

Analysis of Enterprise Risk Diversity Committee and Firm Performance: A Mediating Role of Firm Size

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Abstract

This study examined how firm size mediates the effect of various enterprise risk management committee characteristics on the performance of deposit money banks in Nigeria for the period of eleven years (2012–2022). The sample covered ten (10) selected deposit money banks in Nigeria based on data availability. The pooled panel least squares model estimator was employed to analyze the data after checking for the data features and relationships among the interest variables using summary statistics and correlation analysis, respectively. The findings from the model regression estimates are that when firm size moderates enterprise risk management committee gender diversity and enterprise risk management committee expertise, the effect on the performance of deposit money banks in Nigeria is positive and statistically significant for enterprise risk management committee gender diversity, but for enterprise risk management committee expertise, the effect is positive but statistically non significant. Furthermore, the study notes that enterprise risk management committee expertise, and enterprise risk management committee gender and firm size significantly contribute to positive performance of deposit money banks in Nigeria. The study equally noted that firm size can effectively mediate the effects of enterprise risk management characteristics on the performance of deposit money banks. The study therefore, made recommendations in line with the study findings that deposit money bank enterprise in Nigeria can leverage on their size when considering gender diversity in constituting risk management committee, amongst other things.

Keywords: *Enterprise Risk Diversity Committee, Firm Performance, Firm Size*

1.0 INTRODUCTION

Businesses face a wide range of risks and potential hazards as a result of modern business practices. Companies used to manage their risk exposures in a traditional manner. This conventional method of risk management has depended on each business unit assessing and managing its own risk before reporting back to the CEO. Numerous businesses, including Enron, Acen, Amicable, Baico, Olympus, WorldCom, Satyam, Parmalat, Oceanic, and Intercontinental Bank, collapsed as a result of the 1997 Asian financial crisis and the 2008 global financial crisis, which exposed flaws in the conventional approach to organizational risk management (Ibrahim, Okika, Yunusa & Janada 2020). In addition, the forces of globalization, technological development, the speed of financial transactions, changes in commodities and currency markets, and intense competition have all contributed to the complexity of corporate risks throughout time.

These and other causes increased the need for managers of businesses to adopt a more comprehensive approach to risk management. Thus, enterprise risk management (ERM), a method that approaches risk management strategically from the viewpoint of the entire company or organization, was adopted. It is a top-down approach that seeks to recognize, evaluate, and get ready for possible losses, risks, hazards, and other potential negative outcomes that could impede an organization's goals and operations or result in losses. Instead of managing risks in silos or piecemeal fashion, enterprise risk management requires businesses to identify all of the risks they face and determine which risks to actively manage.

Businesses that use Enterprise Risk Management (ERM) usually have a specific enterprise risk management team called the Enterprise Risk Management Committee (ERMC) that controls the operations of the company since risk judgments made by top management may appear to be at odds with local assessments on the ground.

The company's worldwide operations risk management policies are primarily and solely the responsibility of ERMC, an independent board of directors committee that also supervises the organization's global risk management system's execution. Regarding the company's risk tolerance, risk control, and enforcement procedures, the committee assists the board of directors in fulfilling its regulatory responsibilities. The quantity and kind of risk that a business can and is willing to accept in its market activities and risks, in spite of its stakeholder obligations and corporate priorities, is known as its risk tolerance. In their study on the relationship between risk committees and bank performance in China and India, Bertinetti, Cavezzali, and Gardenal (2013) suggested the creation of an independent risk management committee to specifically regulate the enterprise's complex risk nature and establish the firm's risk appetite and limit.

As a result, practitioners and scholars are unsure if the ERM framework and ERMC established by Nigerian companies have contributed to the reduction of enterprise risks. Due to the dearth of research on the topic, it is unclear if the establishment of a distinct ERMC has contributed to reducing business risks, which would inevitably enhance the financial performance of such businesses.

Odubuasi, Ofor, and Ilechukwu (2022) examined the impact of enterprise risk management (ERM) and risk committees on the earning capacity of African banks; Ogiriki and Empere (2022) examined the relationship between risk committees and the corporate performance of quoted insurance firms in Nigeria; Ugwu, Ekwochi, and Ogbu (2021) examined the impact of corporate risk management committees on the performance of Nigerian firms; and Odubuasi, Obi, and Osuagwu (2021) examined the combined effect of risk management committees and ERM on the performance of Nigerian banks. A number of earlier studies in Nigeria were direct effect studies. Previous research has not examined a mediating influence study. Understanding the process by which an independent variable influences a dependent variable is the justification for adding a mediating variable. By determining the underlying process or mechanism that connects the independent and dependent variables, mediating variables aid in the explanation of the relationship between them. They shed light on how and why particular factors affect the desired result. In outcome studies, mediating variables are crucial because they produce useful data regarding interventions. They can aid in the development of successful therapies and expand the quantity of data gleaned from outcome studies. Consequently, firm size—the scale on which a business functions—is considered a suitable mediating variable.

Additionally, it becomes imperative to understand the characteristics of the risk committee, such as its size, gender diversity, composition, expertise, and meeting frequency, in order to accomplish the ERMC's goal of reducing risk exposure through the effective and efficient formulation and administration of the organization's risk policies.

Because of their high level of risk exposure and the important role they typically play in the economy, the Nigerian banking industry was chosen as the study's site. Because the financial sector acts as a financial mediator and an auxiliary in boosting economic growth, failure in this sector may spread to other areas of the economy (IMF, 2009). As a result, financial institutions are seen as the main economic actors in any country. In light of this, the study looked into how business size affected the enterprise risk management committee and the performance of DMBs that were listed on the Nigerian Exchange Group (NGX).

1.1 Objectives of the Study

The main objective of this study was to investigate the mediating effect of firm size on enterprise risk diversity committee and performance of listed Deposit Money Banks in Nigeria. The specific objectives are to ascertain:

1. The mediating effect of firm size on enterprise risk management committee gender and performance of Deposit Money Banks in Nigeria.
2. The mediating effect of firm size on enterprise risk management committee expertise and performance of Deposit Money Banks in Nigeria.

1.3 Research Hypotheses

The following null hypotheses were tested in the study:

1. **H₀**: Firm size does not significantly mediate the relationship between enterprise risk management committee gender and performance of Deposit Money Banks in Nigeria.

2. **Ho:**Firm size does not significantly mediate the relationship between enterprise risk management committee expertise and performance of Deposit Money Banks in Nigeria.

2.0 LITERATURE REVIEW

2.1.1 Enterprise Risk Management

One corporate method that has been utilized to handle risks comprehensively is enterprise risk management, or ERP. To manage these risks, businesses have devised their own techniques. The ability of the company to integrate its current resources in order to accomplish its objectives is the risk management plan. Because different organizations operate in different industries, which might result in varying risk exposure, the risk management solutions that one firm uses cannot be owned or developed in the same way by other firms. As a result, ERM, a company's internal resource, may effectively manage these risks and thereby improve business performance. According to Elahi (2013), a company's ability to control risk can be leveraged to give it a competitive edge.

Within a company, risk management has historically been disorganized and grouped. Corporate risk managers had been focusing on pure risks, and risk had been managed in silos. Operational or strategic risks are examples of additional hazards that ERM attempts to address. Therefore, the purpose of ERM is the coordinated management of all risks that a company faces, including those related to IT, supply chains, distribution systems, corporate governance, audits, and human resources (Zemzem & Kacem, 2014). The goal of ERM is to obtain a methodical understanding of the relationships and interdependencies across risks, in contrast to TRM's silo-based approach to risk management. Combining hazards into portfolios and then hedging the remaining risk is a key idea in ERM. This approach is more effective and maximizes value than handling each risk separately. By using portfolio theory concepts, ERM can increase the value of a company since, if there are natural hedges, the overall risk of the portfolio should be lower than the sum of the individual risks if the risks are not 100% connected (Udoka & Orok, 2017).

2.1 Enterprise risk management committee gender

The Enterprise Risk Management Committee Gender (ERMCG) study examines how the gender balance of the committee—both male and female—affects the organization's performance. Generally speaking, the majority of companies' boards of directors, including those of deposit money banks, are made up of men, with very few or no women. However, the majority of academics have viewed this as a shortcoming and have alternated between analyzing the potential impact of female executives or members of the Board on the success of companies. Utilizing the various qualities and abilities that both men and women possess that could be advantageous to the company is the process of gender diversity (Onatuyeh & Proso, 2019). Various nations have implemented a variety of measures, such as laws and quotas, to guarantee that more women hold senior management and board roles. For instance, the governments of a number of European nations have ordered European companies to create strategies aimed at boosting the proportion of female directors (Collier, 2008). Though the Vision 2020 national technical working committee on corporate governance highlighted greater female involvement in corporate governance matters without providing specifics, Nigeria does not have such regulations. Therefore, it is still not unexpected that a relatively small number of Nigerian women have attained corporate executive

positions in comparison to their male counterparts (Abiola, 2004). Women face many obstacles on their path to become top executives in different companies, from overcoming cultural barriers to managing work and family obligations.

2.2 Enterprise risk management committee expertise

The educational background of the directors who serve on the risk management committee is measured by the enterprise risk committee expertise. Directors with expertise in finance or accounting are better able to recognize risks in all of its forms. According to Kallama (2015), committee members' accounting proficiency will dictate their capacity to identify and control a company's risk for improved performance. Additionally, there is evidence in the literature that a risk management committee with knowledgeable directors will be more successful in risk monitoring and risk management due to their training and expertise (Yatim, 2009; Akhtaruddin & Haron, 2010; Ismail & Rahman, 2011). When it comes to risk identification, directors who possess this strong tool—knowledge of risk and its manifestations—cannot be compared to those who do not (Ugwu, Ekwochi & Ogbu, 2021). The only way to effectively supervise management's strategic choices and operations for better business performance is through the experience and knowledge of the directors. Board committees with a high level of financial competence enhance the quality of financial reporting, according to MdYusof (2010).

A previous study by Diome & Triki (2005) discovered a strong correlation between directors' capacity to manage a company's risk and their degree of financial understanding. Given this background, it is anticipated that having a director with experience in finance or accounting will enhance the company's success. Nonetheless, the percentage of directors who possess accounting or financial competence relative to the total number of directors is used to gauge the financial expertise of the directors. Given their educational background or experience, risk management committees with expert directors will be more equipped to monitor, assess, identify, detect, and manage the risk and risk policies of enterprises, according to Yatim (2009) and Kallamu (2018). According to Roberts, McNulty, and Stiles (2005), qualifying highlights the committee's operational efficacy and efficiency. According to Akhtanddin & Haron (2010), directors' knowledge might lessen information asymmetry. The degree of financial experience of the directors on the risk committee and their capacity to control the firm's risk were found to be significantly positively correlated by Diome & Triki (2003). According to MdYusof (2010), a higher percentage of directors with financial competence on the committee can improve the quality of financial reporting. When evaluating the efficacy of audit and risk management committees, Gendron & Bedard (2006) recommended that managers and external auditors primarily assess the experience of the committee members. On the other hand, Husaini & Saiful (2017) discovered a negligible and inverse relationship between audit/risk committee skills and the value of companies in the Indonesian market.

2.2 Theoretical Framework

Agency theory, legitimacy theory, and upper echelons theory are the theories that are relevant to this study project. However, the Upper Echelons Theory (UET), which was put forth by Hambrick and Mason in 1984, serves as the foundation for this investigation. According to the UET,

management background traits can predict organizational results, strategic decisions, and performance levels to some extent. Prior conceptions regarding the characteristics of executive management and potential behaviors exhibited by them form the fundamental basis of UET. Therefore, there may be a positive correlation between the organization's performance and competitive behavioral traits at the highest levels. The fundamental tenet of UET is that executives' personalities, values, experiences, and beliefs have a big impact on how they interpret the situations they encounter and, ultimately, how they make decisions.

Accordingly, top management members may influence top management decision-making and enhance company performance if they had a more diverse demographic. According to this hypothesis, team heterogeneity will have a positive correlation with profitability in turbulent environments, particularly discontinuous ones, whereas team homogeneity will have a positive correlation with profitability in stable environments. They maintained that the traits of senior management, such as their demographics, have an impact on the choices they make and, consequently, the course of action taken by the companies they oversee. This happens because demographic traits are linked to a variety of cognitive bases, attitudes, and perceptions that influence top management's decision-making.

However, Priem, Douglas, and Gregory (1999) have harshly criticized the UET, claiming that research based on top management teams (TMTs) and demographics is compromising construct validity, explanatory power, and prescription practicality. They claimed that the simplicity with which demographics may be measured contributed to their adoption, arguing that it is difficult to determine which component of a deep-level feature is being measured or which combination of demographics best captures a given deep-level attribute. That is, it is unclear what the demographics being examined repeat in research that are dependent on demographics. Secondly, the hypothesis was criticized since the demographics identified by empirical research are either less susceptible to manipulation by the CEO and practitioners or are not truly within their control. Finally, when compared to psychological research in terms of psychology's study objectives, UET was criticized on the grounds that studies based on demographics may be considered unsuccessful. Psychologists assert that UET needs to be able to characterize, explain, forecast, and regulate the phenomenon under study. They contended that while demographic-based research has been very successful in characterizing the connections between the traits of the top management team and the performance of the company, it has been less successful in explaining and controlling. In other words, rather than providing causal explanations of the mechanisms via which demography influences organizational outcomes, these demographic-based studies have been successful in producing causal descriptions and predictions.

Accordingly, Priem, Douglas, and Gregory (1999) suggested that research should focus on the factors that demographics are thought to be a proxy for rather than just the present interest in demography. They recommended that academics focus on the top management teams' judgment, psychographics, and power dynamics. These deep-level factors, like the ones listed above, are more significant empirically, though, and might not be measurable quantitatively.

The goal of the current study is to determine the causal effect of enterprise risk management committees on the financial performance of Nigerian firms, as opposed to their explanatory effect, after reviewing the UET theory and finding, following criticism, that the theory is perfect in predicting causal relationships or effects. As a result, we decided to base our investigation on the Upper Echelon Theory.

2.3 Empirical Review

Odubuasi, Ofor, and Ilechukwu (2022) conducted a comparative analysis of the impact of risk committees and enterprise risk management (ERM) on African banks' ability to generate profits. The study period, which ran from 2009 to 2018, was ten (10) years. The panel data methodology was used to analyze the data. The study discovered that, in comparison to the other two countries examined, Nigerian enterprises' earning potential is more impacted by the effectiveness of their risk committees and ERM. According to the report, South Africa has outperformed Nigeria in terms of producing returns for shareholders. Ghana has performed the worst, according to the study, since the same characteristics contributed the least to ROE. Therefore, the study came to the conclusion that risk committees and ERM are crucial to enhancing the profitability potential of certain African banks. Therefore, the report suggested that regulators in African nations should demand stringent adherence and guarantee that ERM standards are applied to all African banks.

Additionally, Ogiriki & Emperere (2022) looked at the corporate performance and risk committee of quoted insurance companies in Nigeria. The study's goals were to ascertain how risk committee size affected the corporate performance of quoted insurance companies in Nigeria, how risk committee meetings affected the corporate performance of quoted insurance companies in Nigeria, how risk committee independence affected the corporate performance of quoted insurance companies in Nigeria, and how risk committee diversity affected the corporate performance of quoted insurance companies in Nigeria. The ex-post facto design was advocated by the study. The information was taken from the financial reports of Nigerian insurance companies that were mentioned. Twenty-two (22) insurance companies listed on the Nigerian Stock Market between 2011 and 2020 make up the research population. Purposive random sampling was utilized in the study to choose fifteen (15) insurance companies. As a result, the study used ordinary least squares for the econometric analysis and descriptive statistics to measure the means and standard deviation. According to the study, RCM has a negative and non-statistically significant relationship with return on asset, but risk committee characteristics (RCI and RCS) have a positive and statistically significant relationship. The study comes to the conclusion that financial performance is significantly impacted by a risk committee's characteristics.

Furthermore, Temitope (2021) investigated how listed banks' financial performance at the Nigeria Stock Exchange (NSE) was impacted by their enterprise risk management strategy. The study used a longitudinal cross-sectional survey design. Data for 20 Nigerian listed banks was gathered between 2009 and 2018. Normality, autocorrelation, multicollinearity, linearity, homoscedasticity, stationarity, fixed, and random effects tests were performed on the obtained data. To determine the link between the independent and dependent variables, correlation analysis was performed. The association and significance between the study variables were determined using the Generalized

Least Squares (GLS) regression analysis model. According to the report, enterprise risk management and return on capital employed—a metric used to assess the financial performance of banks listed on the NSE—have a favorable link. Given that enterprise risk management techniques have a beneficial impact on listed banks' financial performance, the study concluded that listed banks must effectively manage their capital buffer.

Additionally, Ugwu, Ekwochi, and Ogbu (2021) investigated how corporate risk management committees affected Nigerian companies' performance. The study's population consisted of all 18 Nigerian banks that were listed on the Nigeria Stock Exchange. Five banks that have continuously operated banks, had the necessary amount of shareholder wealth as stated in the NDIC annual report from 2009 to 2019, and have been required to report risk management issues up to this point made up the sample banks. Content analysis, which involved systematic classification, coding, item identification, and subject interpretation of text data, served as the foundation for data gathering. Descriptive statistics, Pearson correlation, the Hausmann test (random and fixed effect), regression modeling, the variance inflation factor (VIF) to assess the multicollinearity of the independent variables, the heteroscedasticity test, and the Ramsey RESET test were the analytical methods used. The findings demonstrated that the ROE of the tested enterprises, particularly banks, is impacted by the corporate risk management committee. Out of the four explanatory variables applied in the study; Corporate Risk Committee Diligence (CRCD) and Corporate Risk Committee Composition (CRCC) were positively significant; while Corporate Risk Committee Expertise (CRCE) was positively insignificant and Corporate Risk Committee Size (CRCS) was insignificant on ROE. The study recommended that there is a need for firms, especially banks to establish risk management committee, considering CRCD and CRCC as they impact on financial performance.

Furthermore, the effect of enterprise risk management on firm value for companies listed on the Indonesia Stock Exchange was investigated by Utami, Sulastris, Adam, and Yuliani (2021). A sample of manufacturing firms listed between 2012 and 2020 on the Indonesia Stock Exchange were used in this study. The regression model was used to analyze the data collected from the companies' annual reports. The results showed a strong relationship between company value and enterprise risk management, suggesting that enterprise risk management plays a major role in boosting firm value.

Additionally, Abeyrathna & Lakshan (2021) used primary and secondary data pertaining to Sri Lankan insurance companies to experimentally verify if the implementation of ERM had an impact on firm performance. Using a stratified random selection technique, 230 executive level personnel from 26 insurance companies in Sri Lanka were chosen as the study's sample, and a structured questionnaire was used to gather primary data. ERM processes were evaluated using the COSO ERM framework's criteria, and firm performance was gauged using Return on Assets (ROA) and Tobin's Q as stand-ins. The data was analyzed using regression analysis, correlation analysis, and descriptive statistics. The correlation analysis's findings showed a substantial association between ROA and two independent variables: the control environment and information and

communication. At the same time, Tobin's Q is significantly correlated with two independent variables: information and communication and goal setting.

However, Odubuasi, Obi, and Osuagwu (2021) looked into how the risk management committee and ERM worked together to affect Nigerian banks' performance. The investigation was moderated by four specified objectives, and the hypotheses aligned with these objectives. The research design was ex post facto. Using a discretionary sample technique, nine banks were chosen, and secondary data was taken from the banks' 2010–2019 annual reports. The data was analyzed using panel data regression analysis, correlation analysis, and descriptive statistics. The findings indicated that risk committee competence had a favorable impact, risk committee gender diversity had an inverse effect, and, lastly, the performance of Nigerian banks was positively and statistically significantly impacted by both ERM and risk committee features. Therefore, among other things, the report suggested that regulatory bodies draft laws that would reinforce and enforce ERM implementations in businesses.

However, Nurudeen, Enebi, and Kanwai (2020) looked at how risk management and board composition affected the financial performance of Nigerian listed insurance companies between 2012 and 2017. The research design used in the study was correlational. Based on data availability, 26 adjusted population members and 30 listed insurance companies in Nigeria made up the study's population. Paneled regression was used to examine the collected data. The results showed that the financial performance of listed insurance companies is negatively and significantly correlated with solvency risk and underwriting risk. According to the study's conclusions, insurance companies should provide a sufficiently diversified portfolio of insurance policies in order to improve premium earnings and be able to cover other losses when they happen.

Fali, Philomena, Ibrahim, and Amos (2020) also looked into the corporate performance and risk committee of quoted insurance companies in Nigeria. The ex-post facto design was advocated by the study. The information was taken from the financial reports of Nigerian insurance companies that were mentioned. Twenty-two (22) insurance companies listed on the Nigerian Stock Market between 2011 and 2020 make up the research population. Purposive random sampling was utilized in the study to choose fifteen (15) insurance companies. As a result, the study used ordinary least squares for the econometric analysis and descriptive statistics to measure the means and standard deviation. The study discovered that while RCM has a negative and non-statistically significant relationship with return on asset, risk committee features, risk management committee independence, and risk management committee size (RCI and RCS) had positive and statistically significant relationships with return on asset. The study comes to the conclusion that financial performance is significantly impacted by a risk committee's characteristics. Therefore, in order to improve effectiveness, the study suggested that insurance companies' risk committees shouldn't be overly large.

Additionally, Khalikand & Sum (2020) looked on how corporate governance affected the use of enterprise risk management (ERM) in Malaysian non-financial public listed companies (PLCs) in high-risk industries. Regression analysis was used to examine the data that was gathered between 2016 and 2017. According to the study, there is a considerable positive correlation between the

size of the BOD and the use of ERM. However, there is a substantial negative correlation between the industry and the implementation of ERM. Corporate governance has an impact on the application of ERM in Malaysian PLCs operating in high-risk industries. As a result, it was suggested that regulators stress the significance of board members' duties and responsibilities in risk oversight. In order to guarantee efficient risk management monitoring, a policy regarding the minimum and maximum number of board members must also be developed.

However, using data from a selection of non-financial companies listed on the Nigerian Stock Exchange, Iwedi, Oriakpono, Barisua, and Zaagha (2020) investigated how company hazards and risk management affect shareholders' value with an emphasis on reward systems for firm owners through dividends and other earning structures. Panel data for 48 non-financial companies listed on the Nigerian Stock Exchange between 2011 and 2018 was used in the study. The empirical investigation, which focused on the Random Effects estimation technique, was conducted using the panel data analytical framework. The findings demonstrated that, generally speaking, the impact of risk on shareholder value is contingent upon both the value under consideration and the risk pattern. Additionally, the study discovered that higher business risk reduces the firms' earnings per share as well as their dividend per share. However, it has been demonstrated that financial risks increase shareholder value, particularly value unrelated to dividend payments. Additionally, it was shown that the best way to increase shareholder value is through risk management based on institutional shareholding. The study suggested that enterprises in Nigeria should apply enterprise risk management not just to comply with regulations but also to pursue best practices and long-term viability.

Furthermore, the influence of enterprise risk management on the accounting quality of a subset of listed firms in the Nigerian financial industry was experimentally examined by Adebayo, Uwalomwa, Eriabie, Olubukola, and Omoike (2019). To ascertain the ERM disclosure index and its effect on accounting quality across a five-year pre-ERM era (2007–2011) and a subsequent five-year post-ERM period (2013–2017), the study employed content analysis. Enterprise risk management and accounting quality in the pre-ERM era did not significantly correlate, according to the study, which tested the hypotheses using the panel Generalized Method of Moments estimator.

Nonetheless, Byamungu, Irechukwu, and Ogoi (2019) investigated how corporate investment in a few Rwandan commercial banks was impacted by operational, market, compliance, and governance risk management strategies or practices. The research design used in the study was descriptive. The 95 managers from the finance, internal audit, risk compliance, and operations divisions were the study's target group. There were 77 responders in the sample. Survey forms (questionnaires), interviews, and reports from the targeted institutions were among the primary and secondary data used in the study. The study found that operational risk management improves the financial performance of financial institutions in Rwanda by using descriptive statistics like means, modes, standard deviation, variances, and inferential statistics. The study also discovered a relationship between the financial institutions' performance and both operational and market risk management. Given the bank's primary role in the financial system, the study advised managers to

regularly conduct a thorough evaluation of the bank's overall credit risk management framework and credit position to make sure they are providing an appropriate degree of resilience to credit stress.

Additionally, the impact of Enterprise Risk Management (ERM) on the performance of Small and Medium Enterprises (SMEs) was investigated by Sajiah, Hafizuddin-syah, and Nur (2019). Multiple regression analysis was used in the study to test the hypotheses that were developed. The analysis's findings showed that ERM significantly affects business performance. However, the performance of SMEs is significantly impacted by only one of the ERM components, namely objective determination.

Furthermore, Kakanda, Salim, and Chandren (2018) investigated how the market performance (market-to-book value ratio, or MTB) of Nigerian listed financial services companies was affected by the characteristics of the risk management committees (risk management committee size, composition, and meeting). From 2012 to 2016, information was collected from a sample of 45 financial service companies, including both banks and non-banks. The study's hypotheses were tested using the Panel Corrected Standard Errors (PCSEs) regression model. According to the regression analysis, risk management committee meetings and composition significantly improve company performance, while risk management committee size significantly but negatively affects firm performance.

Nonetheless, Abubakar, Ado, Mohamed, and Mustapha (2018) looked into how the financial performance of Nigerian listed banks was impacted by the characteristics of the risk management committee and the board's financial expertise. Board financial understanding, risk management committee independence, and committee size are the three independent variables that are examined in this study. 42 firm-year observations and secondary data from the 2014–2016 annual reports of fourteen (14) banks listed on the Nigerian stock exchange were utilized in the study. Regression estimates were based on random effect. The results of the panel data analysis show a significant negative correlation between ROA and board financial understanding and the independence of the risk management committee. In the meantime, ROA and the size of the risk management committee have a positive but negligible association. In addition to offering recommendations for additional investigation, the report Other corporate governance factors, including as risk management experience, ownership concentration, director compensation, management ownership, and board meetings, should be included in future studies, the report suggested.

3.0 METHODOLOGY

This study employed *ex-post facto* research design. This method was chosen because the study investigated what has been documented in the past by looking at the annual report of the selected financial institutions that cannot be manipulated. The *ex-post facto* research design was adopted on the basis that the researcher does not have control over the variables mainly because the event has already occurred and cannot be changed by the researcher. The sample size for this study consists of ten (10) banks based on data availability.

The study first employed descriptive statistics to compute statistics such as the mean, median, standard deviation, minimum, maximum values statistics. This was used to describe the nature of

data and also aid data visualization. Correlation analysis was used to examine the relationship among the variables. The study adopted a panel-pooled regression model to analyze the study data.

Definition of Variables/Proxies

VARIABLES	DEFINITION	SOURCE
Dependent Variables		
Return on Capital Employed (ROCE)	<u>Earnings before Interest and Tax (EBIT)</u> Capital Employed (Net Asset)	Fali,Philomena, Ibrahim & Amos (2020)
Independent Variables		
Enterprise Risk Management Committee Gender	Proportion of female directors to the total number of EMRC	Elamer & Benyazid, (2018), Malik, (2017)
Enterprise Risk Management Committee Expertise	Percentage of Directors in the committee with Accounting/Finance Knowledge/expertise	Ibrahim, Okika, Yunusa & Janada (2020)
Mediating Variables		
Firm Size	The natural log of total assets	Elamer & Benyazid, (2018),

3.8 Model Specification

The model adapted for this study was the model of Ibrahim, Okika, Yunusa & Janada (2020) stated as:

$$ROA_{it} = \beta_0 + \beta_1 RMCSZ_{it} + \beta_2 RMCINDP_{it} + \beta_3 RMCEXP_{it} + \beta_4 FSIZE_{it} + \beta_5 LEV_{it} + e_{it} \quad (1)$$

$$ROCE = ERMCG * FSize + ERMCE * FSize \dots \dots \dots (2)$$

Equation (2) can further be broken into composite equation and expressed in mathematical form with the initial variables included to ensure econometrics soundness, as:

$$ROCE_{it} = \beta_0 + \beta_1 ERMCG_{it} + \beta_2 ERMCE_{it} + \beta_3 ERMCG * FSize_{it} \quad (3a)$$

$$ROCE_{it} = \beta_0 + \beta_1 ERMCG_{it} + \beta_2 ERMCE_{it} + \beta_3 ERMCE * FSize_{it} \quad (3b)$$

Where:

ROCE = Return on Capital Employed

ERMCG = Enterprise Risk Management Committee Gender

ERMCE= Enterprise Risk Management Committee Expertise

FSize = Firm Size

ERMCG*FSize = Interaction of Enterprise Risk Management Committee Gender and Firm Size

ERMCE*FSize = Interaction of Enterprise Risk Management Committee Expertise and Firm Size

i = Firm Script (cross sectional)

t = Firm Script (time)
 β_0 = is the intercept
 $\beta_1 - \beta_5$ = are the parameters to be estimated in the equation.

The econometric form of the regression model is presented by introducing the error term, the model stated as follow:

$$ROCE_{it} = \beta_0 + \beta_1ERMCG_{it} + \beta_2ERMCE_{it} + \beta_3ERMCG * FSize_{it} + \varepsilon_{it}(4a)$$

$$ROCE_{it} = \beta_0 + \beta_1ERMCG_{it} + \beta_2ERMCE_{it} + \beta_3ERMCE * FSize_{it} + \varepsilon_{it}(4b)$$

Where ε is the error term used to capture other factors not included in the model of this study that could influence bank performance in Nigeria, every other thing still maintain nomenclature as previously defined in equation (3). Thus, equation (4a to 4e) will be estimated and used to test the proposed hypothesis.

4.0 DATA ANALYSIS

4.1: Summary Statistics

The summary statistics as presented in Table 4.1 reveals that a total of 110 observation was used for the study, which consisted of ten firms sampled over eleven periods. Accordingly, return on capital employed (ROCE), which is the measure of firm performance averaged at 0.0436364 and ranges between -0.25 and 0.22, has a standard deviation of 0.0568392, which is above the mean value. This clearly reveals that huge variation exists in performance across firms and periods. It is also clearly shown by the minimum and maximum performance that while some firms made significant returns on capital employed, others had losses (indicated by the negative minimum value), and this is possibly distributed across periods. Implying that the sampled firms made profitable return at different times and losses at other times, with the possibility that some firms may have had profitable returns throughout the sample period. Next is firm size, which averaged 2.771418 and ranged between 0.157 and 13.374, with a standard deviation of 2.803875 that is slightly above the mean value, indicating variations across firms and periods. Enterprise risk management committee expertise (ERMCE) averaged at 0.5109773 and ranged between 0.143 and 0.857; and enterprise risk management committee gender (ERMCG) averaged at 0.2161182 and ranged between 0 and 5. All in all, only firm performance (ROCE) and firm size (FSIZE) showed that maximum variations existed across banks and periods. More importantly, the interacted variables indicating how the firm sizes acted on the various enterprise risk management committees revealed that in all cases, the standard deviation is higher than the mean values, indicating that huge variations exist across the firms and periods.

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROCE	110	.0436364	.0568392	-.25	.22

ERMCG	110	.2161182	.1480618	0	.5
ERMCE	110	.5109773	.1603662	.143	.857
FSIZE	110	2.771418	2.803875	.157	13.374
ERMCG*FSIZE	110	.5346305	.712698	0	3.223
ERMCE*FSIZE	110	1.500522	1.645558	.044902	8.0244

SOURCE: authors output (2024)

4.2: Correlation Matrix

The correlation matrix in Table 4.2 shows the relationship amongst the study variables; however, the researcher's interest is in the relationship between the regressors and the performance (ROCE) of deposit money banks in Nigeria. The correlation matrix reveals that enterprise risk management committee gender (ERMCG) has a weak positive correlation with bank performance (0.1124); enterprise risk management committee expertise (ERMCE) has a weak positive correlation with bank performance (0.2702) while firm size (FSIZE) has a moderate positive correlation with bank performance in Nigeria (0.3915).

Table 4.2: Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) ROCE	1.00					
	00					
(2) ERMCG	0.11	1.00				
	24	00				
(3) ERMCE	0.27	0.16	1.00			
	02	94	00			
(4) FSIZE	0.39	-	0.18	1.00		
	15	0.15	94	00		
		64				
(5)	0.47	0.44	0.25	0.70	1.00	
ERMCG*FSIZE	22	27	01	62	00	
(6)	0.42	0.20	0.35	0.96	0.73	1.00
ERMCE*FSIZE	77	28	84	77	89	00

Furthermore, the correlation between enterprise risk management committee characteristics and bank performance when firm size acts as a moderating variable is further highlighted in Table 4. 2. That enterprise risk management committee gender moderated by firm size (ERMCG*FSIZE) has a strong positive correlation with the performance of deposit money banks in Nigeria (0.4722) and enterprise risk management committee expertise moderated by firm size (ERMCE*FSIZE) has a moderate positive correlation with the performance of deposit money banks in Nigeria (0.4277)

4.3: Panel Pooled Regression Result
Table 4.3: Panel Pooled Regression Result

	(1)	(2)
	ROCE	ROCE
ERMCG	-0.053 (0.055)	0.054 (0.035)
ERMCE	0.067* (0.032)	0.046 (0.047)
FSIZE	-0.000 (0.004)	0.003 (0.010)
ERMCG*FSIZE	0.040** (0.016)	
ERMCE*FSIZE		0.009 (0.019)
_cons	0.005 (0.048)	-0.010 (0.050)
R^2	0.273	0.229
$F-prob$	0.000.	0.000

Standard errors in parentheses *SOURCE: authors output (2024)*
 * $p < 10\%$, ** $p < 5\%$, *** $p < 1\%$

The current study, in testing the proposed hypothesis on the moderating role of firm size on the impact relationship between the performance of deposit money banks and enterprise risk management committee variables, resorted to the use of pooled model estimators (Pooled OLS) for the panel dataset. To avoid issues of multi-collinearity, each research objective is presented as a model, giving rise to five different models with similar variables except for the moderated variable, which represents the objective of the study in each case. To begin with, model 1 for, ERMCG*FSIZE, which has an R^2 of 0.2731 and an F probability value of 0.0000; and model 2, ERMCE*FSIZE, which has an R^2 of 0.2289 with an F probability value of 0.0000. Having satisfied these important econometric criteria and shown an acceptable level of variance inflation factor (VIF) value on average, the study's hypothesis is then tested.

HYPOTHESES TESTING

H₀₁: Firm size does not significantly mediate the relationship between enterprise risk management committee gender and performance of Deposit Money Banks in Nigeria.

The result of model 4 shows that the mediation of firm size on the relationship between enterprise risk management committee gender and the performance of deposit money banks in Nigeria is positive and statistically significant at 5% (p -value = 0.013), with a coefficient of 0.0399524. This

is opposed to the initial effect of enterprise risk management committee gender(ERMCG) on the performance of the sampled deposit banks in Nigeria without moderation, which was negative and statistically insignificant at all levels. This outcome supports the rejection of the null hypothesis and the acceptance of its alternative that the mediation of firm size on the relationship between enterprise risk management committee gender and the performance of deposit money banks in Nigeria is statistically significant. This is in line with a priori, thus, a unit change in $ERMCG*FSIZE$ is capable of increasing bank performance by 0.0399524%, all things being equal. The implication of this finding is that when a banking enterprise maintains a risk management committee gender diversity without considering the firm size, the cost implications and other related factors would likely affect the performance of the banking enterprise negatively, unless the banking enterprise is big enough to undertake such a cost and absorb these inherent factors. This is valid, indicating that as the size of a banking enterprise increases, the bank can effectively benefit more from a risk management committee gender diversity. To wit, consideration should be given to the size of the bank when it intends to set up a risk management committee that incorporates the principle of gender diversity. Women are uniquely endowed just like men and possess unique wit to influencing a client in order to achieve. The position in the society give them access to certain place of truth because they are often regarded as weak leaving every around with little or no fear unlike men. Thus, this afford them the opportunity to gain information from relevance sources which could be useful in managing the risk aspect of the banking business. Similarly, the male have their area of strength which makes gender diversity advantageous in enterprise risk management committee.

Ho₂: Firm size does not significantly mediate the relationship between enterprise risk management committee expertise and performance of Deposit Money Banks in Nigeria.

The model 5 regression result in presented in table 4.3 reveals that the mediation of firm size on the relation between enterprise risk management committee expertise ($ERMCE*FSIZE$) and performance of deposit money banks in Nigeria is positive and statistically insignificant at all levels at indicated by the coefficient and probability values of 0.0093296 and 0.623. This is similar to the effect of enterprise risk management committee expertise (ERMCE) without any moderation is positive and insignificant. On the basis of this outcome, it is valid to accept the null hypothesis while the alternative that firm size exacts a statistically significant effect on the relationship between enterprise risk management committee expertise and the performance of deposit money banks in Nigeria is rejected. This connotes that for any one unit change in $ERMCE*FSIZE$ will leave performance of the sampled deposit money banks the same, all things being equal. This finding negates a priori leaving a question mark on the validity of expertise in risk management of the banking system. The outcome also suggests that the financial system during the study period may have not yet recovered from the 2009 global financial distress. This validated by the constant shaking experienced amongst deposit money banks in Nigeria which occasions periodic retrenchment of workers in the sector with many of the banks shutting down many of their branches to reduce the cost of operation as a survival mechanism.

Finally, it is observed across the various model estimates that ERMCE, ERMCG and FSIZE showed positive statistically significant effect on the performance of the sampled deposit money banks in Nigeria, indicating that they encourage the performance of banks in Nigeria at varied

level of significance. The findings for ERMCG in this study agreed with Mashonganyika (2015), Andersson & Wallgren (2018), Akpan & Amran (2014) and Lamidi et al (2022) that ERMCG has a positive effect on performance of deposit money banks, but refutes Onyali & Okerekeoti (2018). Similarly, the finding for ERMCE supports Husaini & Saiful, (2017) and Ugwu Ekwochi & Ogbu (2021) but disagreed with Akpan & Amran (2014).

Overall, firm size was shown to be the key factor responsible for the desirable performance of the deposit banks in Nigeria followed by enterprise risk management committee expertise. But the fact that the mediation of committee expertise by firm size yielded an insignificant effect on performance suggests that being a large banking enterprise does not necessarily guarantee that the involvement of experts in the risk management of the firm enhances better performance. Thus, there may be certain inherent strategy employed by the firms in relations to the market circumstances that yielded the positive performance. Moreover, many of the banks do allowed politics into their senior executive appointments which may occasion the appointment of none expertise while insinuating that they are experts. In such situation the members of the risk committee will be unable to deliver because they lack the expertise although they lobbied their ways into the position. There are certainly no known empirical works in existence to support the mediation role of firm size in this study.

5.0: Conclusion and Recommendation

In an effort to establish a strong risk management framework, the enterprise risk management committee was separated from the board audit committee to supervise the entity's risk management procedures. A number of studies have alternately looked into how the enterprise risk management committee affects a variety of industry performance measures. To further advance research in this area, this study investigated how firm size mediates the effect of various enterprise management committee characteristics on the performance of deposit money banks in Nigeria for a period of eleven years (2012–2022). The sample covered ten (10) selected deposit money banks in Nigeria, and it was based on data availability. The pooled panel least squares model estimator was employed to analyze the data after checking for the data features and relationships among the interest variables using summary statistics and correlation analysis, respectively. The findings from the model regression estimates are that when firm size moderates enterprise risk management committee gender diversity and enterprise risk management committee expertise, respectively, the effect on the performance of deposit money banks in Nigeria is positive; for enterprise risk management committee gender diversity, it is statistically significant but insignificant for enterprise risk management committee expertise. Furthermore, the study notes that enterprise risk management committee expertise, enterprise risk management committee gender, and firm size significantly contribute to the positive performance of deposit money banks in Nigeria. However, where this expectation is not met, the mediation of firm size was found to be reasonable in attaining the desired outcome. Based on the findings of the study, the following recommendations were made:

- i. That deposit banking enterprise in Nigeria can leverage on their size when considering gender diversity when constituting risk management committee. This implies that a small banking firm may not need to apply gender consideration when constituting risk

- management committee but rather it should consider expertise among other things. The reason is that the firm needs to grow in the midst of stiff competition. As such it needs a force to reckon on for its survival in the industry.
- ii. That deposit money banks can also leverage on size when constituting risk management committee but it is not necessary. What is necessarily indispensable is that the risk management committee should be made up of experts not minding the size. However, a young banking firm requires experts in its risk management committee for optimum performance.

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