

Risk Management Practices and Firm Performance: Evidence from Non-Financial Listed Companies in Nigeria

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Submitted: 05-11-2021

Revised: 12-11-2021

Accepted: 15-11-2021

ABSTRACT

The study investigates the effect of risk management practices on the performance of non-financial listed companies in Nigeria. Risk management practices were proxied by the Enterprise Risk Management, Risk Management Committee, Chief Risk Officer, Audit Committee, Board's size, Independent Directors, the proportion of non-executive Directors on the Board, financial experts on the Board, a whistleblower policy and Internal Audit in the companies. The firm performance was measured by Return on Assets, Return on Equity and Tobin's Q. The study adopted an ex-post facto research design on 44 firms selected from a target population of 114 firms. The study used secondary data obtained from the financial statements of non-financial companies from 2010 to 2019 and the Nigerian Exchange Limited (NGX) and its Factbooks. Descriptive statistics were deployed to analyse the research questions. The inferential statistics (simple and multiple Regression analysis, t-test and Analysis of Variance) were also deployed to investigate the relationship between the dependent and independent variables. Results show that risk management practices have no significant effect on the performance of the listed non-financial companies. However, the multiple regression analysis revealed that only board size was statistically significant to influence ROE positively, and only Independent Director was also statistically significant to influence Tobin's Q positively. The study concludes that listed non-financial companies in Nigeria should take risk management more seriously to improve their performance. The study recommends that the risk management practices should be monitored by the Risk Management Committee, Securities and Exchange Commission (SEC), Nigerian Exchange Limited

(NGX), and the Financial Reporting Council of Nigeria (FRCN).

Keywords: FRC, Non-financial listed Companies, NSE, Performance, Risk Management practices, SEC.

I. INTRODUCTION

Every company's fundamental objective is to make a profit and perform efficiently in its operations (Otekinrin et al., 2021). Despite the uncertain or unfriendly business environment, an entity's adequate and consistent profit-making will enable it to create satisfactory returns to its stakeholders, particularly shareholders, creditors, and employees. Risks, however, threaten the goal. The recent economic crisis caused by COVID-19 has given risk management a new focus that has received the required attention among top executives and practitioners in organisations worldwide. Effective risk management can enhance the performance of firms irrespective of their sectors or industries. It can bring about superior financial performance, a better basis for strategy setting, improved service delivery, better competitive advantage, economical use of time and other resources, and minimum surprises.

Effective risk management continuously assesses and identifies risks and reduces surprises that affect the organisation (Mohammed & Knapkova, 2016). In times of uncertainty, a worldwide economic crisis and a global pandemic, the function of risk management as a platform for business management is becoming more fundamental.

Recently, there has been a growing interest in risk management practice worldwide due to many parallel events (Iwedi et al., 2020). Global concerns about risk management are increasing, as noted from discussions on economic, political,

technological, and other issues. It is now a major concern for all stakeholders. According to ISO (2020), managing risk is part of all activities associated with an organisation and includes interaction with stakeholders.

The attitude of management and owners of non-financial companies to risk management leaves much concern. It would be intriguing to know how risk management could help improve the concerned entities' performance. Risk management practices in non-financial companies depend on the types of risks in the environment. Management of risk can have either positive or negative effects on an entity's performance. Non-financial companies in Nigeria are exposed to various risks such as market risk, credit risk, liquidity risk, political risk, technological risk, legal risk, compliance risk, security risk, reputational risk, fraud and pandemic risk. Insurance was the only or primary way of managing risks by the non-financial industries in the twentieth century, but the practice has changed due to the following reasons:

1. Insurance cannot cover all risks. Hazards that cannot be covered by insurance include reputational, regulatory, political, and pandemic risk.
2. The associated costs, including premium payables on insurance, have become so significant in the companies' overheads, and Managers cannot ignore the effects of such costs on the companies' profitability.
3. Disagreements often arise between the insurers and insured on payment of claims.
4. The companies' assets require more safeguards than in previous years. The companies may not be compensated in good time by the insurers, and this may affect their continued operations.

However, managers or directors of non-financial companies must acknowledge that insurance is still one of the options available to minimise risks in Nigeria and the world.

Risk management practices are the different practices put in place to identify, assess, plan and control social, economic, and physical threats to organisations. It involves risk-avoiding as well as risk-taking.

There are various practices aimed at managing risks by the companies in Nigeria, particularly in the Companies and Allied Matters Act and Code of Corporate Governance. These various practices are implementation of enterprise risk management (ERM), the existence of a risk management committee (RMC), the appointment of a chief risk officer, the existence of statutory audit committee, the size of the board, the existence of independent director, higher

proportion or ratio of non-executive directors to the total board members, financial expertise of the directors, adoption of a whistleblower policy, and the presence of internal audit function. There have been various studies to investigate the effect of these different risk management practices. They include that of Ilaboya & Obaretin (2015) and Ai Ping et al. (2017).

A firm's performance has attracted much attention due to its effect on its going concern. Performance, in its real sense, has attracted debates because it is defined and measured differently. The performance of firms could be financial performance and market performance. Financial performance refers to the firm's achievement towards achieving profitability and includes Return on Assets (ROA) and Return on Equity (ROE). On the other hand, market performance refers to investors' perception of a firm's success, mainly through its stock price or market value. It is measured by several proxies such as Tobin's Q, Price to Book Value (PBV), Market to Book Value (MBV), and stock returns (Fujianti, 2018). Regarding this study, the focus is on Return on Assets (ROA), Return on Equity (ROE) and Tobin's Q. They are significant performance measurement variables commonly used for similar studies and by financial analysts who advise their clients or investors from time to time.

A company has no business in the Nigerian Exchange Limited if it cannot create wealth for its shareholders and sustain other stakeholders' interests. However, in their study, Odusanya et al. (2018) found that firms' performance in Nigeria, including non-financial firms, is low and not encouraging.

Organisations embrace risk management to enable their management and stakeholders to identify the various risks exposed to and take appropriate steps or measures to manage and control them. However, it is costly and takes considerable effort to enforce all the identified risk management practices. Furthermore, most previous researchers on risk management in and outside Nigeria focused more on the financial sector because it is more sensitive than non-financial. Hence, less emphasis was given to the non-financial sectors; thus, this could threaten their growth and development in the long run. Therefore, it is essential to ascertain the impact of risk management on non-financial listed companies in Nigeria.

The knowledge and understanding of the relationship between risk management and firm performance are still ambiguous. It is believed that a good risk management process and

implementation will largely impact the performance of firms and enhance Nigeria's economy. There is an ongoing debate in understanding the various factors responsible for the poor performance of non-financial firms in Nigeria, which necessitated this study.

Objective of the Study

The main objective of the study is to examine the effect of risk management practices on performance of non-financial listed companies in Nigeria.

The specific objectives are to:

1. measure the extent of the implementation of risk management practices by the non-financial listed firms in Nigeria.
2. ascertain the relationship between risk management practices and the performance of non-financial listed firms in Nigeria,
3. examine whether risk management practices increase the performance of non-financial listed firms in Nigeria.

Research Questions

The study fills the identified gap by addressing the following research questions;

1. What is the current level of risk management practices among the non-financial listed firms in Nigeria?
2. What is the relationship between risk management practices and the performance of non-financial listed firms in Nigeria?
3. Which of the risk management practices can increase the performance of non-financial listed companies in Nigeria?

Research Hypotheses

The following null hypotheses are formulated to achieve the research objectives:

H₀₁ – Risk management practices do not exist in non-financial listed firms in Nigeria.

H₀₂- Risk management practices have no significant relationship with the performance of the non-financial firms listed on the Nigerian Exchange Limited.

H₀₃- The performance of non-financial listed companies in Nigeria is not influenced by any risk management practices.

Review of Related Literature

Concept of Risk

Risk is an integral part of business activity and is required if any business entity is to survive and create value for its stakeholders. According to Hopkin (2014), the risk is anything that can impact the fulfilment of corporate objectives.

Concept of Risk Management Practices

Risk Management refers to the process of identifying, assessing and prioritising risks to coordinate and ensure economical use of available resources to minimise, monitor, and control such risks to reduce the elasticity of its occurrence and the impact of unfortunate events (Soyemi et al., 2014). Risk management involves identifying and selecting the most appropriate strategies for effectively treating various loss exposures an organisation faces. It is one of the most critical issues facing organisations today; the business environment has been volatile and unpredictable. Hence, there is a need for effective management of various risks in a business environment.

According to COSO (2017), enterprise risk management principles have been organised into five interrelated components and twenty principles. The components are setting governance and culture, strategy and objective-setting, performance, review and revision, information, communication, and reporting. The principles are board risk oversight, the establishment of operating structures, defining the desired culture, demonstrating a commitment to core values, employment of capable individuals, analyses of business context, defining risk appetite, evaluation of alternative strategies, formulating business objectives, identification of risk, assessment of the severity of risk, prioritising risks, implementation of risk responses, development of portfolio view of risks, assessment of substantial change that may affect the firm, review of risk and performance, pursuing improvement in enterprise risk management, leveraging on the firm's information systems, communication of risk information, and reporting of risk, culture, and performance.

In addition, Zoghi (2017) noted that identifying a significant firm's risks is crucial for running an effective control system in companies.

In reaction to the identified dangers and continued economic threats, regulators in Nigeria had recommended that companies institute risk management practices on different occasions. Accordingly, the Financial Reporting Council of Nigeria (FRCN) issued the Nigerian Code of Corporate Governance (NCCG) for Nigerian companies for effective implementation from 1 January 2020. The concerned companies must establish a sound framework for managing risk and ensuring an effective internal control system. The framework should be communicated to all employees and integrated into the business's day-to-day operations and provide guidelines and

standards for managing key risks (Nigerian Code of Corporate Governance, 2018).

The Federal Government of Nigeria also revised the Companies and Allied Matters Act in 2020 to incorporate matters or provisions relating to risk management, among other relevant issues to business operations and management in Nigeria.

Concept of Firm Performance

The concept of performance to the firm has attracted several debates because it means different things to different people and organisations; it is defined or viewed in different ways. It can be an accounting measure or a market-based measure. Performance can be financial or non-financial. Financial performance has to do with the results of operations, profits or surplus. Non-financial performance relates to achieving other set objectives beyond gains such as the number of products, attracting the best hands in the industry, staff motivation, etc. It must, however, be acknowledged that financial performance facilitates the achievement of other objectives. For example, organisational performance involves using resources wisely to avoid wastage (Eruemegbe, 2015).

Empirical review

Johl et al. (2015) examine the impact of board characteristics and firm performance. The researcher used board meetings, board independence, board size and directors accounting expertise as board characteristics. The study used financial and non-financial data from annual reports of the 700 public listed firms in Malaysia for 2009. Descriptive statistics and the Ordinary Least Square method were used to analyse data obtained for the study. It was found that board independence did not affect firm performance, whilst board size and board accounting/financial expertise were positively associated with firm performance. Board diligence in terms of board meetings was also found to have an adverse effect on firm performance. The study focused only on board size and accounting expertise out of the ten independent variables used in this present study. The research took place in Malaysia in 2009; several changes could render their results weak in today's business environment.

Implementing Enterprise Risk Management on listed companies' firm performance in Malaysia was examined using a quantitative method such as the questionnaires to obtain data. The eight components of COSO (2004) frameworks were used as the independent variables, and the financial and non-financial

indicators were used to measure performance as done in this study. Their results revealed that the implementation of ERM has a significant influence on firm performance. The study found that the board of directors' monitoring, firm size and firm complexity significantly impacted the relationship between implementation of risk management and performance (Ai Ping & Muthuveloo, 2015). Questionnaires methods used for the examination have many limitations: dishonest answers, subjectivity, researcher imposition etc. The study was also silent on the variables used for financial performance.

Another study was conducted to evaluate the relationship between enterprises risk management and the performance of consumer goods companies listed on the Nigerian Exchange Limited. The study focused only on twenty-five consumer goods companies listed on the Nigerian Exchange Limited, a scope smaller than this research. The study adopted an ex post facto research design, and data were obtained from annual reports and accounts of selected consumer goods companies. The collected data were analysed using descriptive statistics and generalised least square analytical methods. The results revealed that the Risk Management Committee, Financial Experts, Audit Committee, and Board size have a significant positive effect on firms' performance. The existence of a Chief Risk Officer, on the other hand, has no significant impact on performance (Salaudeen et al., 2018). Although the study took place in Nigeria, it suffers from the shortcomings of using questionnaires.

The relationship between risk management and the corporate performance of Twenty (20) organisations registered with the Corporate Affairs Commission (CAC) in Jalingo, Taraba State, Nigeria, was evaluated in a study. The independent variables used were the existence of a risk management committee, financial expertise, an audit committee's existence, the existence of a Chief risk officer, and board size. The data of the study were obtained from annual reports and financial statements of the selected enterprises. The collated data were analysed using descriptive statistics and a correlation matrix. The results revealed that risk management committee, financial expertise, audit committee, and board size have a significant positive effect on performance. The work also showed that a chief risk officer's existence has a significant negative impact on performance (Nyameh et al., 2019). The study captured 50% of the risk management variables used in this study.

Kajola et al. (2017) examined the relationship between board size and financial performance using the ROA of 35 non-financial firms listed on the Nigerian Exchange Limited, sampled from 183 non-financial firms listed between 2003 and 2014. Secondary data were obtained from the audited reports and accounts of the selected firms and the Nigerian Exchange Limited FactBooks for 2003-2014. Using panel data regression analysis and fixed effects model as an estimation technique, the result of the study showed a positive and significant relationship between board size and the ROA financial performance of the firms. The outcome of the study is consistent with some previous studies, but the scope was narrow. The Directors alone cannot manage the entity's risk; hence, the board's size is inadequate to measure risk management.

Hope & Ikueze (2018) investigated the effect of audit committee characteristics on the performance of selected non-financial firms quoted in the Nigerian Exchange Limited. ROA measured firms' performance while audit committee characteristics were proxied by audit committee independence, size, meeting, and qualifications. The study was predicated on ex post facto and cross-sectional research design and used secondary data obtained from 50 sampled listed firms. The data was sourced from the annual report and accounts of the various non-financial companies from 2007 to 2016. The data collected were analysed using descriptive statistics, Pearson correlation analysis and Ordinary Least Square regression. The result revealed a significant positive relationship between audit committee independence, audit committee meeting and firm performance. Simultaneously, a significant positive association was also recorded for audit committee size and return on assets. However, audit committee qualification was found not to significantly affect the return on assets of non-financial firms in Nigeria. The findings show that 76% of non-financial firms' performance could be attributed to the audit committee characteristics. However, the observed gap in their study was investigating only one of the ten identified risk management practices; hence, the need for more elaborate risk management variables and their influence on firm performance is a significant focus of this present study.

A study was also conducted to examine the relationship between board characteristics and performance of listed Nigerian consumer goods firms by Olabisi et al. (2018). It involved ten of the twenty-seven firms in the industry as of 2017,

using a simple random sampling technique. Secondary data of seven years (2011-2017) were obtained from the sampled firms' annual reports and financial statements. ROA was the only dependent variable used, while independence, the board size, board composition and board diligence were independent variables. Descriptive and inferential statistics were used to analyse the data. The study results showed significant relationships between board independence, board diligence and performance of consumer goods firms. However, there was an insignificant relationship between board size, board composition and performance of consumer goods firms. The scope of the study covering only one out of the ten sectors in the non-financial listed sectors was narrow. Also, risk management should involve all the stakeholders and not only the directors as covered by the study.

Akpan (2015) in his study examined the relationship between the frequency of board meetings and company performance using a sample from 79 non-financial companies listed on the Nigerian Exchange Limited from 2010 to 2012. Data were collected from secondary sources. The study adopted a cross-sectional research design and quantitative approach method. Return on Equity (ROE) measured the company's performance. Simultaneously, independent variables, corporate meetings and control variables were assessed through the total number of meetings held by directors and audit committee meeting, the board size, proportion of women directors (gender diversity), board age and director's equity. Descriptive statistics and multiple regression analysis were used for the study. The result showed that the board meetings, directors' equity and board size were negatively significant to the company performance. Audit committee meetings were found to be positively significant, while gender diversity and board age were not significant to the company performance measured with ROE. However, the variables used are not adequate, and the study covered a short period.

In a similar study, Adegbola et al. (2019) examined the relationship between ERM and the performance of selected manufacturing firms listed on the Nigerian Exchange Limited. The descriptive research design was adopted in the study using secondary data from the selected manufacturing firms' annual reports. The study revealed that the practice of ERM is positively and significantly related to a firm's performance which includes the level of return on equity (ROE) of the firms. The study also revealed that the liquidity level represented by the current ratio (CR) is positively

and significantly related to the level of return on equity (ROE). Leverage level, such as debt to total equity ratio of a firm, was negatively and significantly related to the return on equity. The study focused on the selected manufacturing as against the entire non-financial sectors on the Nigeria Exchange Limited, and it measured firm performance with ROE alone. However, it has been revealed that ROE is not a perfect indicator of a company's performance; it is not a reliable indicator of efficiency when used alone. Hence, this present study used ROE and other performance variables.

The abilities of the 12 sample companies to preserve and create value in the face of myriad uncertainties were analysed in a study by Li (2018) in China. The study focused mainly on financial indicators collected from annual reports and online disclosures of the companies. Risk Committee and Audit Committee were considered in the study as frameworks or parameters for ERM. Financial performance was measured through revenue, net income, liquidity, indebtedness, Return on Equity and share price. Horizontal analysis, vertical analysis, ratio analysis, and factor analysis were conducted. It was found that ERM is associated with superior performance in value preservation and creation. The study didn't identify causal relations between ERM practices, performance and firm characteristics. It covered only two years of 12 companies in China; hence there is a need to replicate this study involving more risk management practices variables, using experimental research approach to establish a direct relationship between variables and taking a wide lag of ten years of data.

II. THEORETICAL REVIEW

The theoretical framework for the study is stakeholders theory. The theory focuses explicitly on the equilibrium of stakeholders interests as the primary reason for a firm existence. It is preferred due to its emphasises on the need to involve all the stakeholders and satisfy them through adequate financial and non-financial performance. In addition, the theory can increase firm profits and productivity by involving the firm's stakeholders in assessing and evaluating a firm's performance measurements and factors that could impact it. The theory holds that management or directors must understand and account for all the company's stakeholders. It states that a company's value grows when it values and recognises all its stakeholders as partners. Therefore, stakeholders theory provides new insight into the essence of sound risk management.

III. METHODOLOGY

The study adopts an ex post facto research design; the collected data were not manipulated. The pre-existing independent variables before the study were held constant and served as a control group for the stated hypotheses.

The population of the study consists of all the public companies outside the Nigerian Exchange Limited's financial services as of 31 December 2019. There are 114 such companies representing 69% of the total listed companies (166) in Nigeria. Therefore, this research targeted the whole population, covering all non-financial companies in Nigeria from various industries or sectors, with different natures, sizes and operations.

The researchers observed that all the non-financial companies were not in existence throughout the study's period. Therefore, only companies that existed and made a profit for at least six years from the ten years covered by the study, 1 January 2010 to 31 December 2019, were selected. 44 companies, or 39%, met the criteria and were selected for the necessary examination to achieve the study's objectives. It is noteworthy that all ten sectors were represented in the study.

Validation and Reliability of the Data

According to Olabode et al. (2019), obtaining data from multiple independent sources can assess data instruments and data's validity. Most of the data were gathered from companies' financial statements and annual reports. The researchers used a mixed-methods approach to validate the data. The methods include content validity and triangulation. The researchers focused on the addition, subtraction, and multiplication of the quantitative data used, especially for measuring the firms' performance. Using triangulation, the researcher examined the data obtained from different sources. The data obtained from the multiple sources were checked for consistency, completeness and accuracy to ensure reliable data usage. The researchers also noted that the financial statements were audited by qualified External Auditors, who expressed unqualified or clean reports on them.

Method of Data Collection

This study aims to answer the research questions and identify the extent of the relationship between risk management practices and the performance of non-financial listed companies in Nigeria. Secondary data were obtained from the financial statements of the companies and Nigerian Exchange Limited. The data covered a period of

ten years (2010-2019). Only companies with complete data for the period of ten years were included in the analysis; other non-financial ones were excluded due to a large amount of missing data to obtain more accurate data for the study.

Method of Data Analysis

Data collected from the secondary sources were subjected to an amendment to ensure that they are fit for analysis. The secondary information obtained were subjected to analysis using the descriptive statistics, which are the frequency and percentage, graphs, etc.; and the inferential statistics such as the multiple regression analysis, Analysis of Variance (ANOVA) and t-test analysis and decisions were made from the results at 0.05 level of significance. The descriptive statistics were deployed to analyse the study's research questions, which cuts across the level of existence of the dependent and independent variables of the study.

The inferential statistics were also deployed to investigate the relationship between the dependent and independent variables as revealed by the study's hypotheses. The study used a multiple regression model, Analysis of Variance (ANOVA) and t-test analysis to explain the relational influence of the selected risk management practices on the performance of firms. Decisions were made from the various inferential statistics at a 0.05 level of significance.

IV. RESULTS AND DISCUSSION OF FINDINGS

Analyses of Research Hypotheses

Testing of Hypothesis 1

H0¹ – Risk management practices do not exist in non-financial listed firms in Nigeria.

In this section, the researcher used ten independent variables to confirm the existence or otherwise of risk management practices in non-financial listed companies in Nigeria.

The use of descriptive statistics revealed the following from the sampled non-financial firms in Nigeria:

- The enterprise risk management was implemented by 98% of the sampled firms.
- Risk management committees existed in 77% of sampled firms.
- Only 16% appointed chief risk officers.
- 98% of the companies have a statutory audit committee.
- All the firms have more than two directors, which is the minimum number of directors during the period.
- Only 45% of the sampled firms appointed independent directors on their boards.
- Non-Executive directors are more than the executive ones on the board of the companies.
- Most of the sampled firms have more than three directors with financial expertise.
- 57% of the firms had adopted the whistleblower policy
- All non-financial firms in this study have an internal audit department.

Testing of Hypothesis 2

H0² – Risk management practices have no significant relationship with the performance of the non-financial firms listed on the Nigerian Exchange Limited.

The relationship between the risk management practices and firm performance was tested using inferential statistics (t-test analysis and regression analysis). The risk management variables were tested against each of the measures of performance. The results showed no significant relationship between risk management practices and firm performance ($p > 0.05$).

Testing of Hypothesis 3

H0³ – The performance of non-financial listed firms in Nigeria is not influenced by any risk management practices.

The influence of all risk management practices on firm performance was tested by combining all the variables (joint). Inferential statistics, regression analysis and ANOVA, were used to test whether any risk management practices can influence the performance of non-financial firms in Nigeria.

Table 1: Regression analysis for Return on Assets (relative Contribution)

Coefficients ^a		Unstandardised		Standardised	T	Sig.
Model		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	-25.745	18.146		-1.419	.171
	Board Size	1.726	1.062	.403	1.626	.120
	RMC	11.418	11.403	.326	1.001	.329
	Prop. N-Exe.	27.311	14.184	.374	1.925	.069

	CRO	7.262	10.073	.207	.721	.479
	Aud. Comm.	2.562	12.545	.039	.204	.840
	WBP	-8.122	5.084	-.331	-1.598	.126
	Ind. Dir.	.674	1.759	.085	.383	.706
	Fin. Expertise	-2.490	1.706	-.361	-1.459	.160
a.	Dependent Variable: Return on asset					
b.	R = .645 ^a					
c.	R Square = .416					
d.	Adjusted R Square = .182					

Source: Authors Calculation, 2020

The dependent variable in this regression model is the return on assets of the non-financial firms. The independent variables in the model are the risk management practices which are:

- ERM represents enterprise risk management
- RMC represents Risk Management Committee
- CRO represents the appointment of Chief Risk Officer
- Aud. Comm. represents the existence of the Audit Committee,
- Board size represents the size of board members in the firms
- Prop. N-Exe. represents the proportion of non-executive directors to the total Board members of the non-financial firms
- Ind. Dir. Represents the existence of an independent director,
- Fin. Exp. Represents financial expertise of the board,
- WBP represents the adoption of a whistleblower policy,
- Int. Aud. represents the existence of Internal Audit in non-financial firms.

The regression model removed the implementation of enterprise risk management (ERM) and internal audit existence in the non-financial firms (Int. Aud.) because they possess a high constant or have missing correlations in the available data used in the model. Hence, only eight of the variables of risk management practices were considered in the regression model analysis, shown in Table 1. Only board size, the proportion of non-executive directors, independent directors, and the number of financial expertise were captured as ratio variables and were directly used for regression analysis. However, others were captured in categorical variables. Hence, they were transformed into dummy variables to be able to be included in the regression model.

The regression result in Table 1 revealed that no variables of the risk management practices were found to be statistically significant ($p > 0.05$) to influence the return on assets of the non-financial firms.

Also, Table 2 shows a significant joint effect of the variables of risk management practices on the return on assets of the non-financial firm.

Table 2: ANOVA for Return on Assets (Joint Contribution)

ANOVA ^b		Sum	of Df	Mean Square	F	Sig.
Model		Squares				
1	Regression	1759.510	8	219.939	1.781	.141 ^a
	Residual	2470.492	20	123.525		
	Total	4230.002	28			

a. Predictors: (Constant), Fin. Exp, CRO, Aud. comm., Prop. N-Exe., Ind. Dir., WBP, Board size, RMC
 b. Dependent Variable: return on asset

Source: Authors Calculation, 2020

The ANOVA result in Table 2 reveals no significant joint effect of risk management practices variables on the return on assets of the non-financial firms used in this study ($p > 0.05$).

Therefore, it implies that the risk management practice variables in this study do not significantly influence the return on assets of the non-financial firms.

Table 3: Regression analysis for Return on Equity (relative Contribution)

Coefficients ^a						
Model		Unstandardised Coefficients		Standardised	T	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	-219.658	135.679		-1.619	.121
	Board Size	20.412	7.939	.636	2.571	.018
	RMC	63.287	85.260	.241	.742	.467
	Prop. N-Exe.	175.317	106.053	.320	1.653	.114
	CRO	33.258	75.313	.127	.442	.664
	Aud. Comm.	5.091	93.795	.010	.054	.957
	WBP	-60.793	38.011	-.330	-1.599	.125
	Ind. Dir.	-10.077	13.154	-.169	-.766	.453
	Fin. Expertise	-22.303	12.757	-.431	-1.748	.096
a.	Dependent Variable: Return on equity					
b.	R = .648 ^a					
c.	R Square = .420					
d.	Adjusted R Square = .188					

Source: Authors Calculation, 2020

The dependent variable in this regression model is the return on equity of the non-financial firms, which is a significant variable in firms' performance. This model's independent variables also include the risk management practices variables. The regression model for this hypothesis also removed enterprise risk management (ERM) and the existence of internal audits in the non-financial firms (Int. Aud.) because they possess a high constant or have missing correlations in the available data used in the model. Hence, only eight of the variables of risk management practices were

used in the regression model analysis, and results were presented in Table 3.

The result of Table 3 showed that only the board size of firms was statistically significant ($p < 0.05$); hence, it influences the return on equity among the non-financial firms. Also, a unit increase in the board size among firms would create a 64% impetus on the return on equity of non-financial firms.

Table 4 reveals the considerable joint effect of the risk management practices variables on return on equity among the non-financial firms.

Table 4: ANOVA for Return on Equity (Joint Contribution)

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	99902.754	8	12487.844	1.808	.135 ^a
	Residual	138111.621	20	6905.581		
	Total	238014.375	28			
a.	Predictors: (Constant), Fin. Exp, CRO, Aud. comm., Prop. N-Exe., Ind. Dir., WBP, Board size, RMC					
b.	Dependent Variable: Return on equity					

Source: Authors Calculation, 2020

The ANOVA result in Table 4 reveals no significant joint effect of the risk management practices variables on the return on equity of the non-financial firms used in this study ($p > 0.05$). This implies that the risk management practices variables used do not significantly influence the return on equity of the non-financial firms.

The regression analysis was also used to analyse the relationship and effect; hence, the result provided a relative and joint contribution of the

selected risk management practices variables on the Tobin's Q of non-financial firms. The adjusted R square was .11, which reveals that risk management practices variables accounted for 11% of all the crucial factors that could influence Tobin's Q of non-financial firms.

The regression model for the hypothesis showing the relationship and effect between risk

management practices and Tobin's Q is presented in Table 5.

Table 5: Regression analysis for Tobin's Q (relative Contribution)

Coefficients		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	2.823	5.033		.561	.581
	Board Size	-.312	.294	-.274	-1.059	.302
	RMC	-2.020	3.163	-.217	-.639	.530
	Prop. N-Exe.	-.212	3.934	-.011	-.054	.958
	CRO	-1.893	2.794	-.203	-.678	.506
	Aud. Comm.	2.914	3.479	.166	.838	.412
	WBP	-2.038	1.410	-.313	-1.446	.164
	Ind. Dir.	1.057	.488	.500	2.166	.043
	Fin. Expertise	.862	.473	.470	1.822	.083
a.	Dependent Variable: Tobin's Q					
b.	R = .604 ^a					
c.	R Square = .356					
d.	Adjusted R Square = .111					

Source: Authors Calculation, 2020

The dependent variable in this regression model is Tobin's Q of the non-financial firms. The independent variables in the model are risk management practices as provided in the research hypotheses. The regression model also removed enterprise risk management (ERM) and internal audit in the non-financial firms (Int. Aud.) because of a similar reason earlier given.

The result of Table 5 reveals that only independent directors on the boards of non-financial firms were statistically significant

($p < 0.05$). Hence, it influences Tobin's Q of the non-financial firms. A unit increase in the board size among firms would create a 50% impetus on Tobin's Q of non-financial firms. However, other variables of risk management practices do not significantly influence the Tobin's Q of the non-financial firms ($p > 0.05$).

Table 6 reveals the considerable joint effect of the risk management practices variables on Tobin's Q of the non-financial firms.

Table 6: ANOVA for Tobin's Q (Joint Contribution)

ANOVA ^b		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	109.123	8	13.640	1.436	.242 ^a
	Residual	190.040	20	9.502		
	Total	299.163	28			
a.	Predictors: (Constant), Fin. Exp, CRO, Aud. comm., Prop. N-Exe., Ind. Dir., WBP, Board size, RMC					
b.	Dependent Variable: Tobin's q					

Source: Authors Calculation, 2020

The ANOVA result in Table 6 reveals no significant joint effect of the risk management practices variables on the Tobin's Q of the non-financial firms used in this study ($p > 0.05$). This implies that the risk management practices variables used in this study do not significantly influence Tobin's Q of the non-financial firm.

- Only the board's size had a significant relationship with ROE.
- Only the independent directors had a significant relationship with Tobin's Q.

V. CONCLUSION

In summary, all the identified risk management practices do not significantly affect

The results of the tests showed that:

the performances of non-financial firms in Nigeria. This does not, however, undermine the significance attached to the risk management practices in organisational studies. The implementation of some risk management practices by the listed non-financial companies has not reached an appreciable maturity level in Nigeria. Implementation of all the risk management practices at the same time reveals that board size impacts on the ROE and independent directors have a positive relationship with the Tobin's Q of non-financial listed companies in Nigeria.

The debate on the effect of risk management practices has not been resolved. Therefore, the outcome of this study will add to the ongoing discussion on the impact of risk management practices on the companies' performance.

VI. RECOMMENDATIONS

The following recommendations are made to ensure that risk management practices positively impact non-financial companies' results in Nigeria:

- The board of directors should link the identified risk management practices to risk management if they were not considered when constituting the committees by reviewing their charters or in the duties of the officers.
- The risk management committee should be strengthened with qualified individuals and headed by an independent non-executive director. In addition, the number of independent directors in the committee should be more than other directors.
- Non-financial firms should review internal audits as a function in Nigeria; it should act as an independent reviewer to assure the management's capability and performance in risk management.
- Faithful implementation of enterprise risk management and other risk management practices will go a long way to influencing the various outputs or results of non-financial firms in Nigeria.
- Every stakeholder should be involved in risk management to fast track the growth of the non-financial firms in Nigeria.
- Non-financial companies are advised to be guided by the risk management practices in this study and move beyond mere compliance with the laws and guidelines.
- The non-financial companies should include the details of members of the relevant committees and officers considered in this study in their annual reports to ensure a better

assessment of their effectiveness by the stakeholders and researchers in the future.

- Companies should consider qualifications and experiences in appointing all officers and members of committees considered in risk management practices.
- The government must show more interest in the continued existence of non-financial companies. In addition, the regulatory bodies such as the SEC, CAC and FRCN should monitor compliance with the risk management frameworks and practices.
- The FRCN, Nigerian Exchange Limited, and Institute of Directors should organise more training to build more remarkable financial skills and risk management strategies for directors of companies.
- SEC should organise workshops for Shareholders Associations on risk management practices.

REFERENCES

- [1]. Adegbola, O., Tony, I., Adebajo, J., Babatunde, T., Awonusi, F., Eseosa, D., Ajayi, S., & Damilola, F. (2019). Enterprise Risk Management (ERM) and Firm's Performance: Study of Selected Manufacturing Firms on Nigerian Stock Exchange. *Journal of Education and Policy Review*, Vol. 11, No 2, 25-49.
- [2]. Ai Ping, T., & Muthuveloo, R. (2015). The Impact of Enterprise Risk Management on Firm Performance: Evidence from Malaysia. *Asian Social Science*; Vol. 11, No. 22, 149-159.
- [3]. Ai Ping, T., Lee, K., & Muthuveloo, R. (2017). The Impact of Enterprise Risk Management, Strategic Agility, and Quality of Internal Audit Function on Firm Performance. *International Review of Management and Marketing*, Vol. 7, No. 1, 222-229.
- [4]. Akpan, E. (2015). Corporate Board Meeting and Company Performance: Empirical Evidence from Nigeria quoted companies. *Global Journal of Commerce and Management Perspective*, Vol. 4, No. 1, 75 – 82.

- [5]. Anis, M., Chizema, A., Lui, X., & Fakhreldin, H. (2017). The Impact of Board Characteristics on Firms Financial Performance - Evidence from the Egyptian listed companies. *Global Journal of Human-Social Science: H Interdisciplinary*, Vol. 17, Issue 5, 56-76.
- [6]. Borlea, S., Achim, M., & Mare, C. (2017). Board characteristics and firm performances in emerging economies. Lessons from Romania. *Economic Research-Ekonomska Istraživanja*, 30, 55-75.
- [7]. Cavaco, S., Crifo, P., Reberioux, A., & Roudaut, G. (2017). Independent directors: Less informed but better selected than affiliated board members. *Journal of Corporate Finance*, 43, 106-121.
- [8]. Chen, L. (2019). A Review of Research on Whistle-Blowing. *American Journal of Industrial and Business Management*, 295-305. <http://www.scirp.org/journal/ajibm>.
- [9]. COSO (2017). Enterprise Risk Management—Enterprise Risk Management—Integrating with Strategy and Performance. Executive Summary, (2017), 1-16.
- [10]. Eruemegbe, G. (2015). Impact of Business Environment on Organization Performance in Nigeria, a Study of Union Bank of Nigeria. *European Scientific Journal*, 478-494.
- [11]. Fujianti, L. (2018). Top Management Characteristics and Company Performance: An Empirical Analysis on Public Companies Listed in the Indonesian Stock Exchange. *European Research Studies Journal XXI*, 62 – 76, https://www.ersj.eu/dmdocuments/05.FUJIA_NTI_XXI_2_18.pdf
- [12]. Hope, O., & Ikueze, E. (2018). Effect of Audit Committee Characteristics on Performance of Non-Financial Firms: Evidence from recessed economy. *International Journal of Innovation and applied studies*, Vol.24, No.1, 289 -298.
- [13]. Hopkin, P (2014). *Fundamentals of Risk Management: Understanding, Evaluating and Implementing Effective Risk Management*. 3rd edition, United Kingdom: Kogan Page Limited.
- [14]. Ilaboya, O., & Obaretin, O. (2015). Board Characteristics and Firm Performance: Evidence from Nigerian Quoted Companies. *Academic Journal of Interdisciplinary Studies*, Vol. 4, No. 1, 283-290.
- [15]. ISO 31000 (2018). *A Risk Practitioners Guide to ISO 31000: 2018*. Institute of Risk Management. Retrieved on 12 November 2020, <https://www.iso.org/obp/ui/#iso:std:iso:31000:ed-2v:v1:en>
- [16]. Iwedi, M., Anderson, O., Barisua, P., & Zaagha, S. (2020). Enterprise risk management practice and shareholders value: evidence from selected quoted firms in Nigeria. *Green Finance*, Vol. 2, Issue 2, 197-211.
- [17]. Johl, S., Kaur, S., & Cooper, B. (2015). Board Characteristics and Firm Performance: Evidence from Malaysian Public Listed Firms. *Journal of Economics, Business and Management*, Vol. 3, No. 2, 239-243.
- [18]. Kajola, S., Adekunle, O., & Michael, A. (2017). The effect of Corporate Board Size on Financial Performance of Nigeria listed Firms. *Nigerian Journal of Management Science*, Vol.6, No.1., 204 – 212.
- [19]. Korent, D., Đunđek, I., & Čalopa, M. (2014). Corporate governance practices and firm performance measured by Croatian Corporate Governance Index (CCGI). *Economic Research-Ekonomska Istraživanja*, 27, 221-231.
- [20]. Li, L. (2018). A Study on Enterprise Risk Management and Business Performance. *Journal of Financial Risk Management*, 7, 123-138.
- [21]. Martín, J., & Herrero, B. (2018). Boards of directors: composition and effects on the performance of the firm. *Economic Research-Ekonomska Istraživanja*, Vol. 31, No. 1, 1015-1041.
- [22]. Minton, B., Taillard, J., & Williamson, R. (2014). Financial Expertise of the Board, Risk Taking, and Performance: Evidence from Bank Holding Companies. *Journal of Financial and Quantitative Analysis*, 49(02), 351-380.
- [23]. Mohammed, H., & Knapkova, A. (2016). The Impact of Total Risk Management on Company's Performance. *Procedia – Social and Behavioural Sciences* 220, 271 – 277. 19th International Conference Enterprise and Competitive Environment 2016, ECE 2016, 10-11 March 2016, Brno, Czech Republic.
- [24]. Nigerian Code of Corporate Governance (2018), 1-43.
- [25]. Nyameh, J., Sunday, D., & Timothy, V. (2019). Risk Management and Corporate Performance of Business Enterprises in

- Jalingo Local Government, Taraba State. *Journal of Economics and Business*, Vol.2, No.3, 975-982.
- [26]. Odusanya, I., Yinusa, O., & Ilo, B. (2018). Determinants of firm Profitability in Nigeria: Evidence from dynamic panel models. *Journal of Economics and Business*, Vol. 68, No. 1, 43-58. <https://www.econstor.eu/bitstream/10419/195210/1/1022203193.pdf>
- [27]. Olabisi, J., Kajola, S., Oladejo, D., Ojeaga, P., & Abass, T. (2018). Board Characteristics and Performance of Quoted Consumer Goods Firms: Evidence from Nigeria. *Journal of Economics and Business Research*, XXIV, No. 2, 7-26.
- [28]. Olabode, S., Olateju, O., & Bakare, A. (2019). An Assessment of The Reliability of Secondary Data in Management Science Research. *International Journal of Business and Management Review*, Vol.7, No.3, 27-43.
- [29]. Otekunrin, A., Eluyela, D., Nwanji, T., Faye, S., Howell, K. & Tolu-Bolaji, J. (2021). Enterprise Risk Management (ERM) and Firm's Performance: A Study of Listed Manufacturing Firms in Nigeria. *Research in World Economy* Vol. 12, No. 1, 31-42.
- [30]. Salaudeen, Y., Atoyebi, T., & Oyegbile, B. (2018). Enterprise Risk Management and Performance of Selected Listed Consumer Goods Companies in Nigeria. *Applied Finance and Accounting*, Vol. 4, No. 1, 112-121.
- [31]. Soyemi, K., Ogunleye, O., & Ashogbon, F. (2014). Risk Management Practices and Financial Performance: Evidence from the Nigerian Deposit Money Banks (DMBS). *International Journal of Managerial Studies and Research*, 2(5), 31-39, <https://www.arcjournals.org/ijmsr/volume-2-issue-5/5>
- [32]. Vaidya, P. (2019). Board Size and Firm Performance: A Study on BSE 100 Companies. *Journal of Management (JOM)*, 6 (3), 117-123, <https://ssrn.com/abstract=3525368>
- [33]. Zoghi, F. (2017). Risk Management Practices and SMEs: An empirical study on Turkish SMEs. *International Journal of Trade, Economics and Finance*, 8(2), 123-126, doi: 10.18178/ijtef.2017.8.2.550