Corporate Governance Structure and Financial Reporting Quality of Non-Financial Firms in Nigeria

Lawrence, U. Egbadju*

1 Department of Accounting, Federal University Otuoke, Otuoke, Bayelsa State, Nigeria *E-mail: lawuvie@gmail.com

DOI 10.56201/ijebm.v10.no2.2024.pg269.291

Abstract

This study investigates if there is any relationship between certain corporate board characteristics and financial performance of non-financial listed firms in Nigeria. It uses secondarily sourced panel data over the period from 2007 to 2022 of 75 such firms listed on the floor of the Nigerian Exchange Group (NXG). The generalized method of moments (GMM) results reveal that board independence, board gender diversity, foreign ownership, institutional ownership, number of foreign directors, board busyness, chief executive officer (CEO) with financial expertise and chief executive officer (CEO) with military experience are positively significant with discretionary accruals; board size, board meetings, board financial expertise, managerial ownership, top5 ownership or ownership concentration, audit committee financial expertise and audit committee gender diversity are negatively significant with it. The study concludes with some recommendations.

Keywords: Corporate Governance, FRQ, Quoted Non-Financial Firms, Endogeneity, GMM.

1.0 Introduction

The quality of financial reporting has long been a topic of concern for investors, regulatory agencies and academics. This is because financial reporting quality has historically been a key channel for disseminating financial information to external users. The published financial statement continues to be the primary source of information and communication for users regarding the status, development, and financial performance of the companies. It offers trustworthy information to help users make informed economic decisions related to capital provided and the entire economy. Consequently, it is anticipated that the financial statement will provide users with pertinent, trustworthy, comparative, and comprehensible information (Kaka, 2023)

Financial statements are used by businesses to inform stock market participants about their performance and financial status. To assist them in making informed financial decisions, these investors rely on the accuracy of the data in these statements. Financial reporting quality (FRQ) measures how well an entity's financial statements convey information about its operating

performance, predicted cash flows, and financial status. The quality of the financial information that is provided must be such that it can persuade users to make wise investment decisions, which will largely increase market efficiency. Furthermore, the notion of FRQ is more comprehensive and includes non-financial data as well as financial data that have substantial advantages for investors and other sources of funding for the company. According to Boons (2018), high-quality financial reporting mitigates information asymmetry and adverse selection issues, which can lead to enterprises receiving lower interest capital payments/capital costs from lenders because the risks involved are lower than they should be.

The International Accounting Standard Board (IASB, 2010) states that the qualitative qualities of the information that must be revealed are both essential (relevance and faithful representation) and enhancing (timeliness, comparability, understandability, and verifiability). These appropriately differentiate between valuable financial reports and those that include substantial misstatements, which puts a heavy burden on management of businesses. As a result, management's performance in a company is a measure of how well it has fulfilled its fiduciary obligations. By upholding moral principles like honesty and integrity in financial reporting disclosure(Egbadju & Chigioke, 2023); organizations can develop comprehensive strategies to assist them in meeting regulatory requirements (Hasan et al., 2022); addressing problems before they arise (Awotomilusi & Adeosun, 2024); and lowering the high cost associated with corporate governance oversight.

The term "corporate governance" refers to the policies, procedures, and guidelines that regulate how firms are run. It also describes the systems in place for monitoring the accuracy of financial data and raising the standard of openness in the financial reporting process. The importance of corporate governance in the administration of financial reporting cannot be overstated since the establishment of sound corporate practices is ensured by the presence of robust corporate governance measures which ensures adherence to set protocols and maintains openness within an organization. An organization may eradicate fraud and bad management and guarantee that investors have access to an accurate, dependable, and transparent view of the current situation by implementing strong corporate governance (Awotomilusi & Adeosun, 2024)

Corporate board governance has changed as a result of global initiatives to improve board oversight effectiveness and, in turn, corporate governance in firms. Chen et al. (2024) noted that previous scholars drew attention on corporate governance reforms, which demonstrates that these reforms increase company value, boost dividend payout, decrease cash holdings, lower the likelihood of a stock market crash, and reduce accrual-based profits manipulation as a result of legislative changes. Due to these improvements, there is now less information asymmetry between management and board members, as well as between insiders and outsiders of the company, which has improved the quality of financial reporting.

Many previous studies on how corporate governance impacts financial reporting quality has attracted researchers' attention leading to a range of study designs and findings which found strong relationship between them, both in developed- Hasan et al. (2022)- and developing economies-Kaka (2023)-with mixed outcomes. This study differs from others in that it uses many more variables that others researchers reviewed never used such as: institutional ownership, chief executive officer (CEO) with military experience, chief executive officer (CEO) with financial

expertise, number of foreign directors, board busyness, audit committee financial expertise and audit committee gender diversity. This study also uses a longer time span of 16 years from 2007 to 2022 which to the best of my knowledge none in the previous studies reviewed used. We, therefore, hypothesized that corporate governance structures have no significant effect on free cash flow of quoted non-financial firms in Nigeria. Following this introduction, the rest of the paper is divided into five sections with the literature review in section two, methodology in section three, discuss of results and various pre and posttests in section four and the fifth section concludes this paper.

- 2.0 Review of Related Literature.
 - 2.1 Theoretical Underpinning.
 - 2.1.1 .Hazard Moral Theory

Moral hazard is the term used to describe an economic scenario in which one party is free to act recklessly knowing that the other side will be responsible for any unfavorable consequences under the terms of the agreement. The choice to take on the risk is influenced by information asymmetry, which occurs when one party or company in a transaction has access to more information than the other. The identification of a conflict of interest between ownership and control by the agency theory may cause managers functioning as agents to act opportunistically, which may not always be in line with the shareholders' (the principals') objective of optimizing shareholder value. (Nicole & Monica-Violeta, 2013). The theory of moral hazard, which also explains managers' sly or opportunistic behavior, is a fundamental part of agency theory. Human tendency leads to opportunistic activity, whereas counterparties' asymmetric information causes hidden action. Moral hazard is determined by two issues, according to Nicolae and Monica-Violeta (2013): the conflicts of interest of the counterparties (principal and agent), as well as covert actions and opportunistic behavior brought on by asymmetric knowledge. The worst case scenario is the only one that can occur, such as deteriorating performance or even company collapse. As a result, managers are susceptible to moral hazard and opportunistic behavior driven by self-interest.

2.2. Empirical literature

Awotomilusi and Adeosun (2024) empirically tested how corporate governance mechanisms in reshape financial reporting practices of MNEs in Nigeria. The study used secondary panel data over the period from 2008 to 2022 obtained from 20 multinational companies quoted on the Nigerian Exchange Group (NGX). The OLS regression results indicated that neither board size, board independence, board shareholding and board gender diversity were all insignificant with financial reporting practices.

Kabwe (2023) attempted an empirical study to ascertain whether corporate governance enhanced financial reporting quality (FRQ) represented by discretionary accruals in Zambia. The study used secondary panel data over the period from 2012 to 2018 obtained from some listed firms. The OLS regression results indicated that board size statistically and significantly impacted FRQ positively

while board gender diversity, board independence and audit committee independence were insignificant.

Ayoola-Akinjobi and Olayinka (2023) undertook a research to determine if there is any relationship between corporate governance attributes and FRQ represented by discretionary accruals (DACC) in Nigeria. The samples consist of all the agricultural firms quoted on the floor of the Nigerian Exchange Group (NGX) over certain periods. The OLS results revealed that while board size and board gender diversity were negatively significant with FRQ. This means that as board size increases and as more females are added into the board, DACC decreases and this makes FRQ to increase or improves FRQ.

Rimamshung et al.(2023) studied whether there is any relationship between board attributes and financial reporting quality in Nigeria. The researchers used annually sourced panel data collected over the period from 2016 to 2021 on 13 consumer goods companies quoted on the floor of the Nigerian Exchange Group (NGX). The results of the OLS regression revealed that board expertise had a positive effect on FRQ. This means that as board expertise increases, DACC increases and this makes FRQ to decrease. Board diversity and board independence were insignificant.

Ngoc et al. (2023) carried out a research on the extent to which corporate governance impacted on the quality of accounting information in Vietnam. Annual secondary panel data which covered the period 2021 collected from the financial reports of 193 firms. The regression results of the OLS indicated that government ownership, board size, concentrated ownership and board expertise were positively significant with DACC, and so they decrease FRQ for the periods under study.

Kaka (2023) researched to ascertain the extent to which corporate governance have affected financial reporting quality in Nigeria. Secondary data collected from annual reports of some construction companies quoted on the floor of the Nigerian Exchange Group (NGX) from 2016 to2020 was used. The OLS regression results showed that board size was negatively and statistically significant with DACC meaning board size decreases DACC and thus improves FRQ. Audit committee and board composition had a positive and significant effect on DACC meaning they decreased FRQ.

Enobong et al. (2023) carried out a research to determine the effect of corporate governance attributes on the FRQ of firms in Nigeria. The study used annual secondary panel data obtained from 42 manufacturing firms listed on the NGX spanning the periods 2012 to 2021. The Hierarchical Regression model results indicated that board size and ownership concentration were positively significant with FRQ while board size and board diligence/meetings were not.

Hasan et al. (2022) studied whether there is any relationship between corporate governance and financial reporting quality in Pakistan and United Kingdom. The researchers used annually sourced panel data collected over the period from 2009 to 2018 on 78 Pakistani firms and 77 UK firms making 1,550 firm-year observations. The results of the OLS regression revealed that board size, board meetings, audit committee independence, board gender diversity and ownership

concentration were negatively significant with FRQ for either country; foreign ownership and board independence positively impacted FRQ for either country.

Kaawaase et al. (2021) embarked on this research to investigate the effect of corporate governance on FRQ measured by faithful representation, relevance, understandability, timeliness, comparability and verifiability on the average of 6-point Likert scale in Uganda. The study used primarily sourced data with questionnaires survey Chief Finance Officers, Internal audit managers and Senior Accountants of financial institutions. The results of the survey revealed that board role performance and board expertise are significantly associated with FRQ.

Al-Khonain and Al-Adeem (2020) embarked on this research to investigate the effect of corporate governance on FRQ in Saudi Arabia.. The study used primarily sourced data with questionnaires on 56 Saudi financial analysts. The results of the survey revealed that corporate governance contributes immensely to the improvement of the quality of financial reporting which consequently increases foreign investment inflows into the country.

3.0 Methodology

3.1 Research Design

The study uses the ex-post facto research design, otherwise called the descriptive or correlational research design, to investigate the relationship, if any, between the corporate governance mechanisms and performance of 75 non-financial firms quoted on the floor of the Nigerian Exchange Group (NXG). This study uses secondarily sourced data obtained from their annual reports over the period 2007 to 2022, making a total number of 1,200 firm-year observations.

3.2 Measurement and Definitions of Variables.

S/N	Variables	Definitions	Variable	Measurements	Authorities
	Names		Types		
1	DACC1	Discretionary Accruals1	Dependent	See 3.2.1	Rimamshung
					et al.(2023)
2	DACC 1(-1)	One year lag of	Instrumental	Preceding or Last	-
		Discretionary Accruals1		year DACC or	
				DACC _{t-1}	
3	DACC2	Discretionary Accruals2	Dependent	See 3.2.2	-
4	DACC3	Discretionary Accruals3	Dependent	See 3.2.3	-
5	DACC4	Discretionary Accruals4	Dependent	See 3.2.4	-
6	DACC5	Discretionary Accruals5	Dependent	See 3.2.5	-
7	DACC6	Discretionary Accruals6	Dependent	See 3.2.6	-

Table1

IIARD International Journal of Economics and Business Management E-ISSN 2489-0065 P-ISSN 2695-186X Vol 10. No. 2 2024 <u>www.iiardjournals.org</u>

8	BODS	Board size	Independent	Total number of directors on the board	Awotomilusi and Adeosun (2024)
9	BODI	Board independence	Independent	Percentage (%) of independent or non- executive directors on the board	Awotomilusi and Adeosun (2024)
10	BODIV	Board gender diversity	Independent	Proportion (%) of board members that are female.	Awotomilusi and Adeosun (2024)
11	BMET	Board meetings	Independent	Number of times the board meets in a year	Hasan et al. (2022)
12	BFE	Board financial expertise.	Independent	Number of board members with degrees/professional qualifications in accounting and finance	Rimamshung et al.(2023)
13	MOWN	Managerial ownership	Independent	Proportion (%) of shares own by managers	Awotomilusi and Adeosun (2024)
14	FOWN	Foreign ownership	Independent	Proportion (%) of shares own by foreigners	Hasan et al. (2022)
15	IOWN	Institutional ownership	Independent	Proportion (%) of shares own by institutions	No author used it among the literature reviewed
16	CEOME	Chief Executive Officer (CEO) with military experience	Independent	A dummy variable which takes the value '1' if CEO was an officer in the Army, Navy or Airforce, otherwise '0'	No author used it among the literature reviewed
17	CEOFE	Chief Executive Officer (CEO) with Financial Expertise	Independent	A dummy variable which takes the value '1' if CEO has professional qualification in	No author used it among the literature reviewed

IIARD – International Institute of Academic Research and Development

Page **274**

IIARD International Journal of Economics and Business Management E-ISSN 2489-0065 P-ISSN 2695-186X Vol 10. No. 2 2024 <u>www.iiardjournals.org</u>

				accounting and finance, otherwise '0'	
18	Т5	Top5 Ownership or Ownership concentration	Independent	Proportion (%) of shares controlled by shareholders having 5% or more	Ngoc et al. (2023)
19	NFDIR	Number of foreign directors	Independent	Total number of directors on the board that are non- Nigerian	No author used it among the literature reviewed
20	BB	Board busyness	Independent	Directors in two or more firms at the same time	No author used it among the literature reviewed
21	ACFE	Audit committee financial expertise	Independent	Proportion (%) of audit committee members WITH financial expertise	No author used it among the literature reviewed
22	ACGD	Audit committee gender diversity.	Independent	Proportion (%) of audit committee members that are female.	No author used it among the literature reviewed
23	FAGE	Firm age	Control	Number of years since incorporated	-
24	FSIZE	Firm size	Control	Log of total assets	-
25	LEV	Leverage	Control	Total liabilities/Total Assets	-
26	LOSS	Net loss reported each year	Control	Dummy variable which equals "1" in year a firm makes a net loss, "0" otherwise	-
27	BIG4	Deloitte & Touche; Ernst & Young; PriceWater Cooper and KPMG	Control	Dummy variable which equals "1" in year a firm is	-

IIARD – International Institute of Academic Research and Development

Page **275**

				audited by one of the four biggest audit firms; "0" otherwise.	
28	YDUM	Year Fixed Effect Dummy	Control	A dummy variable which takes the value '1' for each year	-
29	IDUM	Industry Sector Fixed Effect Dummy	Control	A dummy variable which takes the value '1' for each industry	-

Source: Author's Compilation from the Reviewed Literatures.

3.2.1 Derivation of the Dependent Variable using the Modified Jones' Model (1995) of Dechow et al (1995)/ Dechow, Sloan, & Sweeney, 1995)

Financial reporting quality (FRQ) is measured from the perspective of discretionary accrual which is the usual proxy for earnings management. Beginning with Healy,1985 and DeAngelo,1986, according to Lee and Vetter(2015), earnings management models have passed through major changes since Jones,1991; Dechow et al. 1995; Kang and Sivaramakrishnan, 1995); Dechow and Dichev 2002; Kothari et al, 2005; to mention but a few. In this study, we use the Jones,1991 as well as the Dechow, Sloan and Sweeney,1995, otherwise known as the Modified Jones Model.

The following steps are taken in order to calculate the discretionary accruals which is our proxy for financial reporting quality for the Modified Jones Model (1995) Step1: Calculate the total accruals as follows:

 $TACC_{it}/TA_{t-1} = (\Delta CA_{it} - \Delta Cash_{it} - \Delta CL_{it} + \Delta DCL_{it} - DEP_t)/TA_{t-1}...Eq1$

where: $TACC_{it}$ = Total accruals for firm i in year t

 ΔCA_{it} = Change in current assets for firm i in year t

 $\Delta Cash_{it}$ = Change in cash and cash equivalent for firm i in year t

- ΔCL_{it} = Change in current liabilities for firm i in year t
- ΔDCL_{it} = Change in short term debt included in current liabilities for firm i in year t DEP_{it}= Depreciation and amortization for firm i in year t

 TA_{it-1} = Total assets for firm i in year t-1, that is, lag of one year.

Step2: Estimate the Modified Jones model in equation2 using the Ordinary Least Squares (OLS) regression technique.

 $TACC_{it}/TA_{t-1} = \alpha_1 1/TA_{it-1} + \alpha_2 (\Delta Rev_{it} - \Delta Rec_{it})/TA_{it-1} + \alpha_3 PPE_{it}/TA_{it-1} + \varepsilon_{it}....Eq2$

- where: $TACC_{it}/TA_{t-1} =$ Total accruals for firm i in year t scaled/divided by total assets for firm i in year t-1
- ΔRev_{it} = Change in revenues for firm i in year t

 ΔRec_{it} = Change in receivables for firm i in year t.

 PPE_{it} = Property, plant and Equipment for firm i in year t.

 α_1 , α_2 and α_3 = Parameters or coefficients to be estimated to derive \hat{a}_1 \hat{a}_2 \hat{a}_3 , the estimated parameters

 ε_{it} = Residuals or error terms for firm i in year t

Step3. Thereafter, we shall calculate the non-discretionary accruals(NDACC) by replacing α_1 , α_2 and α_3 with \hat{a}_1 \hat{a}_2 \hat{a}_3 in equations 2a and 2b above without, ε_{it} , the error terms as:

 $NDACC_{it}/TA_{t-1} = \hat{a}_1 1/TA_{it-1} + \hat{a}_2(\Delta Rev_{it} - \Delta Rec_{it})/TA_{it-1} + \hat{a}_3 PPE_{it}/TA_{it-1}$ for Modified Jones model.

where: $NDACC_{it}/TA_{t-1} =$ Non-discretionary accruals for firm i in year t scaled/divided by total assets for firm i in year t-1

Step4:Finally, we shall calculate the discretionary accruals as total accruals less non-discretionary accruals.

 $DACC1 = DACC_{it}/TA_{t-1} = TACC_{it}/TA_{t-1} - NDACC_{it}/TA_{t-1} - ...Eq3$

This discretionary accruals(DACC), as a proxy for Earnings Management, is also used as a proxy for Financial Reporting Quality(FRQ) as well as a proxy for Audit Quality(AQ) in the literature.

DACC2, DACC3, DACC4, DACC5 and DACC6 can be derived using the following respective equations in Step2 of the general discretionary accruals models.

3.2.2.(DACC2) Jones' Model (1991)

$$\frac{TACCit}{TAit - 1} = \alpha 1 \frac{1}{+ \text{TAit} - 1} + \alpha 2 \frac{\Delta REVit}{\text{TAit} - 1} + \alpha 3 \frac{PPEit}{\text{TAit} - 1} + \varepsilon it$$

Where: $TACC_{it} =$ Total accruals for firm i in year t. $TA_{t-1} =$ Total assets for firm i in year t-1 $\Delta Rev_{it} =$ Change in revenues for firm i in year t

 $PPE_{it} = Gross property plant and equipment for firm i in year t.$

Other variables are as defined in the model above.

3.2.3.(DACC3) Kangsiv's Model (1995)

$$\frac{ABit}{TAit - 1} = \alpha 1 \frac{1}{+ \text{TAit} - 1} + \alpha 2 \frac{\Delta REVit}{\text{TAit} - 1} + \alpha 3 \frac{EXPit}{\text{TAit} - 1} \alpha 4 \frac{PPEit}{\text{TAit} - 1} + \varepsilon \text{it}$$

Where: $AB_{it} = Accrual balance for firm i in year t.$

Note that $AB_{it} = (\Delta AR_{it} + \Delta INV_{it} + \Delta OCA_{it} - \Delta CL_{it} - DEP_{it})$

Where: $AR_{it} = Account Receivables for firm i in year t.$

 $INV_{it} = Inventory for firm i in year t.$

 $OCA_{it} = Other current assets for firm i in year t.$

 $CL_{it} = Current liabilities for firm i in year t.$

 $DEP_{it} = Depreciation and amortization for firm i in year t.$

 $EXP_{it} = Operating expenses for firm i in year t.$

3.2.4. (DACC4) Kazsnix's Model (1999)

$$\frac{TACCit}{TAit - 1} = \alpha 1 + \frac{1}{\frac{TAit - 1}{TAit - 1}} + \alpha 2 \frac{\Delta REVit - \Delta RECit}{TAit - 1} + \alpha 3 \frac{PPEit}{TAit - 1} + \alpha 4 \frac{ROAit}{TAit - 1} + \alpha 5 \frac{\Delta CFOit}{TAit - 1} + \varepsilon it$$

Where: Where: ΔCFO_{it} = Change in cash flow from operations for firm i in year t

Other variables are as defined in the model above.

3.2.5.(DACC5) Key's Model (1997)

$$\frac{TACCit}{TAit-1} = \alpha 1 \frac{1}{+ \text{TAit}-1} + \alpha 2 \frac{\Delta REVit}{\text{TAit}-1} + \alpha 3 \frac{PPEit}{\text{TAit}-1} + \alpha 4 \frac{IAit}{\text{TAit}-1} + \varepsilon it$$

Where: IA_{it} = Gross intangible assets for firm i in year t.

Other variables are as defined in the model above.

3.2.6.(DACC6) Larcher and Richardson's Model (2004)

$$\frac{TACCit}{TAit - 1} = \alpha 1 + \alpha 2 \frac{\Delta SALESit - \Delta RECit}{TAit - 1} + \alpha 3 \frac{PPEit}{TAit - 1} + \alpha 4 \frac{BTMit}{TAit - 1} + \alpha 5 \frac{CFOit}{TAit - 1} + \varepsilon it$$

Where: $CFO_{it} = Cash$ flow from operations for firm i in year t.

 $BTM_{it} = Book-to-Market value for firm i in year t.$

Other variables are as defined in the model above.

3.3 Model Specification

The functional equation of financial reporting quality to test the fifteen (15) hypotheses specified is stated as:

DACC1 = f (BODS, BODI, BODIV, BMET, BFE, MOWN, FOWN, IOWN, CEOME, CEOFE, T5, NFDIR, BB, ACFE, ACGD) (1)

The functional testable model will be derived as:

DACC1 = $\beta o + \beta_1 BODS + \beta_2 BODI + \beta_3 BODIV + \beta_4 BMET + \beta_5 FE + \beta_6 MOWN + \beta_7 FOWN + \beta_8 IOWN + \beta_9 CEOME + \beta_{10} CEOFE + \beta_{11}T5 + \beta_{12} NFDIR + \beta_{13}BB + \beta_{14}BB + \beta_{15}ACGD + \varepsilon$ (2). Since we are using panel data, the model will be specified in the appropriate form as:

 $DACC1_{it} = \beta o + \beta_1 BODS_{it} + \beta_2 BODI_{it} + \beta_3 BODIV_{it} + \beta_4 BMET_{it} + \beta_5 FE_{it} + \beta_6 MOWN_{it} + \beta_7 FOWN_{it} + \beta_8 IOWN_{it} + \beta_9 CEOME_{it} + \beta_{10} CEOFE_{it} + \beta_{11} T5_{it} + \beta_{12} NFDIR_{it} + \beta_{13} BB_{it} + \beta_{14} ACFE_{it} + \beta_{15} ACGD_{it} + \varepsilon_{it}$ (3).

3.4 Universal Usage of Control Variables in Published Scholarly Articles From High Quality Journals.

Traditionally, control variables (CVs) are used in research models that have causal relationship. The two main ways of controlling for variables are by experimental design (before gathering the data) where the samples are manipulated or by statistical control (after gathering the data) where the researcher just includes relevant variables in the model. Some of the reasons for controlling are to eliminate omitted variables biases thereby reducing the error term which in turn increase statistical power by improving the estimated coefficients precision (De Battisti & Siletti, 2018). Cinelli et al. (2022) was of the opinion that while some data analysts, students as well as empirical social scientists have discussed the problem of omitting certain relevant variables, they have not provided a means of deciding which variables could improve or worsen existing biases in a regression model. According to Becker (2005), CVs are just as important as the predictors (independent) variable and the criterion (dependent) variable because one author's CV could be another author's predictor's or criterion variable such that including improperly any CV can produce misleading results. Hunermund and Louw (2020) noted that over 47 percent of scholarly papers published the previous five years in top management journals made use of CVs. They pointed out that they were specifically as authors asked to hypothesized and

interpret CV coefficients as though these CVs were focal main variables for as much as the CVs could give valuable information to other researchers. Again, Nielsen and Raswant (2018) opined that if there is no adequate attention given to CVs, there will be a serious threat to cause and effect inferences validation and so statistical controls can be made to determine relationship between the other variables and this helps to reduce the risk of committing Type II errors. Becker (2005) as well as Becker et al (2016) gave ten points recommendations which both authors and reviewers must imbibed as guides for the inclusion of control variables in regression models. Thus, De Battisti and Siletti (2018) advised that researchers should run the regression with the CVs and without the CVs and observe the pattern of the results to know which of the models to report. Non-inclusion of these variables may lead to omitted variables biasness in our estimation results and thereby draw erroneous conclusions on which managerial and policy decisions are based (Hunermund & Louw, 2020).

Thereafter, we included some firm-specific as well as year dummy and industry sector dummy variables to control for specific fixed effect to arrive in equation 5 below.

 $\begin{aligned} \mathsf{DACC}_{\mathsf{it}} &= \beta o + \beta_1 \mathsf{BODS}_{\mathsf{it}} + \beta_2 \mathsf{BODI}_{\mathsf{it}} + \beta_3 \mathsf{BODIV}_{\mathsf{it}} + \beta_4 \mathsf{BMET}_{\mathsf{it}} + \beta_5 \mathsf{FE}_{\mathsf{it}} + \beta_6 \mathsf{MOWN}_{\mathsf{it}} + \\ \beta_7 \mathsf{FOWN}_{\mathsf{it}} + \beta_8 \mathsf{IOWN}_{\mathsf{it}} + \beta_9 \mathsf{CEOME}_{\mathsf{it}} + \beta_{10} \mathsf{CEOFE}_{\mathsf{it}} + \beta_{11} \mathsf{T5}_{\mathsf{it}} + \beta_{12} \mathsf{NFDIR}_{\mathsf{it}} + \beta_{13} \mathsf{BB}_{\mathsf{it}} + \beta_{14} \mathsf{ACFE}_{\mathsf{it}} \\ &+ \beta_{15} \mathsf{ACGD}_{\mathsf{it}} + \beta_{16} \mathsf{FAGE}_{\mathsf{it}} + \beta_{17} \mathsf{T5}_{\mathsf{it}} + \beta_{18} \mathsf{NFDIR}_{\mathsf{it}} + \beta_{19} \mathsf{BB}_{\mathsf{it}} + \beta_{20} \mathsf{ACFE}_{\mathsf{it}} + \beta_{21} \mathsf{ACGD}_{\mathsf{it}} + \\ &\beta_{22} \mathsf{YDUM}_{\mathsf{it}} + \beta_{23} \mathsf{IDUM}_{\mathsf{it}} + \varepsilon_{\mathsf{it}} \end{aligned}$ (5).

3.5 Description of the Estimation Technique Used.

3.5.1 Dynamic Data Analysis using Generalized Method of Moments (GMM):

Generalized Method of Moments (GMM) regression estimation technique is a generic method for the estimation of statistical model parameters. The essence of using GMM for a dynamic panel data is to practically solve the problem of endogeneity bias which simultaneously tackles unobserved heterogeneity (Chung et al., 2018). GMM is designed to handle the problems of multicollinearity, heteroscedasticity and autocorrelation but especially second order correlation. Many studies in corporate finance which tries to explain causal-effect relationships often encounter difficulties in dealing with endogeneity and this can lead to inconsistent and biased parameter estimates (Wintoki et al., 2012) or we may not even get the right coefficient sign-positive or negative (Ketokivi & McIntosh, 2017), thereby resulting in misleading inferences, conclusions and interpretations (Li et al., 2021). Li et al. (2021) observed that out of about twelve (12) papers where endogeneity bias were ever mentioned, only three of them used the dynamic model approach while only one applied the rigorous way by reporting the results of the test. To identify endogeneity in our model, we run a fixed effect regression model for only the independent variables with each independent variable being a dependent variable in turn and then extract its residual. This residual variable is used to replace the main dependent variable in the original regression equation and then, rerun and observe the p-value. If the p-value of the residual variable is less than or equal to 5%, then there is an endogeneity in our model. The endogeneity test results in Table.2 below showed that of the twenty-two(22) variables used in this study, eleven (11), i. e. RES_BODS,

RES_BODIV, RES_MOWN, RES_NFODIR, RES_CEORE, RES_ACGD, RES_FAGE, RES_LEV, RES_LOSS, RES_BIG4 and RES_YDUM- have endogeneity problem since their P-values are less than 5%.

Endogeneity Test Results

Table 2

S/N	Estimated Residuals of Variables	P-Values	S/N	Estimated Residuals of Variables	P-Values
1	RES_BODS	0.0012	12	RES_CEOME	0.0844
2	RES_BODI	0.2394	13	RES_CEORE	0.0392
3	RES_BODIV	0.0037	14	RES_ACFE	0.1556
4	RES_BMET	0.1464	15	RES_ACGD	0.0010
5	RES_BFE	0.0760	16	RES_FAGE	0.0000
6	RES_MOWN	0.0001	17	RES_FSIZE	0.3668
7	RES_IOWN	0.3142	18	RES_LEV	0.0000
8	RES_FOWN	0.4689	19	RES_LOSS	0.0000
9	RES_T5	0.2492	20	RES_BIG4	0.0003
10	RES_BB	0.4739	21	RES_IDUM	0.8897
11	RES_NFODIR	0.0037	22	RES_YDUM	0.0416
Carrier Dagaan	ale an'a Commentation	(2024) II.	~ EVierra 12 Cal	2	

Source: Researcher's Computations (2024) Using EViews13 Software.

If a regression estimator can still be reliable in the presence of outliers and its standard error consistent when the regression errors have outliers, autocorrelation and heteroskedasticity, then it is adjudged to be robust (Ismail et al., 2021). GMM is one of the dynamically robust estimation techniques which make use of the lagged dependent variable as one of its instrument to control for endogeneity problems. The use of lagged dependent variable is, first, to eliminate autocorrelation in the residuals and, secondly, to capture the dynamism in panel data by controlling for endogeneity bias. By including the lagged value of the dependent variable, that is, DACC_{it-1}, due to unobserved heterogeneity transforms the static model to a dynamic one.

Thus, including the lagged dependent variable to equation 5, we have equation 6

 $DACC_{it} = \beta o + \beta_{1}FCF_{it-1} + \beta_{2}BODS_{it} + \beta_{3}BODI_{it} + \beta_{4}BODIV_{it} + \beta_{5}BMET_{it} + \beta_{6}FE_{it} + \beta_{7}MOWN_{it} + \beta_{8}FOWN_{it} + \beta_{9}IOWN_{it} + \beta_{10}CEOME_{it} + \beta_{11}CEOFE_{it} + \beta_{12}T5_{it} + \beta_{13}NFDIR_{it} + \beta_{14}BB_{it} + \beta_{15}ACFE_{it} + \beta_{16}ACGD_{it} + \beta_{17}FAGE_{it} + \beta_{18}T5_{it} + \beta_{19}NFDIR_{it} + \beta_{20}BB_{it} + \beta_{21}ACFE_{it} + \beta_{22}ACGD_{it} + \beta_{23}YDUM_{it} + \beta_{24}IDUM_{it} + \varepsilon_{it}$ (5).

4.0. Method of Data Analysis

4.1 Bivariate Data Analysis (Variance Inflation Factor)

Table 3 below shows the results of the variance inflation factor (VIF) and the corresponding tolerance column. A VIF of any variable less than 10 with its tolerance level greater than 0.2 is free of multicollinearity for VIF that ranges between 5 to 10 is adjudged to have highly correlated variables (Shrestha, 2020). Since all our variables has a VIF less than 10 and a tolerance more than 0.2, our variables do not exhibit multicollinearity.

Table 3

S/N	Variables	Variance Inflation Factor (VIF)	Tolerance
1	BODS	1.301135	0.76856
2	BODI	1.093013	0.914902
3	BODIV	1.41788	0.705278
4	BMET	1.252895	0.798151
5	BFE	1.0711	0.93362
6	MOWN	2.243506	0.445731
7	FOWN	1.167729	0.856363
8	IOWN	2.226673	0.449101
9	T5	1.036472	0.964811
10	NFODIR	1.206429	0.828893
11	BB	1.316672	0.759491
12	CEOME	1.106332	0.903888
13	CEORE	1.151356	0.868541
14	ACFE	1.223221	0.817514
15	ACGD	1.356447	0.73722
16	FAGE	1.561725	0.640318
17	FSIZE	1.363837	0.733225
18	LEV	1.170045	0.854668
19	LOSS	1.094322	0.913808
20	BIG4	1.12131	0.891814
21	IDUM	1.183542	0.844921
22	YDUM	1.551215	0.644656

Source: Researcher's Computations (2024) Using EViews13 Software.

4.2 Regression Models Estimation Results and Hypotheses Testing.

Table	4.	GENERALIZED	METHOD	OF	MOMENTS	(GMM)
REGRE	ESSI	ION RESULTS				

Variable	Coefficien	t Std. Error	t-Statistic	Prob.
DACC(-1)	0.082755	8.22E-05	1006.443	0.0000
BODS	-0.681435	0.001565	-435.2932	0.0000
BODI	2.937382	0.015275	192.2986	0.0000
BODIV	12.03549	0.026505	454.0815	0.0000
BMET	-0.134535	0.001142	-117.8217	0.0000
BFE	-8.934151	0.361974	-24.68173	0.0000
MOWN	-0.001993	1.04E-05	-191.4261	0.0000
FOWN	6.670670	0.112078	59.51808	0.0000
IOWN	0.002953	9.97E-06	296.1385	0.0000
T5	-0.000157	5.94E-06	-26.40995	0.0000
NFODIR	1.389197	0.126675	10.96660	0.0000
BB	0.699772	0.001584	441.7971	0.0000
CEOME	8.295503	0.097904	84.73129	0.0000
CEORE	0.485747	0.018143	26.77267	0.0000
ACFE	-0.490252	0.030859	-15.88682	0.0000
ACGD	-2.720944	0.772012	-3.524481	0.0007
FAGE	0.446501	0.004887	91.37247	0.0000
FSIZE	3.355535	0.008805	381.1106	0.0000
LEV	0.011181	2.44E-05	458.8910	0.0000
LOSS	-0.073504	0.001030	-71.39512	0.0000
BIG4	4.341627	0.139213	31.18689	0.0000
IDUM	-199.3955	76.29680	-2.613419	0.0109
YDUM	-0.632039	0.004763	-132.6915	0.0000
	Effects Spe	ecification		
Cross-section fixed (first differences)				
Mean dependent var	0.003590	S.D. depe	endent var	2.844649
S.E. of regression	15.84181	Sum squa	ared resid	241928.2
J-statistic	56.80572	Instrume	nt rank	77
Prob(J-statistic)	0.370936			

Source: Researcher's Computations (2024) Using EViews13 Software.

4.3 Discussion of the Regression Results.

Table 4 above shows the regression estimation results of the relationship between corporate governance structure alone (BODS, BODI, BODIV, BMET, BFE, MOWN, FOWN, IOWN, CEOME, CEOFE, T5, NFDIR, BB, ACFE, ACGD); the control variables (FAGE, FSIZE, LEV, LOSS, BIG4, IDUM, YDUM) and financial reporting quality of the 75 sampled firms.

A look at the coefficient (0.082755) of DACC1 (-1) shows that it is positively significant (t-Statistics = 1006.443 and p= 0.0000) at the 1% levels of significance. This result conforms to the extant literature that the dependent variable and its lag move in the same direction and must be significant (Egbadju & Jacob, 2022). The positive coefficient means that the current year discretionary accrual is directly affected by previous period discretionary accrual and this is a good sign. Again, since the p-value of Sargon statistic or J-Statistic (0.370936, that is, 37%) is higher than the threshold of 5% and 10% or even the 25% or more suggested by Roodman (2009), our model is free from the problem of instruments proliferation.

From the result above, 15 of the 15 corporate governance characteristics (BODS, BODI, BODIV, BMET, BFE, MOWN, FOWN, IOWN, CEOME, CEOFE, T5, NFDIR, BB, ACFE, ACGD) statistically and significantly impacted discretionary accrual. Of the 15 significant variables, while 8 (BODI, BODIV, FOWN, IOWN, CEOME, CEOFE, NFDIR and BB) are positive; 7 (BODS, BMET, BFE, MOWN, T5, ACFE and ACGD) are negative.

Specifically, BODS relationship with DACC1 is negatively significant with a coefficient of -0.681435, a t-Statistic of -435.2932 and a p-value of 0.0000 at the 1% levels of significance.. This suggests that an increase in BODS will reduce DACC1. That is, the more the board membership increases, the lesser the intentions of managers to engage in financial reporting manipulations and thus the higher the quality of financial reporting. The sign or direction as well as the size or magnitude is in line with a-priori expectations. We, therefore, reject the null hypothesis of no significant relationship and accept the alternative hypothesis that there is a significant relationship between BODS and DACC1.

BMET relationship with DACC1 is negatively significant with a coefficient of -0.134535, a t-Statistic of -117.8217 and a p-value of 0.0000 at the 1% levels of significance.. This suggests that an increase in BMET will reduce DACC1. That is, the more the board meets, the lesser the intentions of managers to engage in financial reporting manipulations and thus the higher the quality of financial reporting. The sign or direction as well as the size or magnitude is in line with a-priori expectations. We, therefore, reject the null hypothesis of no significant relationship and accept the alternative hypothesis that there is a significant relationship between BMET and DACC1.

BFE relationship with DACC1 is negatively significant with a coefficient of -8.934151, a t-Statistic of -24.68173 and a p-value of 0.0000 at the 1% levels of significance.. This suggests that an increase in BFE will reduce DACC1. That is, the more the board membership financial expertise increases, the lesser the intentions of managers to engage in financial reporting manipulations and thus the higher the quality of financial reporting. The sign or direction as well as the size or magnitude is in line with a-priori expectations. We, therefore, reject the null hypothesis of no

significant relationship and accept the alternative hypothesis that there is a significant relationship between BFE and DACC1.

MOWN relationship with DACC1 is negatively significant with a coefficient of -0.001993, a t-Statistic of -191.4261 and a p-value of 0.0000 at the 1% levels of significance.. This suggests that an increase in MOWN will reduce DACC1. That is, the more the board membership increases, the lesser the intentions of managers to engage in financial reporting manipulations and thus the higher the quality of financial reporting. The sign or direction as well as the size or magnitude is in line with a-priori expectations. We, therefore, reject the null hypothesis of no significant relationship and accept the alternative hypothesis that there is a significant relationship between MOWN and DACC1.

T5, ACFE and ACGD are all negatively significant with DACC1 and so should be interpreted in line with those of BODS, BMET, BFE and MOWN.

However, BODI relationship with DACC1 is positively significant with a coefficient of 2.937382, a t-Statistic of 192.2986 and a p-value of 0.0000. This suggests that the more independent directors or outside directors or non-executive directors are brought into the board,, the more managers will have the tendencies to engage in manipulation of financial statement and so reduce the quality of financial reporting. The sign or direction is not in line with our expectations but the size or a magnitude is in line with our expectations. We, therefore, reject the null hypothesis of no significant relationship and accept the alternative hypothesis that there is a significant relationship between BODI and DACC1.

BODIV relationship with DACC1 is positively significant with a coefficient of 12.03549, a t-Statistic of 454.0815 and a p-value of 0.0000. This suggests that the more female directors are brought into the board, the more managers will have the tendencies to engage in manipulation of financial statement and so reduce the quality of financial reporting. The sign or direction is not in line with our expectations but the size or a magnitude is in line with our expectations. We, therefore, reject the null hypothesis of no significant relationship and accept the alternative hypothesis that there is a significant relationship between BODIV and DACC1.

FOWN relationship with DACC1 is positively significant with a coefficient of 6.670670, a t-Statistic of 59.51808 and a p-value of 0.0000. This suggests that the more foreign directors are brought into the board, the more managers will have the tendencies to engage in manipulation of financial statement and so reduce the quality of financial reporting. The sign or direction is not in line with our expectations but the size or a magnitude is in line with our expectations. We, therefore, reject the null hypothesis of no significant relationship and accept the alternative hypothesis that there is a significant relationship between FOWN and DACC1.

IOWN relationship with DACC1 is positively significant with a coefficient of 0.002953, a t-Statistic of 296.1385 and a p-value of 0.0000. This suggests that the more shareholding are allotted

to institutional investors in the firm, the more managers will have the tendencies to engage in manipulation of financial statement and so reduce the quality of financial reporting. The sign or direction is not in line with our expectations but the size or a magnitude is in line with our expectations. We, therefore, reject the null hypothesis of no significant relationship and accept the alternative hypothesis that there is a significant relationship between IOWN and DACC1.

NFODIR, BB, CEOME and CEOFE are all positively significant with DACC1 and so should be interpreted in line with those of BODI, BODIV, FOWN and IOWN.

All the control variables- FAGE, FSIZE, LEV, LOSS, BIG4, IDUM and YDUM- are statistically significant with DACC1.

4.4 Regression Diagnostics Test

4.4.1 Arellano and Bond Serial Correlation Diagnostic Tests of AR (1) and AR (2).

When an estimator uses lags as instruments with the assumption that the disturbance or error term is white noise, such an estimator would produce inconsistent results if the disturbance terms are indeed serially correlated (Arellano & Bond, 1991). Thus, it is very necessary to be sure of no autocorrelation by carrying out test statistics of no serial correlation by validating the instrumental variables through a second-order residual serial correlation test (Arellano & Bond, 1991). The AR (1) may be or may not be significant but AR (2) must never be insignificant at all. AR (2) is more important in evaluating our results as it shows whether there is second-order serial correlation. If AR (2) is significant, it indicates that some of the lagged dependent variables which might be used as instrumental variables are bad instrument and thus endogenous. Since the p-values of AR (1) = NA(Not Available) and AR (2) = 0.9997 in Table 5 below is greater than 0.05, we then accept the null hypothesis that there is no serial correlation.

Table 5. Arellano-Bond Serial Correlation Test Equation: Untitled Date: 03/01/24 Time: 17:04 Sample: 2005 2020 Included observations: 987

Test order	m- Statistic	rho	SE(rho)	Prob.
AR(1)	NA	-2728.	NA	NA
AR(2)	0.000343	2059.	60128	0.9997

*Standard errors could not be computed. Try different covariance matrix options

Source: Researcher's Computations (2024) Using EViews13 Software

4.5 Additional Tests of Robustness Comparing Five Models.

To test the robustness of our results, we model five scenarios using FRQ2, FRQ3, FRQ4, FRQ5 and FRQ6.

Table 6

The Regression Results of the Five Models Using Their Probability Values

VARIABLES	DACC2	DACC3	DACC4	DACC5	DACC6
DACC(-1)	0.0000	0.0000	0.0000	0.0000	0.0000
BODS	0.0000	0.0000	0.0000	0.0000	0.0000
BODI	0.0000	0.0000	0.0000	0.0000	0.0000
BODIV	0.0000	0.0000	0.0000	0.0000	0.0000
BMET	0.0000	0.0000	0.0000	0.0000	0.0000
BFE	0.0000	0.0000	0.0000	0.0000	0.0000
MOWN	0.0000	0.0000	0.0000	0.0000	0.0000
FOWN	0.0046	0.0000	0.0000	0.0000	0.0000
IOWN	0.0000	0.0000	0.0000	0.0000	0.0000
T5	0.0000	0.0000	0.0000	0.0000	0.0000
NFODIR	0.0000	0.0000	0.0000	0.0000	0.0000
BB	0.0000	0.0000	0.0000	0.0000	0.0000
CEOME	0.0000	0.0000	0.0000	0.0000	0.0000
CEORE	0.0000	0.0000	0.0000	0.0000	0.0000
ACFE	0.0000	0.0000	0.0005	0.0001	0.0000
ACGD	0.0000	0.0000	0.0000	0.0000	0.0910
FAGE	0.0000	0.0000	0.0000	0.0000	0.0000
FSIZE	0.0000	0.0000	0.0000	0.0000	0.0000
LEV	0.0000	0.0000	0.0000	0.0000	0.0000
LOSS	0.0000	0.0000	0.0000	0.0000	0.0000
BIG4	0.0000	0.0022	0.3978	0.0000	0.0409
IDUM	0.0619	0.0033	0.0000	0.5953	0.0019
YDUM	0.0000	0.0000	0.0000	0.0000	0.0000

Source: Researcher's Computations (2024) Using EViews13 Software

Where the five scenarios were taken into considerations, the regression results in Table 6 above did not significantly differ from that of Table 4 above. It should be observed that all the 15 variables in the entire models are statistically significant with their respective DACC. This attest

to the robustness of the fact that corporate governance characteristics considered in this study has helped improving financial reporting quality for the period under consideration.

Conclusion and Recommendations

This study investigates if there is any relationship between certain corporate board characteristics and financial performance of non-financial listed firms in Nigeria. It uses secondarily sourced panel data over the period from 2007 to 2022 of 75 such firms listed on the floor of the Nigerian Exchange Group (NXG). The generalized method of moments (GMM) results reveal that board independence, board gender diversity, foreign ownership, institutional ownership, number of foreign directors, board busyness, chief executive officer (CEO) with financial expertise and chief executive officer (CEO) with military experience are positively significant with discretionary accruals; board size, board meetings, board financial expertise, managerial ownership, top5 ownership or ownership concentration, audit committee financial expertise and audit committee gender diversity are negatively significant with it.

Based on the results above, the study recommends the followings:

- Management should maintain or increase the present level of board size, board meetings, board financial expertise, managerial ownership, top5 ownership or ownership concentration, audit committee financial expertise and audit committee gender diversity since they reduce management manipulative financial reporting intentions and thus improve the quality of financial reporting.
- Management should investigate the reasons board independence, board gender diversity, foreign ownership, institutional ownership, number of foreign directors, board busyness, chief executive officer (CEO) with financial expertise and chief executive officer (CEO) with military experience could not reduce management manipulative financial reporting intentions which lead to poor quality of financial reporting.

References

- Al-Khonain, S., Al-Adeem, K. (2020). Corporate governance and financial reporting quality: Preliminary evidence from Saudi Arabia. *Financial Markets, Institutions and Risks*, 4(1), 109-116
- Arellano, M. & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*. 58(2): 277-297.
- Awotomilusi N.S. and Adeosun O.T. (2024). Analysis of the role of corporate governance mechanisms in shaping the financial reporting practices of MNEs in Nigeria, *European Journal of Accounting, Auditing and Finance Research*, Vol.12, No. 2, pp.,84-103.
- Ayoola-Akinjobi, O. O. & Olayinka, O. D. (2023). The attributes of corporate governance and financial reporting quality of listed agricultural firms in Nigeria. *Journal of Accounting and Financial Management*, 9(5), 163-176.
- Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, 8 (3), 274-289
- Becker, T., Atinc, G., Breaugh, J., Carlson, K., Edwards, J. & Spector, P. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. J ORGAN BEHAV 37(2):157–167
- Boons, L. A. T. M.(2018)*Financial reporting quality, cost of capital, and firm'sfinancing decisions*. Erasmus University Rothadam Repository
- Chen [,] R. R., Liu, F. A. & Zhao, C. (2024).Worldwide board reforms and financial reporting quality. *Research in International Business and Finance*, 69.
- Chung, D. J., Kim, B. & Park, B. G. (2018). How do sales efforts pay off? Dynamic panel data analysis in the Nerlove-Arrow framework. (*n. d.*), 1-50
- Cinelli, C., Forney, A. & Pearl, J. (2022). A crash course in good and bad controls. Forthcoming, *Journal Sociological Methods and Research*, 1-30.

De Battisti, F. & Siletti, E. (2018.).On the use of control variables in PLS-SEM. (n. p.)

Egbadju, L. U. & Chigioke, W. I. (2023). Do auditors characteristics enhance quality of financial reporting in Nigeria?. *Nigerian Journal of Management Sciences*, 24(1a), 84-101.

- Egbadju, L. U. & Jacob, R. B. (2022). Corporate governance mechanisms and performance of quoted non-financial firms in Nigeria. *International Journal of Intellectual Discourse* (*IJID*), 5(4), 135-147.
- Enobong, E. U., Adanma, J. M., Akpan, E. U. & Asuquo, O. S. (2023). Corporate governance attributes and financial reporting quality in Nigeria. *Int. J. Business Management.* 06(07), 104-130
- Hasan, A., Aly, D. & Hussainey, K. (2022).Corporate governance and financial reporting quality: A comparative study. *The International Journal of Business in Society*, 22(6), 1308-1326
- Hunermund, P. & Louw, B. (2020).On the nuisance of control variables in regression analysis, (*n. p.*), 1-17
- IASB(2010) Conceptual framework for financial reporting. Available from: <u>http://www.ifrs.org/News/Press-Releases/Documents/ConceptualFW2010vb.pdf</u>
- Ismail; M. I. & Rasheed, H. A. (2021). Robust Regression Methods / a Comparison Study. *Turkish Journal of Computer and Mathematics Education*, 12(14), 2939-2949.
- Kaawaase, T. K., Nairuba, C., Akankunda, B. & Bananuka, J. (2021). Corporate governance, internal audit quality and financial reporting quality of financial institutions. *Asian Journal of Accounting Research*, 1-19
- Kabwe, M. (2023). Corporate governance attributes and financial reporting quality: An evidence from a developing country in Africa. *INTERNATIONAL JOURNAL OF RESEARCH IN BUSINESS AND SOCIAL SCIENCE 12*(1), 179-191
- Kaka, E. J. (2023).Corporate governance and financial reporting quality of construction companies in Nigeria. *Journal of Contemporary Accounting*, 5(3),127-141
- Ketokivi, M., & McIntosh, C. N. (2017). Addressing the endogeneity dilemma in operations management research: Theoretical, empirical, and pragmatic considerations. *Journal of Operations Management*, (52), 1-14.
- Lee, B. B. & Vetter, W. (2015) Critical evaluation of accrual models in earnings management studies. *Journal of Accounting and Finance*, 15(1), 62-71
- Li, J., Ding, H., Hu, Y. & Wan, G. (2021). Dealing with dynamic endogeneity in international business research. *Journal of International Business Studies*, 52,339–362
- Ngoc, B. T., Phuong, N. T. T. & Oanh, L. T. T.(2023). The impact of corporate governance on the quality of accounting information: Research based on listed companies on

Vietnam's stock exchange. International Journal of Professional Business Review, 8(4), 1-27.

- Nicolae, B. S. & Monica-Violeta, A. (2013). Theories of corporate governance. Studia Universitatis "Vasile Goldis" Arad. Seria stiinte economice; Arad, 23(1), 117-128.
- Nielsen, B. B. & Raswant, A. (2018). The selection, use, and reporting of control variables in internationalbusiness research: A review and recommendations. *Journal of World Business xxx (xxxx) xxx–xxx*.
- Rimamshung, S. A., Hassan, S. U., & Adamu, S. (2023). Effect of board attributes on financial reporting quality of quoted consumer goods companies in Nigeria. *Path of Science*, 9(8), 3001-3009.
- Roodman, D. (2009). A note on the theme of too many instruments. Oxford Bulletin of Economics and Statistics, 71(1), 135-158.
- Shrestha, N. (2020). Detecting multicollinearity in regression analysis. American Journal of Applied Mathematics and Statistics, 8(2),39-42
- Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, 105(3): 581–606.