accruals earnings management ($r=-0.09, p<0.05$).

The association of control variables with earnings management reveals that firm size is positively associated with discretionary accruals ($r=0.009$), while leverage and firm growth have negative association with discretionary accruals ($r=-0.014$) and ($r=-0.007$) respectively. The association among the control variables reveal that firm size is negatively correlated with leverage ($r=-0.039$) and positively with firm growth ($r=0.046$), while leverage is negatively associated with firm growth ($r=0.009$).

Overall, the correlations do not present any threat or limitation to analysis as there appears to be no problem of multicollinearity among the independent variables and control variables. Since all correlations are below 0.70, there is no problem of multicollinearity.

Table 6: Pearson Moment Matrix Coefficient of Study Variables

Correlation										
<i>Probability</i>	DAC	BIND	BGDIV	DFEXP	ACIND	ACFEXP	ACDIL	FSIZE	LEV	FGROW
DAC	1.000									
BIND	0.064*** 0.0423	1.000								
BGDIV	0.043 0.1747	0.227*** 0.0000	1.000							
DFEX	0.090*** 0.0369	-0.042 0.1807	0.110*** 0.0005	1.000						
ACIND	0.104*** 0.0222	0.086*** 0.0062	-0.045 0.1526	0.199*** 0.0000	1.000					
ACFEX	-0.053 0.0902	0.034 0.2801	-0.052 0.0984	0.318*** 0.0000	0.103*** 0.0011	1.000				
ACDIL	0.071*** 0.0239	0.057 0.0685	0.129*** 0.0000	0.257*** 0.0000	0.098*** 0.0018	0.059 0.0615	1.000			
FSIZE	0.009 0.7652	0.007 0.8058	0.009 0.9977	0.101*** 0.0014	0.025 0.3539	-0.060 0.0579	0.033 0.2938	1.000		
LEV	-0.013 0.6705	0.208*** 0.0000	-0.007 0.8237	0.164*** 0.0000	0.014 0.6536	0.094*** 0.0029	0.276*** 0.0000	-0.039 0.2169	1.000	
FGROW	-0.007 0.8218	0.006 0.8441	-0.024 0.4399	-0.042 0.1765	0.037 0.2333	0.088*** 0.0052	-0.044 0.1601	0.046 0.1432	-0.008 0.7822	1.000

***, denotes significant at the 0.05 level of significance respectively

4.2.3 Multicollinearity Analyses

Further inspection was carried out using variance inflation factor (VIF), a measure of multicollinearity in a set of multiple regression variables that estimates how much the variance of a regression coefficient

is inflated due to multicollinearity in the model. The table 7 below indicates that the centred VIF values for all variables ranged from 1.01 to 1.33 falls in the region of no multicollinearity. Thus, there is no multicollinearity among the variables of the study.

Table 7: Variance Inflation Factor

Variable	Coefficient Variance	Un-centred VIF	Centred VIF
BIND	0.001545	18.05602	1.151779
BDIV	0.004596	18.76043	1.116401
DFEX	0.001647	22.23559	1.326902
ACIND	0.001470	24.28382	1.083299
ACFEX	0.002789	66.87159	1.178473
ACDIL	0.003224	126.1592	1.215260
FSIZE	2.81E-05	60.35938	1.016714
LEV	0.000260	2.536092	1.205701
FGROW	5.53E-09	1.019846	1.014140
C	0.007777	326.6422	NA

Earnings management through Discretionary Accrual (DAC), Board independence (BIND), Board Diversity (BDIV), Board Financial Expertise (BFEX), Audit Committee Independence (ACIND), Audit Committee Financial Expertise (ACFEX), Audit Committee Diligence (ACDIL), Firm Size (FSIZE), Leverage (LEV) and Firm Growth (FGROW)

4.3 Diagnostic Tests

Since the data is panel data of firms collected from eight (8) sectors in the Nigerian Stock Exchange. 8 firms selected from the Oil and Gas sector, 5 selected from the ICT sector, 5 selected from the

Conglomerate sector, 11 selected from the Industrial goods sector, 7 selected from the Health sector, 8 selected from the Agricultural sector, 16 selected from the Consumer goods sector, and 24 selected from the Service sector. The total companies

analysed are 84 companies (cross sections) for a twelve year period from 2010 to 2021 (time). In order to ascertain the best model to use in the analyses of the data (whether common effect, fixed effect or random effect), two diagnostic tests are performed - Redundant fixed effect test (chow test) and Hausman test.

4.3.1 Redundant Fixed Effect Test (Chow Test)

This test is a mixed variety test to determine the efficient estimator between the pooled least square method and the fixed effect model.

H₀: Fixed effects are redundant

H₁: Fixed effects are not redundant

Table 8 below reveals Cross-Section/Period F-statistics (F=2.39, p=0.000) and Cross-Section/Period Chi-square statistic ($\chi^2=226.17$, p=0.0000). This test has been used to determine whether fixed effects are necessary or not in determining the impact of corporate governance internal monitoring mechanisms on earnings quality (DAC). The Cross section and Period F and chi-square statistics for the combined cross section and period effects are highly significant at 5% hence we reject the null hypothesis that fixed effects are redundant and conclude that the efficient estimator is the fixed effect (unrestricted) model

Table 8: Redundant fixed effect Test

Test cross-section and period fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.559681	(84,889)	0.0000
Cross-section Chi-square	215.310256	84	0.0000
Cross-Section/Period F	2.390985	(95,889)	0.0000
Cross-Section/Period Chi-square	226.172340	95	0.0000

Source: Researcher computation

4.3.2 Hausman’s test

In a panel model, the individual effect terms can be model as either random or fixed effects. If the individual effects are correlated with the other regressors in the model, the fixed effect model is consistent and the random effects model is inconsistent.

On the other hand, if the individual effects are not correlated with the other regressors in the model, both random and fixed effects are consistent and random effects is efficient.

H₀: Random effect model is the best estimator

H_i: Fixed effect model is the best estimator

Table 9 below reveals Cross-Section random Hausman test ($\chi^2=2.39$, $p=0.024$). The χ^2 is highly significant at 5% hence we reject the null hypothesis that random effects

model is the best estimator, and conclude that the efficient estimator is the fixed effect model.

Table 9: Hausman Effect Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	10.882339	9	0.0239	
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
BIND	-0.036723	0.045461	0.003827	0.1840
BDIV	-0.018531	0.029367	0.007176	0.5718
DFEXP	0.091630	0.024231	0.006756	0.4122
ACIND	0.145836	-0.005056	0.008604	0.1038
ACFEXP	-0.043596	0.052384	0.005929	0.2126
ACDIL	0.234891	0.130568	0.019947	0.4601
FSIZE	0.011402	0.002730	0.000147	0.4751
LEV	0.056825	0.008175	0.000391	0.0139
FGROW	-0.000013	0.000000	0.000000	0.4473

Chi-Sq = Chi- Square

Table 10: Regression Analyses

	MODEL 1 (Panel EGLS)		MODEL 2 (Panel PCSE)	
	Coeff	<i>P-value</i>	Coeff	<i>P-value</i>
BIND	-0.036***	0.044	-0.027***	0.049
BDIV	0.001	0.973	0.009	0.961
BFEX	-0.042***	0.046	-0.079***	0.036
ACIND	-0.069***	0.000	-0.140***	0.035
ACFEX	-0.065***	0.000	-0.030***	0.049
ACDIL	-0.041***	0.029	-0.266***	0.018
FSIZE	-0.001***	0.044	-0.011	0.390
LEV	0.027***	0.003	0.053***	0.038
FGROW	-0.001	0.698	-0.006	0.905
Intercept	-0.080***	0.056	-0.475***	0.003
R-Squared	0.55		0.51	
Adjusted - R ²	0.45		0.42	
F-stats (prob)	6.35 (0.000)		2.34 (0.000)	
Fixed effect:				
Industry	Yes		Yes	
Year	Yes		Yes	

***, denote significant at the 0.05 level of significance respectively

4.4 Test of Hypothesis

H₀: Board financial expertise does not have a significant effect on earnings quality of non-financial firms quoted on the Nigeria Exchange Group Ltd.

H₁: Board financial expertise has significant effect on earnings quality of non-financial firms quoted on the Nigeria Exchange Group Ltd.

Since the fixed effect model is the best for the estimation, we run two fixed effect models in order to provide robust tests for the hypothesis: Panel Fixed Estimated Generalized Least Square Model (EGLS) and Panel Fixed Corrected Standard Error Model (PCSE). This PCSE estimation corrects for the presence of auto or serial correlation, heteroscedasticity and cross-sectional dependence of independent variables in the panel estimation. The R-squared values of the two models in Table 10 indicate that the independent variables jointly explain about 55 percent and 51 percent variation in discretionary accruals, for Panel EGLS model and PCSE model respectively. The R-squared results indicate that the independent variables of the study have high predictive power over the dependent variable. The F-statistics 6.35 ($p=0.000$) for the Panel EGLS model, and 2.34 ($p=0.000$) indicates that both models are statistically fit, and the variables specified are perfect in the Panel EGLS and PCSE estimations. The Durbin Watson values of 1.44 and 1.86 indicate the absence of serial-correlation in both Panel EGLS and PCSE models.

The regression model 1 revealed that board financial expertise has a negative and

significant coefficient at the 0.05 level of significance ($\beta=-0.042$, $p=0.046$). The regression model 2 also revealed that board financial expertise has a negative and significant coefficient at the 0.05 level of significance ($\beta=-0.079$, $p=0.036$). The results indicate that boards of directors with financial expertise have strong impact on earnings quality as they restrain earnings management via discretionary accruals.

The results in model 1 and 2 are significant at the 0.05 level of significance. Thus, H₃ null is rejected. The study therefore upholds that Board financial expertise has significant effect on earnings quality of non-financial firms quoted on the Nigeria Exchange Group Ltd.

The results of the control variable regression revealed the following: In model 1, firm size and firm growth both have negative and insignificant effects on discretionary accruals ($\beta=-0.001$, $p=0.044$), and ($\beta=-0.001$, $p=0.698$). Leverage on the other hand has a positive and significant effect on discretionary accruals ($\beta=0.027$, $p=0.003$). In model 2, firm size and firm growth both have negative and insignificant effects on discretionary accruals ($\beta=-.001$, $p=0.390$), and ($\beta=-0.006$, $p=0.905$). Leverage on the other hand has a positive and significant effect on discretionary accruals ($\beta=0.053$, $p=0.038$). The control variables indicate that while bigger firms and firms with growth capacity have negative impact on DAC, leverage increases the motivation to manage earnings (Nguyen et al, 2022).

4.5 Discussion of the effect of board financial expertise on earnings quality

The regression results in Table 10 revealed that board financial expertise negatively impacts discretionary accruals by -0.042 and -0.079 in the Panel EGLS model and panel PSCE model respectively. The results imply that board of directors with financial expertise are associated with lower earnings management, and consequently higher earnings quality. Board financial expertise is viewed as a critical element in board characteristics that has a significant effect on earnings management. To monitor the financial reporting process, the directors must have accounting knowledge and skill, in order to control manipulation and to make information more transparent. Empirical studies support our results that show that financial expertise is an important determinant of quality financial statements. Siam, Laili & Khairi (2014) suggested that to do their tasks effectively the boards must have the ability for “asking management tough questions, actively helping to set corporate strategy, monitoring risk management, contributing to CEO successions plan and ensuring that companies set and meet their financial and operating targets”. So far, this can only be achieved if the board has the vital expertise to fully embrace such duties. Abubakar, Garba, Iliya & Gimba (2017) emphasized the importance of accounting knowledge among the outside directors in reducing the likelihood of financial restatements only if they had financial expertise. They asserted that earnings management is less likely to occur in firms that are run by a board of directors which have a corporate and financial background. They also suggested that boards with diverse knowledge are more effective in deterring earnings management.

Additionally, Igbineweka *et al*, (2021) affirmed that the presence of officers from financial intermediaries in the board can limit abnormal accruals as the unmanaged earnings are below the target. They said that experienced and financially informed outside board members are able to understand the firm and its people better and consequently improve their governance competencies. Thus, the boards of directors’ members who have more financial experience in terms are more likely to demand high-quality earnings reporting through engaging quality audit work. Thus, the thesis reveals that the board financial expertise significantly affects earnings quality.

5.0 Conclusion and Recommendations

5.1 Conclusion

The study investigated the effect of board financial expertise on earnings quality among selected non-financial firms quoted on the Nigeria Exchange Group Ltd over a twelve year period spanning from 2010 to 2021. This period was suitable because it witnessed series of accounting frauds that affected Nigerian economy, and some quoted firms on the Nigeria Stock Exchange. During the period, Nigeria Securities and Exchange Commission reviewed the Code of Corporate Governance established in 2002 to ensure higher standards of corporate governance among quoted firms on the Nigeria Stock Exchange. The non-financial sectors for this study were: Agriculture and Natural resources, Conglomerates, Consumer Goods, Health Care, ICT, Industrial Goods, Oil and Gas, and Services.

1. The study result upholds that Board financial expertise has a negative but

significant effect on earnings quality of non-financial firms quoted on the Nigeria Exchange Group Ltd. The result implies that boards with financial expert directors are linked with lower earnings management, and consequently higher earnings quality.

Recommendation

1. It is recommended that more board members with financial expertise should be engaged on corporate board of firms of all sectors quoted on the Nigeria Exchange Group Ltd since board financial expertise has significant effect on earnings quality of non-financial firms quoted on the Nigeria Exchange Group Ltd

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