

MODERATING IMPACT OF BOARD SIZE ON RISK MANAGEMENT COMMITTEE CHARACTERISTICS AND EARNINGS QUALITY OF LISTED OIL AND GAS COMPANIES IN NIGERIA

Hirhyel Ibrahim Abba
Department of Accounting
Gombe state university
Gombe, Nigeria
hirhyelabba@gsu.edu.ng

Shehu Usman Hassan
Professor of Accounting and Finance
Department of Accounting
Federal University of Kashere
Gombe State, Nigeria
shehu.hassan@fukashere.edu.ng

Hussaini Bala
Department of Accounting, Banking and Finance
Tishk International University
Kurdistan Region, Iraq
hussainumi2013@gmail.com

Abstract

The cases of earning manipulation are still prevalent among industries in Nigeria despite the implementation of several corporate governance mechanisms. This study investigates the moderating impact of board size on the relationship between risk management committee characteristics and earnings quality of listed oil and gas companies in Nigeria. The study uses ex- post facto research design. Earning quality is proxied by discretionary accruals while risk management committee is characterised by risk management committee size, risk management committee diligence and risk management committee independence. The study used secondary data which was extracted from the annual report and accounts of the listed oil and gas companies for a period for 7 years, from 2015 to 2021. Panel corrected standard error approach of estimation was employed in analysing the data. Findings from the study reveal that board size has significant moderating effect on risk management committee size, risk management committee diligence and risk management committee independence on earnings quality of listed oil and gas companies in Nigeria. As such, the study recommends that, oil and gas companies should maintain optimal board size as it has the capability to moderate the impact of risk management committee on earnings quality.

Keywords: Risk management committee, earnings quality, discretionary accruals and oil and gas companies.

INTRODUCTION

The incident that surrounded the New York stock market crash of 1929, necessitated the need for regulator to mandate all quoted companies to published annual report to serve as the major means of communicating with stakeholders on the financial activities of an entity (Barry & Jamie, 2009). One of the essential variables of the annual report that attract the attention of investors, lenders, shareholders and financial experts is the accounting earnings which serves as basis for efficient and effective decision making. Hence the accounting earnings are expected to be accurate, timely, understandable and verifiable. Quality accounting information provides value to the report and excites assurance that the report is free from error and that the presentation is not misleading to the users (Faruk, et al 2019). The global accounting scandal that swept big corporations in the late 2007 to 2008 is evidence of the impact erroneous financial reporting despite the existence of detect and risk management (Ewers, 2017). Hence, the increasing need for greater corporate financial

reporting transparency by shareholders and regulators, owing to its importance in all business decision making.

Nigeria as a country was not exempted from the consequences of the financial reporting scandal with the case of African continental bank, Cooperative and commerce bank, Orient bank in the 1990s, cases of Afribank plc, Oceanic bank and the Cadbury Nigeria Plc where recorded in 2009, and most recently the allegation of financial statement fraudulent practice against Oando Plc in 2017, one of the energy giant (Madu & Shehu, 2021). Researchers have proposed that the rapid growth in the global business environment, exchange rate volatility, increase in the complexity of financial dealings, and the dynamic nature of the material risk are a serious concern to all entities as business practice can be overtaken by the intricacy of reality (Emblemsvag, 2020; Olayinka et al., 2020). This has prompted the need for organisation to update the risk management approach deploy to effectively and holistically address the risk confronting the organization (Batten & Wagner, 2014). Many external drivers of risk management implementation are related to the need for organizations to forecast the risks that may affect its activity and to deploy measure that will enable the organisation curtail disruption and exploit opportunity (committee of sponsoring organisation COSO.2017); Monica et al., 2020).

The US Sarbanes-Oxley Act 2002, made mandatory/statutory provisions for compliance with regards to many governance issues including internal control and risk management, and it is in that vein, that the 2011 revised security and exchange commission (SEC) code suggest that all quoted companies should have a stand-alone risk management committee(RMC) separate from audit committee to specifically provide technical skills and effective risk management in other to achieve overall organizational objectives. Empirical evidence has established that a stand-alone risk management committee perform better on risk oversight responsibility thereby enhancing corporate performance and reducing the motivation to manipulate earnings (Elhaj et al., 2022; Ewers, 2017; Sani et al., 2018). The COSO, 2017 framework emphasizes the significance of board's participation in risk management and oversee a framework that manages risk on an ongoing basis. Board size is the number of directors on the board, the issue about board size is governance efficiency as a result of rich ideas from different background and volunteers (Darmadi, 2011). Increase in the size of the board will enhance the degree of inspection monitoring and oversight responsibility in relation to framework that manages risk, thereby, reducing the extent of discretionary accruals and improving the quality of reported earnings (Al-Haddad & Whittington, 2019; Iqbal, 2022).

The issue of risk management committee and earnings quality has attracted the attention of various researches both within and outside Nigeria, studies such as (Abubakar et al., 2022; Efenyumi & Okoye, 2022; Elhaj et al., 2022; Ewers, 2017; Madu&Shehu,2021; Olayinka et al., 2019; Sani et al., 2018; Yasa et al.,2020). Findings of the diverse research have been mixed, controversial and inconclusive. These controversies could be attributed to different methodology, domain, or economic development, hence, the need for the current study. Once again, it is unclear how the size of the board moderates the relationship between risk management committee and earnings quality of listed oil and gas companies is not clear. Risk management committee in this study is proxied by risk management committee size, risk management committee diligence and risk committee management independence. This study is motivated by the significant role that the financial report plays in decision making, another motivation is the need to add to the body of knowledge in regards to risk management committee and earnings quality. The choice of oil and gas sector is motivated by the strategic role it plays amongst all industries and yet experiencing cases of financial reports manipulations. Hence the major question asked is: what is the moderating role of board size on the relationship between risk management committee and earnings quality of listed oil and gas companies in Nigeria.

Objective of the Study

The main objective of the study is to investigate the moderating impact of board size on risk management committee and earnings quality of listed oil and gas companies in Nigeria.

The specific goals of the study are as follows:

- (i) To examine the impact of risk management committee characteristics (risk management committee size, risk management committee diligence, and risk management committee independence) on earnings quality of listed oil and gas firms in Nigeria.
- (ii) To investigate the impact of board size on earnings quality of listed oil and gas companies in Nigeria.
- (iii) To determine the moderating impact of board size on risk management committee size and earning quality of listed oil and gas companies in Nigeria.
- (iv) To examined the moderating impact of board size on risk management committee diligence and earning quality of listed oil and gas companies in Nigeria.
- (v) To investigate the moderating impact of board size on risk management committee independence and earning quality of listed oil and gas companies in Nigeria.

Hypotheses of the Study

The following hypotheses are formulated based on the objective of the study in null form.

Ho₁: Risk management committee characteristics have no significant impact on earnings quality of listed oil and gas companies in Nigeria.

Ho₂: Board size has no significant impact on earnings quality of listed oil and gas companies in Nigeria.

Ho₃: Board size has no moderating impact on risk management committee size and earnings quality of listed oil and gas companies in Nigeria.

Ho₄: Board size has no moderating impact on risk management committee diligence and earnings quality of listed oil and gas companies in Nigeria.

Ho₅: Board size has no moderating impact on risk management committee independence and earnings quality of listed oil and gas companies in Nigeria.

LITERATURE REVIEW

This section reviews empirical literature of the nexus between corporate risk management and earnings quality, board size and earnings quality as well as board size on risk management committee and earnings quality. The relevant theory that underpins the study was also reviewed in this section.

Risk management committee and Earnings Quality

Elhaj, et al., (2022) examine the effectiveness of risk management committee (RMC) attributes and real earnings management with evidence from Malaysia. The sample of the study constitute 146 non-financial firms listed on Bursa Malaysia, data was collected for the period of 3 years 2016 to 2018. The study recorded a negative significant effect between RMC size, RMC diligence, RMC members' qualifications and real earnings management. However, RMC independence has no significant effect on real earnings management. This study though considered a large sample size but a short period of observation of 3 years. In a similar study, Abubakar et al., (2022), examine the impact of risk management committee, institutional ownership on real earnings management in Nigeria. The study constitutes 72 non- financial firms listed on the Nigeria stock exchange and data for the study was collected for the period of 5 years 2015 to 2019. It was recorded in the study that risk management committee is negatively significant to real earnings management. In another study, Efenyumi & Okoye, (2022), investigated the effect of risk management committee characteristics on

earnings quality of listed companies in Nigeria. The study adopted Ex-post facto design and data was collected from 70 non-financial firms for the period of ten years (2012-2021). The result from the study reveals that risk committee independence and risk committee diligence has no significant effect on earnings quality of listed non-financial firms in Nigeria.

Similarly, Madu and Shehu, (2021) examine the impact of enterprise risk management and financial reporting quality: evidence from listed Nigerian non- financial firms, the study adopted the correlation research design. A total of 74 non- financial firms were used as the sample size and data was collected for the period of 2010 to 2019. The study recorded positive significant effect between risk management committee and financial reporting quality. The studies above was able to cover a reasonable time frame of 10 years which allows justifiable conclusion to be reached. Yet in another study, Sani et al., (2018), conducted a study on the impact of risk management committee on real earnings management through sales: evidence from Nigeria.80 listed non-financial firms constitute the sample size and data was collected for the period of five years (2012- 2016). A finding from the study reveals that risk management committee has negative significant impact on real earnings management of the sampled firms. These studies, though considered the non-financial firms in Nigeria only examine the direct relationship between risk management committee and earnings management. On the contrary, Olayinka et al, (2019) conducted a study on the impact of enterprise risk management on accounting quality: evidence from the Nigerian financial institutions. The study was based on content analysis from 2013 to 2011with 50 samples firms, a pre-enterprise risk management (ERM) and post ERM era. The study recorded a negative significant between risk management committee and accounting quality for the post ERM era. This study though covers a moderate period, it concentrated on financial sector.

Board Size and Earnings Management

Wada et al. (2023) examined the impact of risk committee on risk disclosure quality. The study covers 17 firms listed on the Nigeria exchange group insurance companies in Nigeria and data was collected for the period of 11 years from 2011 to 2021. Result from the study reveals that risk committee size has a positive significant effect on risk disclosure quality, indicating increase on risk disclosure quality. Iqbal et al., (2022), examine the moderating role of audit committee on Corporate Governance and Earnings Management Practices. 137 non-financial firms listed as shariah-compliant companies in the Hijrah Shariah Index in Malaysia formed the sampled size and data for the study was collected for the period of 12 years 2008 to 2019.A finding of the study reveals that Board size has negative significant effect on earnings management of non- financial firms in Malaysia.

In another study, Githaiga et al., (2022), examined if firm size matter in the relationship between board characteristics and earnings management. The study sample was 88 firms in the East African Community (EAC), data was collected for the period of 10 years 2011 to 2020.board size was found to be appositely significance with earnings management of firms in EAC. Similarly, Kangea (2022), considered the effect of board size on earnings quality of non-financial firms listed at the Nairobi Securities Exchange. The study used quantitative survey research design with 33 firms in the non-financial firms constituting the sample firms. Data for the study was collected for the period of 13 years from 2008-2020. The study found that board size has significant positive effect on earnings of non- financial firms in Nairobi. Each of the three studies above was able to cover a reasonable time frame of 10 years and above; however, the studies are conducted in countries other than Nigeria.

In a similar study, Egbunike and Odum (2018), examine the influence of board leadership structure and earnings quality of quoted manufacturing firms in Nigeria. The study used ex post facto research design, with concentration on 45 firms in the conglomerates, consumer goods and industrial goods sector. Data for the study was collected for the period of 6 years 2011 to 2016. The study recorded a positive significant effect between board size and earnings quality. In a different study, Adamu et al., (2017)., investigated the effect of board

attribute on real earnings management in Nigerian financial institution. The study constituted 45 listed financial companies trading in the Nigerian Stock Exchange and data for the study was collected for the period of 5 years, 2011-2016. The study reveals that board size has positive significance on real earnings management of listed financial companies in Nigeria.

Board Size on Corporate Risk Management and Earnings Quality

Kemboi, (2020), examined the moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya. The study sample constituted 42 active commercial licensed and regulated by the Central Bank of Kenya, data were extracted for the period of 5 years, 2013-2017. The study concludes that there is a moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya. Similarly, Zheng (2019), examined the moderating effect of board size on the relationship between diversity and performance of tourism firms in China. The study covers the period of 8 years, from 2008 to 2015, and the study concluded that board size moderated the relationship between unrelated diversification and firm performance. These two studies though conducted on performance the study examines the moderating effect of board size.

Agency theory centres on explaining and resolving the problem that exist between business owners and agent as postulated by Jensen and Meckling in 1976. This usually occurs when the principal or owner employs an agent to assume some responsibility on behalf of the principal which often leads to conflicts of interest resulting in agency problem, under the assumption that the agent will act in variance with the interest of the owner (Jensen and Meckling, 1976). This is usually the case, especially where reward or bonuses are linked to performance. Managers will use opportunistic discretion to manipulate the reported earnings to satisfy personal interest. Hence the need for proper governance mechanisms to be put in place to protect shareholders' interests. (Boshkoska, 2015). Bensaid, (2021), suggest that risk management committee reduce the monitoring cost by providing better insight about risk, therefore reducing agency cost and information asymmetric and enhance transparency in the financial reports. Agency Theory is significant in this study as it provides a sound theoretical ground for the findings of the study.

METHODOLOGY AND MODELS SPECIFICATION

This study was conducted within philosophical research paradigm of positivism with a quantitative approach. The study is based on ex- post facto research design, which indicates the impact of one variable on another. The population of the study consist of 10 oil and gas companies listed in the Nigerian Exchange Group as at 31st December 2021. Census of the entire population was taken; however, two of the listed oil and gas companies (Rak unity petroleum company plc and Oando plc) were excluded from the study due to non-availability of data, reducing the sampled firms to eight. Secondary source of data was employed and data was extracted from the annual report and accounts of firms from 2014 to 2021. Panel Corrected Standard Errors (PCSE) approach of estimation was employed, which simultaneously corrects autocorrelation, heteroscedasticity and cross-sectional dependence, in order to improve the parameter efficiency (Lawal & Shehu, 2017; Doku et al., 2019).

Due to the nature of this research a two-stage regression model is required. The value of the discretionary accruals was utilized as the dependant variable in the study, Yoon, et al. (2012) model was used to determine earnings quality from the model. The other models explain and describe the relationship between earnings quality (as derived from the first model) and the independent variables Also the dependant variable and the moderator- board size and finally the moderating effect.

Table 1: Variable Measurement

Variable Name	Code	Variable Measurement	Sources
Dependant Variable			
Earnings quality	EQ	The discretionary accrual model of Yoon, et al (2012) was used to determine earnings quality	Echobu, et al., (2019)
Independent Variable (Risk management committee characteristics)			
Risk management Committee size	RMCS	The number of members in the risk Management committee	Elhaj et al., (2022)
Risk management committee diligence	RMCD	Number of meetings held by the risk Committee members in a year	Efenyumi &Okoye,(2022)
Risk management committee independence	RMCIND	The proportion of non-executive directors to total members of the risk Management committee	Abba et al., (2023)
Control Variable (Firm characteristics)			
Leverage	LEV	Financial leverage; total Liabilities divided by total assets	Adamu et al., (2017)
Firm Age	FAGE	Determined by the number of years since the incorporation of the firm.	Iqbal,et al., (2019)
Moderating Variable (Board characteristic)			
Board size	BZ	Measured as the number of board members	Echobu, et al., (2019)

Researchers design

Model Specification

The first Yoon, et al. (2012) model is given as:

$$TA/A_{t-1} = \beta_0 + \beta_1\Delta REV/A_{t-1} + \beta_2\Delta NREC/A_{t-1} + \beta_3PPE_{t-1}/A_{t-1} + \beta_4INTG_{t-1}/A_{t-1} + \varepsilon \dots (1)$$

Where TA is total accruals, which is the difference between net income and cash flow from operations; A_{t-1} is lagged total assets; ΔREV is change in revenue $\Delta NREC$ is change in net receivables PPE_{t-1} is lagged plant, property and equipment, $INTG_{t-1}$ is of intangible asset, β_0 is the constant term; $\beta_1, -\beta_4$, represents specific parameters and ε is residual here represents the discretionary portion of accruals. Discretionary Accruals (DA), which is the final, derive as EQ.

Therefore, the model of the study is given thus:

$$EQ_{it} = \beta_{0it} + \beta_1RMCS_{it} + \beta_2RMCDT_{it} + \beta_3RMCIND_{it} + \beta_4BZ_{it} + \beta_5LEV_{it} + \beta_6FAGA_{it} + \varepsilon_{it} \dots (2)$$

Where EQ is earnings quality; RMCS is risk management committee size; RMCDT is risk management committee diligence, RMCIND is risk management committee independence, LEV is leverage and FAGA is firm age.

$$EQ_{it} = \beta_{0it} + \beta_1RMCS_{it} + \beta_2RMCDT_{it} + \beta_3RMCIND_{it} + \beta_4BZ_{it} + \beta_5RMCS_{it} * BZ_{it} + \beta_6RMCD_{it} * BZ_{it} + \beta_7RMCIND_{it} * BZ_{it} + \beta_8LEV_{it} + \beta_8FAGA_{it} + \varepsilon_{it} \dots (3)$$

RESULTS AND DISCUSSION

In section the result of the data collected for the study is presented analysed and discussed. This section also makes conclusion and recommendations based on the findings of the study. The descriptive statistic, correlation matrices and regression result are as follows:

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std.Dev	Min	Max
EQ	56	-24.21	65.81	-267.59	-0.0798
RMCS	56	4.02	1.70	0	7
RMCD	56	2.88	1.38	0	5
RMCIND	56	0.64	0.30	0	1
BZ	56	8.96	2.08	6	14
LEV	56	0.65	0.33	0.00056	2.4785
FAGE	56	37.86	20.75	6	70

Source: Authors' computation from annual reports of the companies using STATA

The result from Table 2 shows that the number of observations for each variable is 56. This is in line with the number of the sampled companies, which is 8, with the period of 7 years. EQ shows a mean value of -24.20942, minimum -267.589 and maximum of -0.0797769. These imply that the average discretionary accrual of listed oil and gas companies in Nigeria during the period is -24%. The mean value of risk management committee size of 4.017857, standard deviation of 1.700172 this indicates a wide variation in of risk committee size among the firms. Risk management committee diligence has a mean value of 2.875, minimum of 0.0000 and maximum 5. These mean that the average number of meetings held by risk committee members of listed oil and gas companies in Nigeria is 2.875 while the maximum is 5. The mean value of risk management committee independence is 0.6406888 meaning that, on the average, non-executive directors constitute 64% of the risk management committee members of listed oil and gas companies in Nigeria. Board size has a mean of 8.964286; minimum 6 and maximum of 14 while the standard deviation is 2.079898, the value of the standard deviation indicates a wide variation of board size of listed oil and gas companies in Nigeria. Leverage and firm age has a mean value of 0.6548178 and 37.85714 respectively.

Table 3 correlation matrix of the variables of the study.

Variables	EQ	RMCS	RMCD	RMCIND	BZ	LEV	FAGE
EQ	1.0000						
RMCS	0.1415	1.0000					
RMCD	-0.2696	0.4440	1.0000				
RMCIND	-0.4155	0.1728	0.6373	1.0000			
BZ	-0.5233	0.0619	0.1828	0.1276	1.0000		
LEV	0.3279	0.2264	0.0379	-0.1845	-0.3223	1.0000	
FAGA	0.5059	-0.1504	-0.2362	-0.3547	-0.1855	0.0110	1.0000

Source: Authors' computation from annual reports of the companies using STATA

The correlation matrix in Table 3 shows how the dependent variable relates with independent variables as well as how the independent variables relate among themselves. The values of the correlation range from -1 to 1. The sign of the correlation indicates the direction of the relationship (positive or negative). The correlation coefficients reveal that there are no high correlations between the dependent and the explanatory variables as well as among the explanatory variables themselves. This is in line with the suggestion of Gujarati (2003) that all variables with less than 0.80 correlation coefficients are not highly correlated and therefore considered safe for inclusion in the same regression model.

Table 4. Regression Results

EQ	Coef.	Std. Err.	z	P>z
Constant	-42.04415	32.20404	-1.31	0.192
RMCS	-60.47267	14.90017	-4.06	0.000
RMCD	128.6753	22.40607	5.74	0.000
RMCIND	-83.52236	43.55625	-1.92	0.055
BZ	-1.134432	3.182396	-0.36	0.721
RMCS*BZ	7.832777	1.684765	4.65	0.000
RMCD*BZ	-15.218	2.550924	-5.97	0.000
RMCIND*BZ	4.786277	3.293257	1.45	0.146
LEV	15.50596	12.73787	1.22	0.223
FAGE	0.8412805	0.2123326	3.96	0.000
Autocorrelation				no auto
R- Squared				0.7756
Wald chi2				405.13
Prob> chi2				0.0000
VIF mean				(1.54)
Hetttest chi2(1)				33.87
Prob > chi2				0.0000

Source: Authors' computation from annual reports of the companies using STATA

Table 4 present the regression results of the study with robustness tests of the model. The test for multicollinearity was conducted and the result prove the absence of multicollinearity among the variables, with an average value of variance inflation factor (VIF) of 1.54, this is in line with the submission of Gujarati, 2003, that VIF in excess of 10 is seen as an indication of multicollinearity. Heteroskedasticity test was also carried out to ensure that regression fits all the values of the independent variables, the result of the test shows a p-value of 0.0000, thus suggests presence of heteroskedasticity as suggested by (Gujarati 2003). Consequently, panel corrected standard error (PCSE) regression approach was employed to correct the problem of heteroscedasticity and cross-sectional dependence, in other to improve the parameter efficiency. From the summary of the models shown in Table 4, the R-squared is 0.7756 Which implies that the combined effect of the independent variable explain the dependent variable to the tone of 77.56%. The overall fitness of the model has also been determined using wald statistic of chi2 405.13 which is significant at 1% level of significant from the p.value 0.0000 which indicate that the model is fit.

Similarly, the results show that risk management committee size (RMCS) has significant negative effect on discretionary accruals of listed oil and gas companies in Nigeria. This implies that the higher the number of members in the risk management committee, the lower the discretionary accruals there by increasing the quality of earnings. This finding contradicts the results obtained by Madu and Shehu (2021) using non-financial services companies in Nigeria. Conversely, risk management committee diligence (RMCD) shows a positive significant effect though on the discretionary accruals of listed oil and gas companies in Nigeria. This means that the more meetings held by the risk committee members the less earnings quality. This finding is in line the result of Efenyumi and Okoye, (2022), however, the finding is in oppose the finding of Elhaj et al., (2022) which was conducted in non-financial firms in Malaysia. In another vein, risk management committee independence (RMCI) reveals a negative but significance effect on the discretionary accrual of listed oil and gas companies in Nigeria. This means that an increase in the number of non-executive directors in a risk committee will result to no a reduction in earnings manipulation. This finding is in contravene with the results of Elhaj et al., (2022) and Efenyumu and Okoye (2022) which both studies recorded an insignificant impact on earnings quality.

The Moderating Effect of Board Size on Risk Management Committee and Earnings Quality

Table 4, show that the moderating effect board size on risk management committee size (RMCS) and earnings quality has positive significant effect on the discretionary accrual of listed oil and gas companies in Nigeria though. This result vary with the direct relationship, which implies that board size moderate the relationship between RMCS and EQ, as such, the null hypotheses Ho3 which state that board size has no significant Moderating impact on risk management committee size and earnings quality of listed oil and gas companies in Nigeria, is rejected. On the other hand, the moderating effect of board size on the relationship of risk management committee diligence (RMCD) and earnings quality shows a negative significant effect on the discretionary accruals of listed oil and gas companies in Nigeria with the p.value of 0.0000, which is significant 1%. This result indicate that board size has moderated the relationship between RMCD and EQ, compare to the result in in the direct relationship. Hence, the null hypotheses Ho4 which state that board size has no significant moderating impact on risk management committee diligence and earnings quality of listed oil and gas companies in Nigeria, has been rejected. On the contrary, the moderating effect of risk management committee independence (RMCI) reveals a significant effect on the discretionary accrual of listed oil and gas companies in Nigeria. This is evidence from the p. value of 0.146, this result has weakened the relationship between RMCI and EQ by changing the result from negative significance effect to insignificance in model 4. Therefore, the null hypotheses Ho5 which state that board size has no significant impact on risk management committee independence and earnings quality of listed oil and gas companies in Nigeria, is fail to be rejected. Leverage has an insignificant effect on the discretionary accrual of listed oil and gas companies in Nigeria. However, firm age has a significant positive effect on the discretionary accruals of listed oil and gas companies in Nigeria.

CONCLUSION

This study examines the moderating effect of board size on corporate risk management and earnings quality of listed oil and gas companies in Nigeria, for the period of 2015 to 2021. In line with the findings of the study, it is concluded that board size has significant moderating effect on the relationship between risk management committee size and earnings quality of listed oil and gas companies in Nigeria. Similarly, the study concludes that board size has significantly moderated the relationship between risk committee diligence and earnings quality of listed oil and gas companies in Nigeria. Moreover, it is also concluded that board size significant moderating impact on risk committee independence and earnings quality of listed oil and gas companies in Nigeria.

Based on the findings and conclusion of the study, the following recommendations were offered:

Oil and gas companies in Nigeria should maintain an optimal size of board of directors as board risk oversight responsibility enhances risk committee diligence there by mitigating discretionary accruals and achieving earnings quality; The oil and gas companies should keep up to a sizeable number of board of directors in order to constitute a risk management committee with higher number of non-executive directors to foster independent decision regarding risk management issues, hence, reducing the motivation to manage earnings.

REFERENCES

- Abba, H. I., Sabo, A., & John, J. (2023). Effect of risk management committee characteristics on the value of listed oil and gas companies in Nigeria. *African Journal of Management and Business Research*. 10 (1). 68 – 77.
- Abubakar¹, A. H., Mansor, N., &Fadhil, N. F. M. (2022). Risk management committee, institutional ownership, and real earnings management. *GATR Journal of Finance and Banking Review* 10(1) 64 – 71.
- Adamu, A. I., Ishak, B. B., & Chandren, S. A. P. (2017). The effect of board attributes on real earnings management in Nigeria financial institution. *Journal of Accounting Business and Financial Research*. 1(1), 76 -83. [http:// doi: 1020448/2002.11.76.83](http://doi:1020448/2002.11.76.83).
- Al-Haddad, L., & Whittington, M. (2019). The impact of corporate governance mechanisms on real and accruals earnings management practices: evidence from Jordan. *The international journal of business in society*. (19)6, 1167- 1186. <https://doi.org/10.1108/cg-05-2018-0183>.
- Batten, J. A., & Wagner, N. F. (2014). Introduction to risk management post financial crises: A period of monetary easing. *Contemporary Studies in Economic and Financial Analysis*. 1-8. [http:// doi: 10.1108/51569-375920140000096019](http://doi:10.1108/51569-375920140000096019).
- Barry, E., & Jamie, E. (2011). *Financial accounting and reporting* (4th ed.).
- Bensaid, A., Ishak, S. B., &Mustapa, I. R. (2021). Risk management committee attribute: A review of the literature and future directions. *Universal Journal of Accounting and Finance*. 9(3), 388-395. <http://doi:10.13189/ujaf.2021.090313>.
- Boshkoska, M. (2015). The agency problem: Measures for its overcoming. *International Journal of Business and Management*. 10 (1), 204 -209.
- Doku, J., Kpekpena, F. A., &Boateng, P. Y. (2019). Capital structure and bank performance: Empirical evidence from Ghana. *African Development Review*. 31(3). <http://doi:10,1111/1467-8268.12360>.
- Echobu, J., AudI, A. M., &Mailafia, L. (2019). Effect of corporate attributes on financial reporting quality : Application of yoon, kim and woodruff model. *FUDMA International Journal of Social Sciences*, 1 (1), 31-51.
- Efenyumi, P. E., & Okoye, E. I. (2022). Risk management committee characteristics' effects on listed companies' earnings quality. *Journal of Accounting and Management*,12(3), 80- 92.
- Egbunike, C. F., & Odum, A. N. (2018). Board leadership structure and earnings quality :Evidence from quoted manufacturing firms in Nigeria. *Asian Journal of Accounting Research Article information*. <http://doi.org/10.1108/AJAR-05-2018-0002>
- Elhajl, E., Mansor, N., &Salleh, S. I. N. (2022). The effectiveness of risk management committee attributes and real earnings management: Empirical evidence from Malaysia.*Journal of Positive School Psychology*, 6(6). 1-14.
- Emblemsvåg, J. (2020). Risk and complexity– on complex risk management. *The Journal of Risk Finance*. <http://doi:10.1108/JRF-09-2019-0165>.
- Ewers, R. (2017). *Enterprise Risk Management in Responsible Financial Reporting*, (Doctoral dissertation, Walden University) <https://scholarworks.waldenu.edu/dissertations>,
- Farouk, M. A., Magaji, I.J., Egga, K. A. (2019). Impact of Characteristics of Firm on Quality of Financial Reporting of Quoted Industrial Goods Companies in Nigeria. *Amity Journal of Corporate Governance*. 4 (2), 42-57.
- Gujarati, N. D. (2003). *Basic Econometrics* (4th ed.). McGraw – Hill.
- Githaiga, P. N., Kabete, P. M., &Tirisa Caroline Bonareri, T. C. (2022) Board characteristics and earnings management. Does firm size matter? *Cogent Business & Management*, 9:1, 2088573, 1- 16. [https:// doi: 10.1080/23311975.2022.2088573](https://doi:10.1080/23311975.2022.2088573).
- Iqbal, A., Sharofiddin, A., Farooq, Z., Khan, S. A., Bilal, F., Kamran, M., &Rehman. S. (2022). Corporate governance and earnings management practices: Moderating role of audit committees. *Journal of Positive School Psychology*. (6)12, 57-72.
- Jensen, M. C., &Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership Structure. *Journal of Financial Economics*. (3), 305-360.

- Kangea, S. T., Nasieku, T., & Muturi, W. (2022). Effect of board size on financial quality of non-financial firms listed at the Nairobi securities exchange. *Finance & Economics Review*, 4(1), 41-54. <https://doi.org/10.38157/fer.v4i1.377>.
- Kemboi, R. K. (2020). Moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya. *International Journal of Economic, Commerce and Management*, 8(10), 116 – 122.
- Lawal, A., & Shehu, U. H. (2017). Accounting Conservatism and Financial Performance of Nigerian Deposit Money Banks: An Analysis of Recent Economic Recession. *International Journal of Business Policy & Governance*, 4(12), 124-135. <http://doi: 10.19085/Journal.Sijbpg041201>.
- Madu, M., & Shehu, U. H. (2021). Enterprise risk management and financial reporting quality: Evidence from Listed Nigerian Non-financial Firms. *Journal of Risk and Financial Studies*, 2(1), 43-70.
- Monica. H., Cristina, A., Betriz, A., Elfego, R. (2020). Are external pressures always behind ERM Implementation? Evidence from Spanish Listed Firms. *International Journal of Disclosure and Governance*, 17(3). <http://doi: 10.1057/s41310-020-00076-z>
- Olayinka, A E., Uwuigbe, U., Omololu B., Sylvester, E., Uwuigbe, O. R., & Amiolemen, O. O. (2019). Does enterprise risk management impact accounting quality? Evidence from the Nigerian financial institutions. *Investment Management and Financial Innovations*, 16(4), 16-27. <http:// doi:10.21511/imfi>.
- Olayinka, E., Omololu, O., & Jonah, A. (2020). Risk governance and financial performance: an empirical analysis, *Business: Theory and Practice*, 21(2), 758-768, <http://dx.doi.org/10.3846>
- Sani, A. A., Latif, R. A., & Al-dhamari, R. A. (2018). Risk management committee and real earnings management through sales: Evidence from nigerian. *Journal of Advanced Research in Business and Management Studies*, 12(1), 62-69.
- Wada, N. A., Rabiu, N. B & Dandago, K. I. (2023). Risk Committee and Risk Disclosure Quality: Evidence from Listed Insurance Firms in Nigeria. *Journal of Accounting Research, Organization and Economics*, 6(2), 162 – 182.
- Yasa, G.S.W., Wirakusuma, M. G & Suaryana, G.N.A. (2020). Effect of Leverage, Free Cash Flow, Corporate Governance, Growth and Risk Management on Earnings Quality. *International Research Journal of Management, IT & Social Sciences*, 7(1), 177- 184. <https://sloap.org/journals/index.php/irjmis/>
- Zheng, C and Tsai, H (2019). The moderating effect of board size on the relationship between diversification and tourism firm performance. *Tourism Economics*, 25 (7), 1084-1104. <https://doi.org/10.1177/1354816618823427>.