Risk management practices and performance of non-financial firms in Nigeria

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Non-financial firms, risk management committee, return on assets and risk management committee size.

Abstract

***Purpose of the Research**: This study investigates the effect of risk management practices on the financial performance of quoted non-financial firms in Nigeria. The study analyses the effect of meeting, gender diversity, independence and size of risk management committee on return on assets.*

***Design/methodology**: A sample of quoted 40 non-financial firms on the Nigerian Stock Exchange (NGX) cutting across several subsectors and with audited annual reports from 2012 to 2022 was selected.*

***Results/findings**: The findings demonstrated a significant negative effect of risk management committee size on financial performance. Risk committee meeting, independence and gender diversity showed an insignificant positive effect on financial performance. Firm age has a significant positive effect on financial performance.*

***Practical implications and conclusions**: These findings provide the board with insights on maintaining an optimal size for the risk management committee to enhance decision making and oversight, ultimately improving financial performance. The study highlights the importance of regular committee meetings to effectively manage emerging risks in today's dynamic business climate. Also, it informs shareholders about the necessary level of independence for the risk management committee to significantly boost financial performance.*

Introduction

Risks related to corporate entities' operational and strategic operations have been blamed for recent business failures in Nigerian non-financial enterprises. To facilitate growth and advancement, organizations engage in risky investment opportunities. Moreover, there are inherent risks involved with regular policy evaluations and the formulation of new corporate strategies, crucial for maintaining competitiveness (Spedding & Rose, 2018). Controlling risks exposure has become crucial for business organizations considering the complexity of corporate companies (Boniface & Ibe, 2012). Increasing company value stands as a primary objective for non-financial organizations, closely tied to their organizational performance. The effectiveness with which the business uses its resources to produce profit and increase firm value is how this performance is evaluated (Amerta & Soenarno, 2022). Improved liquidity, profitability, return on equity, and other measures are indicators of financial success. It gives the company the non-financial and financial measures required for effective risk management and transparency. In a highly competitive worldwide market, every firm naturally aspires to sustain exceptional financial performance (Mohd, Ariffin & Kassim, 2011).

Corporate risk management is strongly tied to the board's supervisory responsibilities and is a subject of governance. The management team of a corporation oversees more than simply its day-to-day operations and business. Numerous topics included in this research have either remained important or have become more so after the epidemic. The terrain of risk governance that boards have to traverse is always changing. To identify which dangers should be accepted or minimized and which should be avoided, risk management necessitates evaluating the company's risk appetite (Shuaibu, Yusuf & Amarachi, 2022). Therefore, authorities continue to focus on projects that are intended to enhance performance through innovative ways to risk reduction to address the range of threats that firms confront (Nyagah, 2014). Risk management is being proactive, detecting possible dangers, as well as creating regulations and protocols to improve an entity's capacity to prevent or minimise the effects of risk-taking procedures (Jaber, 2020). Effective risk control should boost an organization's revenue and profitability,

improving its financial performance. The combination of successful company operations with risk management is necessary to promote long-term, sustainable growth.

Numerous studies in the current literature highlight the potential for risk management measures to improve financial results, as they have a significant impact on financial performance. Numerous empirical investigations have examined the connection between financial success in industrialised and emerging countries and risk management strategies. Zemzemaa and Kacem (2015) conducted research in North Africa (Morocco, Tunisia & Algeria); Hitimana et al. (2016) in Rwanda; Girangwa et al. (2020) in Kenya; Agyemang et al. (2020) in China; Atiso, Koranteng, and Boakye (2020) in Ghana; Ewool and Quartey (2021) in Jordan; Otanga (2021) in Kenya; and Amerta and Soenarno (2022) in Indonesia, Malaysia, and Thailand. However, not enough research has been done in this investigation to ascertain the impact of risk management techniques on the financial performance of publicly traded non-financial firms is crucial for sustaining the economic growth of any nation. Several studies have explored this issue within the Nigerian context, including research by Afolabi and James (2020), Ojubanire and Dawodu (2021), Ebenezer and Ahmad (2016), Olugbemiga et al. (2016), Olayinka et al. (2017), and Abubakar et al. (2018). These studies provide valuable insights into how effective risk management strategies contribute to the stability and growth of non-financial firms, which in turn supports broader economic development.

Reviews indicate that a substantial percentage of studies that looked at the connection among risk assessment strategies and results in terms of finances mostly focused on the banking industry and small and medium-sized businesses (SMEs), neglecting non-financial companies that are essential in the long run, sustainable economic development of any country. This leaves a vacuum, which needs to be filled. Based on the foregoing, this study aims to look at the connection among those who assess risk strategies the financial performance of non-financial companies listed in Nigeria is also examined in this study. The analysis focuses on the period from 2012 to 2022, with particular attention to several key indicators of risk management practices. These include the size of the risk committee (RCS), its independence (RCI), gender diversity (RCG), meeting frequency (RCM), and board risk management committee size (RCS). By investigating these factors, the study aims to deepen the understanding of how these risk management mechanisms influence the financial outcomes of non-financial companies in Nigeria.

Literature Review

Financial Performance

An organization's operations and strategy may be examined by looking at its financial performance. According to Kakanda (2017), performance refers to the method by which a business uses its limited resources to accomplish its objectives over both in the short and long durations. A product's performance corporation is critical to its survival and expansion. Firm performance plays a significant role in determining shareholder wealth because it is measured from the start of an accounting period to its conclusion (Mustapher & Othman, 2020). This evaluation highlights the business's potential for financial success while also boosting investor confidence in future returns (Indawati, 2021).

The ability of an organisation to meet stakeholder expectations and its own needs for growth and survival can be used to evaluate its performance (Abualoush et al., 2018). Organisational success is the outcome of economic activities and can originate from three different sources: financial results, the success of the product on the market, and shareholder returns. The monetary outcomes of a business, or its ability to turn a profit over a certain time frame, is the main emphasis of this study. One important performance metric for a company is profitability. Return on Equity (ROE), Profit after Tax (PAT), A few metrics used to gauge how well the management of the business is doing are Return on Investment (ROI) and Return on Assets (ROA). The financial performance of a business helps stakeholders, investors, and the overall economy. Successful firms have the loyalty of stakeholders and investors who appreciate their returns on investment (Selvam et al. 2016). The term "return on assets" (ROA) is used in the finance industry to evaluate how well management uses the resources of the company to boost profitability. It can also be thought of as the earning power that indicates how successful the company has been in using its resources to generate revenue (Apiti et al. 2017).

A company's financial performance throughout time may be used to estimate its long-term financial health. It makes it possible to compare many companies operating in the same industry at the same time (Wanjohi et al. 2017). According to Eastburn and Sharland (2017), financial success is a clear sign of management's prior ability to make risky decisions. using measures to evaluate a company's efficacy, such as the profitability ratio, solvency ratio, efficiency ratio, and others (Ahmed et al. 2018). A company's financial performance indicates how well it can generate income and manage its resources, which makes it a crucial predictor of long-term financial health.

Performance in terms of finances is evaluated using ratios like the profitability ratio, solvency ratio, and efficiency ratio. In this research, return on assessment (ROA) is used to examine financial success. This may be found by deducting net income a measure of short-term performance from total assets. It is regarded as the most effective utilization of resources and informs investors of the profits generated by capital assets.

Risk Management Practices

The focused efforts made by an organization to control and manage its risks are referred to as risk management. Adeusi et al. (2014) defined risk management as the practice of minimizing pure and speculative hazards stemming from organizational choices or operations. According to Emmanuel (2017), risk management is a strategy in which senior management, working under the board's leadership, assesses risk connected with corporate operations and establishes objectives for its control to accomplish a given aim. According to him, the degree of risk and general direction are defined by the board of directors. as well as oversees how it is performed. This sets risk management as a driving policy. To manage risk, the board may elect to organize a risk management committee to help with monitoring risk characteristics, evaluating risk appetite, and determining risk limits. Wamalwa and Mukanzi (2018) suggest that a risk management committee must contain particular elements in order to carry out its tasks successfully. They stress the committee's size, independence, diversity, and frequency of meetings.

When forming a committee to oversee risk controls and reduce misconduct within a corporation, it is essential to consider the composition of the committee (Nguyen, Hagendorff, & Eshraghi, 2015). According to Bédard, Chtourou, and Courteau (2014), larger committees bring more authority, expertise, and diverse perspectives on various challenges. Given the complexity and opacity of corporate operations, a larger committee helps ensure that risk monitoring mechanisms address structural factors that might hinder external shareholders from effectively overseeing the organization (De Andres & Vallelado, 2018). Regular meetings are a crucial feature of the risk committee's work. When critical challenges arise that require gathering essential information, management should convene the risk management committee to evaluate the likelihood of potential risks (Osayantin & Embele, 2019). Tao and Hutchinson (2012) explain that the purpose of these meetings is to ensure that when companies face business decisions involving significant risks, the committee can decide on strategies to mitigate such risks, benefiting all stakeholders involved.

The independence of a risk committee can be assessed by the number of members who are free from external pressures that could compromise their ability to effectively manage risks. The committee's ability to oversee risk management activities is largely shaped by its independence from the company's management. This is why having a significant proportion of non-executive board members is often regarded as an important factor in accurately evaluating the committee’s independence. Independent directors play a key role in monitoring and overseeing management's risk-related decisions. Non-executive directors are more worried about their reputation than executive directors, so it is logical that they would strive for greater governance. According to Uzun, Szewczky, and Varma (2018), organizations with more non-executive directors had reduced fraud charges and stronger corporate governance. However, diversity within the risk management committee refers to the mix of individuals who are devoted to the risk management task, which includes variances in gender, ethnicity, and other characteristics. De Andres and Vallelado debuted in 2018. Over the last two decades, debates have focussed on developing and supporting sound corporate governance, sufficient risk management methods, and a diverse board of directors (Plessis, Saenger, and Foster 2012). A person's personality impacts variety in leadership, intellectual processes, emotional responses, risk preferences, and

behaviors, which is more prevalent in a diversified risk management committee membership (Emmanuel 2017). More full control over the organization's risk management processes may be offered, as well as an incentive to handle new difficulties by raising the firm's knowledge of a greater variety of possible risks, such as reputational and regulatory concerns. The diversity effort for the risk management committee attempts to establish a varied array of personal traits and demographic features within the committee (Kakanda 2017).

Risk Management Committee Size and Financial Performance

One of the most important aspects of risk management is the size of the committee responsible. for a non-financial company in Nigeria. A broader risk management committee, according to Amerta and Soenarno (2022), offers more chances to include directors who possess the technical know-how and skill sets required for efficient risk management. The committee should have enough members to include new people who are adept at recognizing, evaluating, quantifying, and communicating risk (Jaber 2020). A business may maintain high decision-making standards in risk management operations and improve financial performance by reducing the probability of unfavorable future events with an appropriately sized committee.

Risk Management Committee Meeting and Financial Performance

To keep a careful eye on any potential risks arising from ordinary business activities, Regular meetings of the risk management committee are required. Meeting frequency ensures that any issues are regularly identified and fixed before they worsen by serving as a stand-in for the duration and scope of risk discussion sessions. These meetings facilitate the timely recognition, management, and settlement of events associated with financial risk, thereby preventing the worsening of issues. Frequent meetings allow the committee to promptly handle any potentially dangerous events before they negatively impact the organization's performance (Otanga, 2021).

Whether vertical or horizontal, the committee meetings offer a suitable channel for communication for risk assessment and mitigation. Throughout the discussion, a professional with expertise in risk coverage supervision identification, assessment, and management offers direction and guidance. According to Zemzem and Kacem (2015), having meetings more often promotes both faster gains in financial performance and quicker resolution of issues that pose risks.

Risk Management Committee Independence and Financial Performance

The independence of the risk management committee is often measured by the percentage of independent non-executive directors. Boards with a higher proportion of non-executive directors are better equipped to thoroughly assess potential risks. These boards also consider the establishment of a risk management committee as one of the most essential tools for overseeing risk management. According to Tao and Hutchinson (2012), a committee comprised of independent directors is well-positioned to monitor and control management’s risk-taking activities, ensuring that all strategies are implemented as intended. Osayantin and Embele (2019) note that independent directors contribute by performing comprehensive audits and providing complete transparency of both financial and non-financial information. Since independent directors are focused on maintaining their reputation and delivering high-quality oversight, they are particularly well-suited for ensuring transparency and monitoring (Murah, 2007). To enhance the effectiveness of the committee, the inclusion of non-executive directors is crucial. A well-structured risk management committee, with a higher proportion of independent board members, ensures strong governance, diligent execution of risk management duties, and the prevention of fraud—factors that ultimately improve the company’s financial performance (Mokni & Rachdi, 2012). Furthermore, since they are more worried about their job than executive directors are, non-executive directors often demand greater monitoring than executive directors. Less dangerous insider activities result from the independence of the risk committee members, which lowers losses-particularly during a financial crisis. Because of the committee's independence, it is possible to prevent any concerning or unwanted dangers. After independence is obtained, risk management responsibilities will be carried out more effectively.

Risk Management Committee Gender Diversity and Financial Performance

Ling and Hung (2010) asserted that a varied committee for risk management improves decision-making process because its members are more aware of the business's operations and concentrate more on risk monitoring and control. This aids the business in better aligning its strategy with its surroundings by fortifying the social compact including the stakeholders and the firm. Given this, it is suggested that a diversified risk management committee may help a firm build a reputation as a responsible citizen that respects and appreciates its community.

Having a diverse gender risk management committee might greatly enhance performance of the organization. People with different backgrounds in gender, population, cognitive psychology, culture, and education provide unique traits and attributes that enhance the effectiveness of risk monitoring (Pojasek, 2017). The diversity of directors' backgrounds, gender, and races offers a range of perspectives, which helps the risk committee make better judgments. This variety of viewpoints from different backgrounds contributes to a larger spectrum of beliefs required to fulfill the duty of risk management. Therefore, the committee's diversity may enhance the financial performance of Nigeria's non-financial services firms.

Theoretical Framework

This study is grounded in agency theory, which was introduced by Jensen and Meckling in 1976. Agency theory describes a legal arrangement where one or more principals appoint an agent to perform tasks on their behalf, granting the agent decision-making authority. This framework emphasizes the contractual relationship between shareholders (principals) and management (agents), who share managerial responsibilities (Isaac et al., 2021). The theory suggests that when both parties aim to maximize their own interests, there is a possibility that the agent may act opportunistically, potentially undermining the principal's objectives. A key concern of agency theory is the conflict that arises from the divergent interests of principals and agents, making it difficult to fully understand or control the actions of the agent (Eisenhardt, 1989).

Agency theory serves as a valuable tool for managing and maintaining control within an organization. It helps managers identify and monitor risks, as well as manage the organization's assets and liabilities. Smith and Stulz (1985) argue that risk management influences managerial behavior when it comes to risk-taking and risk-avoidance decisions. The theory also explains how power imbalances can create conflicts of interest between shareholders, management, and debt holders over the allocation of profits. As a result, the business may avoid excessive risk or pursue activities that increase net value (Amarachi et al., 2022).

Several studies such as those by Agyemang et al. (2020), Amneh (2018), Abubakar et al. (2019), Amerta et al. (2022), Mamari et al. (2022), and Amarachi et al. (2022) have explored the relationship between risk management and financial performance through the lens of agency theory, with an emphasis on risk reduction within organizations. The theory suggests that reducing information asymmetry and conflicts of interest can help maintain balance between principals and agents, thus enhancing risk management.

This theoretical framework is critical to the research because it examines the factors that influence whether management in non-financial firms adopts risk management practices. Agency theory provides insights into how managerial decisions impact risk management strategies. When conflicts of interest are minimized, management decisions are more likely to align with shareholder interests. Consequently, management is more inclined to pursue initiatives that increase shareholder wealth. Since these initiatives often involve a certain degree of risk, management is also more committed to implementing effective risk management practices.

Empirical Studies

Al-Mamari, Al-Ghassani, and Ahmed (2022) conducted a statistical analysis of the risk management practices and financial performance of deposit money institutions, utilizing partial least squares, structural equation modeling, and annual data from the Muscat Stock Exchange. Their study revealed a strong correlation between risk management and return on assets (ROA), although no such correlation

was found with return on equity. Similarly, Abu-Rummana et al. (2021) performed a quantitative study on the relationship between risk mitigation practices and the financial performance of Lebanese banks, concluding that there was a strong and positive relationship between the two.

Al-Nimar et al. (2021) examined how risk management influences business performance in Jordan, using a quantitative approach. By applying both descriptive and inferential statistics to data from 228 Jordanian companies, the study found that risk management strategies significantly impacted business efficiency. In Kenya, Girangwa, Rono, and Mose (2020) employed a descriptive cross-sectional survey to assess the connection between risk mitigation practices and the performance of state-owned enterprises. Both studies found that risk management techniques had notable and positive effects on organizational performance.

Afolabi and James (2018) investigated the performance of small and medium-sized enterprises (SMEs) in Osun State, Nigeria, surveying 330 SMEs by distributing questionnaires to managers and owners. The findings revealed a strong association between the success of SMEs and risk management, with risk-taking behaviors positively influencing risk management strategies. Similarly, Abubakar et al. (2018) explored the effect of risk mitigation committee characteristics on the financial stability of listed deposit money banks in Nigeria, finding that committee size had a small but positive impact on ROA, while committee independence had a significantly negative effect.

Olayinka et al. (2017) concluded that risk management practices improved the financial health of 40 Nigerian firms. Oluwagbemiga, Isaiah, and Esiemogie (2016) investigated the financial performance of 21 deposit money banks listed on the Nigerian Stock Exchange between 2005 and 2014, finding a positive correlation between risk management strategies and financial outcomes. In Rwanda, Hitimana, Kule, and Mbabazize (2016) examined the effects of risk management strategies on the financial performance of 40 banks, analyzing data from bank annual reports from 2011 to 2014 using descriptive research and secondary data collection methods. The Pearson correlation analysis indicated that risk management strategies could improve profitability, liquidity, return on equity, and return on assets, supporting the hypothesis that risk management practices significantly affect financial performance in both Nigeria and Rwanda.

Ebenezer and Omar (2016) explored how risk management practices influenced the financial stability of Nigerian banks through a survey and primary data collection. Their findings suggested that poor risk management practices adversely affected the organization's profitability, highlighting a direct link between risk management strategies and financial performance. Similarly, Zemzem and Kacem (2015) analyzed the relationship between governance, business performance, and risk management in lending institutions, focusing on a sample of 17 Tunisian banks between 2002 and 2011 using an Ordinary Least Squares model. Their research found that risk management practices, particularly the size of the risk committee, had a positive and significant impact on institutional performance.

Research Methodology

This study adopted an ex-post facto research approach, analyzing secondary data collected from the 2012–2022 annual reports of non-financial firms listed on the Nigerian Exchange Group (NGX). This design is appropriate as it relies on historical data, enabling an exploration of relationships between variables without direct manipulation of conditions.

The target population comprises 66 non-financial companies listed on the NGX as of December 31, 2022. The firms span multiple sectors, including consumer goods, oil and gas, healthcare, information technology, natural resources, services, construction, and industrial products.

The sample consists of 40 non-financial firms randomly selected to ensure every company had an equal chance of being included. This simple random sampling approach helps to minimize selection bias, ensuring that the sample is representative of the larger population.

To explore the relationship between financial performance and risk management practices in non-financial firms, this study adapted a model inspired by Adefala and Aderibigbe (2018). The general form of the model is:

Perf= f (RMP)

The functional form used in this study expands on this framework as follows:

$$Perf = f(RCMit, RCGit, RCIit, RCSit) \quad (1)$$

$$ROAit = \alpha + \beta1RCMit + \beta2RCGit + \beta3RCIit + \beta4RCSit + FAGit + \varepsilon it \quad (2)$$

where:

Perf = Financial performance proxied by Return on Assets (ROA)

RCM_{it} = Risk Management Committee Meetings

RCG_{it} = Risk Management Committee Gender Diversity

RCI_{it} = Risk Management Committee Independence

RCS_{it} = Risk Management Committee Size

FAGit = Firm Age (control variable)

$\beta_1 - \beta4$ = Coefficients for independent variables; ε_{it} is the error terms of firm i and time t is 2012-2022. As an A-priori expectation, $\beta1>0$, $\beta2>0$, $\beta3>0$, and $\beta4>0$ are expected. suggesting that effective risk management strategies positively impact financial performance.

The research was estimated and analysed using the panel-corrected standard error (PCSE) method. For each of the four objectives, Data were analyzed using the Panel-Corrected Standard Error (PCSE) method, which accounts for heteroskedasticity and potential cross-sectional correlations in the data. The Hausman specification test was conducted to decide between the fixed and random effects models. The fixed effects model was deemed more appropriate based on the results, indicating that variations within firms are more significant than those across firms. The operational definitions and measurements for the variables in the research are shown in Table 1.

Table 1. Measurements of Study Variables

S/N	VARIABLES	DESCRIPTION	MEASUREMENTS	SOURCES
1	Return on Assets	Measures how efficiently a company utilizes its assets to generate profits	$\frac{\text{Net Income}}{\text{Total Assets}} \times \frac{100}{1}$	
2	Risk Management Committee Meeting	Total number of committee meetings per year	Count of meetings	Alhassa and Mamuda (2020)
3	Risk Management Committee Gender Diversity	Proportion of female members on the committee	Number of women / Total committee members	Abdul (2016)
4	Risk Management Committee Independence	Proportion of non-executive directors	Number of independent directors / Total committee members	Abdul (2016)
5	Risk Management Committee Size	Total number of committee members	The total number of members of the risk management committee board	Abdul (2016)
6	Firm Age	Number of years since incorporation	The year of incorporation till year end of the study period	

Findings/Results

Descriptives Statistics

Table 2 presents the descriptive statistics for the key variables used in this study, including financial performance and risk management metrics. The statistics include the mean, standard deviation, coefficient of variation, and the minimum and maximum values, along with skewness and kurtosis to assess the data distribution.

The financial performance measure, Return on Assets (ROA), shows an average value of 4.8025%, with a standard deviation of 0.1185 and a coefficient of variation of 2.4%. This indicates that, on average,

non-financial firms generate a return of 4.8% on their assets. Across the selected firms, ROA varies between 4.28% and 5.06%.

The data distribution for ROA exhibits irregularities, as indicated by skewness and kurtosis, suggesting deviations from normality. Furthermore, the Risk Management Committee Meetings (RCM) variable reports a standard deviation of 1.7755 and a coefficient of variation of 1.03%. RCM frequencies range from 0 to 6 meetings per year, implying that some committees meet only once annually, while others convene as frequently as six times. On average, committees meet about twice a year, reflecting the diversity in governance practices among the firms analyzed. The data demonstrates a significant variation among firms and a univariate distribution, as shown by the kurtosis value of 1.7795 and the skewness value of 0.4275. The risk committee's (RCG) gender diversity score is 7.700, with a standard deviation of 12.962, and falls between 0% and 50%. As can be observed by looking at the variable's 1.3892 percent skewed data and 3.5772 kurtosis score, the data is not evenly distributed among the firms. These figures show that, on average, gender diversity in businesses ranges significantly by more than 100%. Companies that provide non-financial services must have a gender diversity ratio of at least 0% and no less than 50%.

The Risk Committee Independence (RCI) variable demonstrates considerable variation across firms, with a mean value of 40.2711, a standard deviation of 38.7744, and a coefficient of variation of 0.96. These statistics indicate significant differences in the level of independence among the committees. The data appear relatively normally distributed, with a skewness value of 0.1558 and a kurtosis value of 1.4087. The RCI values range from 0% to 100%, reflecting that while some firms have no independent members, others have fully independent risk committees. For Risk Committee Size (RCS), the average committee comprises 2.8136 members, with a standard deviation of 2.6891 and a coefficient of variation of 0.9557. These figures suggest notable differences in the size of risk committees. The RCS ranges from 0 to 10 members, meaning some firms may not have formal risk committees, while others have larger teams. The distribution is slightly skewed (skewness = 0.2868) and exhibits low kurtosis (1.7903), suggesting near-normality. The age of the firms shows a high degree of variability, with an average of 25.4113 years, a standard deviation of 13.7275, and a coefficient of variation of 54%. This high variation reflects the diverse lifespans of the firms analyzed. Firm age ranges from 12 to 57 years, indicating both relatively young and well-established companies. The distribution of firm age is positively skewed, consistent with many firms being relatively younger, but still aligned with a normal distribution.

ROA	RCM	RCG	RCI	RCS	FAG	OBS
	404	440	440	440	440	440
Mean	4.8025	1.713	7.700	40.2711	2.8136	25.4113
Standard Dev.	0.1185	1.775	12.96	38.7744	2.6891	13.7275
Coeff. Varia	0.0246	1.0361	1.6832	0.9628	0.9557	0.5402
Minimum	4.2881	0	0	0	0	12
Maximum	5.0675	6	50	100	10	57
Skewness	-2.0706	0.4275	1.3892	0.1558	0.2868	0.0478
Kurtosis	10.2168	1.7795	3.5772	1.4087	1.7903	1.8069

Table 2. Descriptive Statistics

The correlation coefficient illustrates the linear link between the dependent and explanatory factors. Table 2's 4.0 percent increase in returns on assets when committee size is raised indicates that larger risk committees are more effective. Returns on assets and risk committee gender (RCG) are positively correlated; more diversity boosts returns on assets by 8.95%. The analysis reveals that gender diversity within the risk management committee has a 0.4% influence on Return on Assets (ROA), indicating a relatively small but positive impact on financial performance. Additionally, risk committee independence (RCI) is positively correlated with ROA, suggesting that higher independence levels within committees are associated with improved asset returns. A notable positive relationship exists between risk committee size and asset performance, with a 12.45% correlation, implying that larger committees may contribute to better resource management and performance. Firm age is also positively associated with all other examined variables, reflecting the influence of organizational maturity on governance practices. Further, the variables representing the risk committee's size, meeting frequency, gender diversity, and

independence are positively correlated, with correlation coefficients ranging from 0.5509 to 0.7891. These moderately strong correlations indicate consistency in governance structures across firms. Since none of the correlations exceed 0.8, multicollinearity which could distort regression results is unlikely to pose a problem. This ensures that the variables can be reliably included in the same regression model without significant overlap.

OBS		ROA	RCM	RCG	RCI	RCS	FAG
ROA	440	1.0000					
RCM	440	0.0408	1.0000				
RCG	440	0.0895	0.5241*	1.0000			
RCI	440	0.0586	0.7891*	0.5509*	1.0000		
RCS	440	0.0042	0.7598*	0.4746*	0.7856*	1.0000	
FAG	440	0.1245*	0.0532	0.0719	0.0801	0.0409	1.0000

Table 3: Correlation Matrix

The Variance Inflation Factor (VIF) is used to assess potential multicollinearity among variables, determining whether the independent variables are sufficiently uncorrelated to produce reliable regression estimates. The results presented in Table 4 indicate that multicollinearity is not a significant concern. This conclusion is based on two criteria: all variables have tolerance levels and VIF values of less than or equal to 10, a threshold commonly used to indicate acceptable levels of correlation among predictors. Thus, the regression coefficients can reliably estimate the effect of each independent variable on the dependent variable. In addition, the Breusch-Pagan/Cook-Weisberg test for heteroscedasticity yielded a p-value of 0.0000, which is below the 0.05 threshold, indicating the presence of heteroscedasticity. This violates the assumption of constant variance in residuals, potentially biasing the regression results. The Wooldridge test for autocorrelation further revealed a statistically significant p-value of 0.0261, suggesting that autocorrelation exists within the panel data. This autocorrelation indicates that errors in one period are correlated with those in another, which could affect the reliability of standard errors and require adjustments to the regression model.

Shapiro -Wilk Test		
Null Hypothesis	**Statistics**	**Probability**
Distribution of the residuals is normal (P>0.05)	5.553	0.00000
Tolerance and VIF Value		
Null Hypothesis	**VIF**	**1/VIF**
There is no multicollinearity among the variables (1/VIF >0.10)	-	2.42
Breusch-Pagan / Cook-Weisberg test for Heteroscedasticity		
Null Hypothesis	**Statistics**	**Probability**
Constant variance across the variable's residuals (P>0.05)	30.41	0.0000
Wooldridge test for autocorrelation		
Null Hypothesis	**Statistics**	**Probability**
No first-order autocorrelation (P>0.05)	0.077	0.7826
Hausman Test		
Null Hypothesis	**Statistics**	**Probability**
Difference in coefficients not systematic (P≤0.05)	12.64	0.0270

Table 4. Summary of Post Estimation Test Results

The stability and reliability of panel regression models may be affected if the underlying variables are non-stationary at their levels. To assess the stationarity of variables, this study employs both the *Levin, Lin, and Chu t test** and the Harris-Tzavalis unit root test. The tests help determine whether the variables are integrated at the same order, which is crucial for accurate parameter estimation. The null hypothesis of the unit root test assumes that each panel contains a unit root (non-stationary), while the alternative hypothesis suggests that some panels are stationary. According to the results in Table 5, all variables are

found to be stationary at level. Given that the data are stationary at level, co-integration testing is not required to identify long-term relationships between the variables. The absence of non-stationary variables makes it feasible to use a panel least squares (PLS) method, which can yield unbiased and efficient parameter estimates under these conditions.

Variable	Levin, Lin & Chu t*		Harris-Tzavalis unit-root test	
	test-statistics	P-value	Z- Statistics	P-value
Returns on assets	-4.8787	0.0000	-15.6896	0.0000
Risk committee size	-3.7675	0.0001	-4.3835	0.0000
Risk committee independence	-26.4880	0.0000	-5.5602	0.0000
Risk committee gender diversity	-9.5023	0.0000	-2.1632	0.0153
Risk committee meetings	-15.4551	0.0000	-4.7839	0.0000
Firm Age	-4.2570	0.0000	-18.6953	0.0000

Table 5: Panel Unit Root Test

To address the research objectives, the Hausman specification test was employed to determine whether a fixed or random effects model better explains the variation in the data. The test yielded a p-value of 0.0270, which is below the 0.05 significance threshold, indicating that the fixed effects model is more appropriate for this study. As a result, the fixed effects model provides the Best Linear Unbiased Estimator (BLUE) for the analysis, ensuring reliable parameter estimation.

Table 5 presents the regression results, evaluating the impact of key risk management metrics-Risk Committee Size (RCS), Risk Committee Independence (RCI), Risk Committee Gender Diversity (RCG), and Risk Committee Meetings (RCM) on the financial performance of non-financial firms listed on the Nigerian Exchange Group (NGX). The Breusch-Pagan/Cook-Weisberg test confirmed the presence of heteroskedasticity, while the Wooldridge test for autocorrelation produced a p-value of 0.0261, indicating first-order autocorrelation within the panel data. To address these issues, Panel-Corrected Standard Errors (PCSE) were employed, which correct for heteroskedasticity and autocorrelation across panels, leading to more robust and reliable estimates.

In linear panel models estimated using ordinary least squares (OLS) or Prais-Winsten regression, PCSEs are effective because they adjust for heteroskedasticity and contemporaneous correlations across panels. As shown in Table 5, the independent variables account for 45.25% of the variance in financial performance, as reflected by the R-squared value of 0.4525. The remaining variance is captured by the error term, suggesting that factors outside the model also influence financial performance. Despite some unexplained variability, the overall model is statistically significant with a p-value of 0.0000 at the 5% significance level.

The results reveal that Risk Committee Size (RCS) negatively correlates with Return on Assets (ROA), with a coefficient of -0.0068 and p-value of 0.0240. This suggests that smaller committees may struggle to monitor risks effectively or develop robust risk management strategies. Additionally, the age of the firm used as a control variable has a positive and significant influence on financial performance, as older firms tend to benefit from greater market experience and more established governance practices. With experienced management teams and seasoned employees, older firms are better equipped to mitigate risks.

Although RCM, RCI, and RCG exhibit positive relationships with ROA, their effects are not statistically significant, likely reflecting the limited gender diversity and independence currently observed in these committees. These findings underscore the importance of improving committee composition to enhance risk management effectiveness.

The findings align with Elamer and Benyazid (2018), who reported that the size, independence, and frequency of meetings in UK risk committees negatively impacted the financial performance of financial institutions. Similarly, Tao and Hutchinson (2013) found a positive relationship between risk committees and performance in Australian financial institutions, highlighting how committee structures help monitor and manage high-risk activities. In contrast, Chou and Buchdadi (2017) concluded that meeting attendance significantly enhances accounting-based profitability in banks. These divergent results may stem from differences in geographical context, industry focus, and governance frameworks across the studies.

Panel-corrected					
ROA	Coef.	Std. Err.	Z		P>|z|
RCG	0.0004	0.0003	1.10	0.272	
RCM	0.0042	0.0049	0.85		0.395
RCI	0.0003	0.0002	1.61	0.108	
RCS	-0.0068	0.0030	-2.25	0.024	
FAG	0.0007	0.0002	3.39	0.001	
CONS	4.7828	0.0106	448.81	0.000	
Number of Obs =	440				
Number of groups =	44				
R-squared =	0.4525				
Wald chi2 (5) =	32.66	Prob > chi2 =	0.0000		

Table 6: Panel Corrected Standard Error

Discussions and conclusions

This study highlights the significant role that the size of the risk management committee plays in influencing a company's financial performance. A larger committee size is particularly crucial in enhancing the oversight and management of risks, which directly impacts corporate success. The age of the company also emerged as a critical factor affecting profitability. These findings align with previous research suggesting that an imbalance in board composition and insufficient governance practices can negatively influence company performance, particularly in fast-evolving business environments.

The study underscores the need for effective risk management strategies, emphasizing their importance in improving financial performance of listed non-financial sectors. To enhance performance, it is recommended that non-financial companies, especially publicly listed ones, consider expanding their risk management committees. Increasing both the number of committee members and the minimum committee size could improve decision-making and oversight. Additionally, holding more frequent committee meetings could help better anticipate and manage emerging risks in today's dynamic business climate.

Originality and practical implications

The findings of this study provide the board with insights on maintaining an optimal size for the risk management committee to enhance decision making and oversight, ultimately improving financial performance. The study highlights the importance of regular committee meetings to effectively manage emerging risks in today's dynamics business climate. Also, it informs shareholders about the necessary level of independence for the risk management committee to significantly boost financial performance.

Limitations and direction for future research

This study investigates the effect of risk management practices on the financial performance of quoted non-financial firms in Nigeria. The study analyses the effect of meeting, gender diversity, independence and size of risk management committee on the financial performance of quoted non-financial firms in Nigeria.

Future studies might explore alternative financial performance metrics, such as earnings per share, return on equity, and Tobin's Q, to provide a more comprehensive view of the relationship between risk management and financial performance. Further studies across various industries and regions could deepen our understanding of the intersection between risk management, corporate governance, and financial performance. Also, future research should focus on the financial services sector, particularly within banking and insurance industries, which are heavily reliant on effective risk management practices.

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