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Enterprise Risk Management and Financial Performance: Evidence from Emerging Market

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Abstract

This study examines the impact of Enterprise Risk Management (ERM) on financial performance in the emerging market with special focus on the Nigerian financial sector. The study investigates 40 companies from the period 2012 to 2016 resulting into 200 firm observations. The method used to measure financial performance was Return on Assets (ROA) while Value at Risk (VaR) was used as a proxy for Enterprise Risk Management (ERM). The study used other control variables such as Leverage (LEV), Board Size (BSIZE), Firm Size (FSIZE), Institutional Ownership (INTOWN) and Risk Management Committee Size (RMC). The result of regression coefficient shows that VaR (0.216), BSIZE (0.218), FSIZE (0.021), INTOWN (0.001), and RMC (0.032) are statistically significant with the exception of LEV (-0.572) which shows an inverse relationship with financial performance. The empirical findings show that ERM is positively and significantly related to financial performance. The results support the hypothesis that ERM has a significant impact on the financial performance of listed firms in the Nigerian financial sector. We recommend that the regulatory authorities (Central Bank of Nigeria, Financial Reporting Council of Nigeria etc.) in charge of the financial sector should ensure that all firms in the sector adopt ERM as a matter of urgency and continue to ensure strict compliance with the ERM framework.

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Introduction

There has being a growing interest on the subject of risk management across the world due to the number of economic events. These economic events have shown in repeated global financial crises that have highlighted the need for risk management practices (Coskun, 2013). Managing risk is a fundamental concern in today's dynamic financial environment (Gordon, Loeb & Tseng, 2009). (Stanton, 2012) posits that risk management is a detailed process that entails identification of threats or disruptive elements, critically examining alternatives as to whether to eliminate or mitigate the identifiable threats. Enterprise Risk Management (ERM) helps organizations to understand a wide array of risk facing today's business environment. This understanding helps the organization to identify and critically examines risks that could affect business opportunities that may impact financial performance (Boris, 2012).

The whole essence of Enterprise Risk Management is for companies to adopt a holistic approach in managing all categories of the risks facing organization today (Koontz, O'Donnell & Dietrich, 2000). Proper management of risk is expected to increase firm's revenue and profitability which will invariably impact financial performance positively. Therefore, Enterprise Risk Management is linked to organizational performance which is expected to lead to sustainable growth in the long run. (Koontz et al., 2002) opine that in recent time ERM has become a global standard across the world in assessing organizational risks due to the failure of the traditional risk based approach. The traditional risk based approach has failed to produce the desired result in the face of financial uncertainty that most business firms encounter in the global market.

The financial crisis that engulfed the whole financial world in 2008 had a spill over effect on the Nigerian financial system. This necessitated the banks' regulatory authority (Central Bank of Nigeria) in Nigeria to develop holistic Enterprise Risk Management (ERM) governance in the Nigerian financial institutions. This was aimed at strengthening the financial system and adding value to financial performance in the financial institutions in Nigeria. The Central Bank of Nigeria in 2012 issued a corporate governance code for all financial institutions while a revised version was issued in 2015. The main objective of the code is to provide a guideline on risk management framework for all financial institutions in Nigeria. By this, all players in the financial sector (banks, insurance companies, and investment companies) were required to adopt ERM and put in place a strong risk management structure. The CBN governance code placed more emphasis on the function of risk management committee, the role of the board of directors as well as developing a holistic risk management framework.

Despite the growing literature on the subject of ERM in developed economies, there is a notable lack of literature in the emerging economies like Nigeria that have examined

the impact of ERM on financial performance in the Nigerian financial sector. Only a few studies (Owojori, Akintoye & Adidu, 2011; Kolapo, Ayeni & Oke, 2012, Ajibo, 2015; Fadun, 2013) have examined risk management research in Nigeria. None of these studies have examined the impact of ERM on financial performance in the Nigerian financial sector. Prior studies only examined ERM implementation and its challenges in the Nigerian banking industry; therefore, we are motivated to carry out this study by increasing its scope to the entire financial sector in Nigeria.

The objective of this study is to provide empirical evidence of the extent to which ERM framework has impacted financial performance in the financial sector in the context of developing countries like Nigeria. Hence the research question that emanates from the objective is 'To what extent does Enterprise Risk Management impacts financial performance in the Nigerian financial sector?' This study contributes to growing literature in the area of risk management research in the emerging economies like Nigeria. To this end, the research examines a combination of variables in the context of ERM and financial performance in the Nigeria financial sector.

The remaining part of this study is structured as follows: Section 2 provides an extant literature review on Enterprise Risk Management (ERM) and financial performance, and also the theoretical framework that underpins the study. Section 3 deals with the model specification and data collection method. Section 4 outlines the findings of the study, while Section 5 focuses on the conclusions and recommendations of the study.

Hypothesis Testing

H_0: *Enterprise Risk Management has no significant effect on the financial performance of listed firms in the Nigerian financial sector.*

H_1: *Enterprise Risk Management has a significant effect on the financial performance of listed firms in the Nigerian financial sector.*

Literature Review

Conceptual Framework

(Fadun, 2013) described ERM, not as a process of avoiding the element of risk but the management of risk associated with firms' operation thereby maximizing opportunities and minimizing threats. ERM is a set of processes that a business undertakes to eliminate or minimize all categories of risks in an integrated approach. (Eseosa, 2011) defined ERM as an aggregate process of how the management of a business organization deals with risks threats in the ordinary course of carrying out its business operation. (Casualty Actuarial Society (CAS), 2003) provided a list of risks that subsumes under ERM which include strategic, credit, financial, market, reputational, operational, compliance and hazard risk. Most times these risks have a significant impact on the effectiveness, profitability and financial performance of the business organization.

(Barton, Shenkir, & Walker, 2002) opine that the essence of ERM framework in the organization is to recognise the interrelationship among risks and how these risks are

treated across all business activities. The reason for ERM implementation is to maximize shareholders' value and strike a balance between corporate performance and risk management. This optimal balance would enable a firm to pursue its objectives and corporate strategy in the face of financial complexity. ERM according to (Tahir & Razali, 2011) is to aggregate and integrate all forms of risks by using risk based tools to minimize and mitigate those risks and communicate risk information for management to take informed decisions. Committee of Sponsoring Organization of the Tread way Commission (COSO) (2004) posits that ERM is an integrated process designed by a firm's board of directors to identify the potential threat that may affect financial performance. COSO (2004) believe that the board has an oversight function to manage risk within its risk appetite and provide reasonable assurance regarding risk management.

(Hau, Gau, & Feng, 2009) opine that implementation of ERM in the financial sector needs the following process to make it holistic and integrated. These include (i) establishment of enterprise risk management strategy (ii) linking the ERM strategy with identifiable threat (iii) identify specific risks facing financial institutions. (iv) a construct risk management infrastructure and form an enterprise risk management environment. Standard and Poor (2005) asserts that ERM practice takes place when a financial institution commits to risk management, identify all risks that pose a financial threat and commits a huge amount of time to mitigate those perceived risk and threat. Several authors (Hoyt & Liebenberg, 2006; Kleffner, Lee & McGannon, 2003; Manab, Hussin & Kassim, 2006) have argued that ERM has a quite similar meaning as Holistic Risk Management (HRM), Corporate Risk Management (CRM), Business Risk Management (BRM), Integrated Risk Management (IRM), Enterprise-Wide Risk Management (EWRM) and Strategic Risk Management (SRM).

Financial performance of companies is driven by the quality of resources allocated to tangible and intangible assets including ERM to create sustainable future for firms (Onafalujo & Eke, 2012). (Acharyya & Johnson, 2007) assert that the main purpose of measuring financial performance is to evaluate the progress made in achieving corporate strategies which can either be financial or non-financial. Performance is driven by past events of an organization, which has an impact on the current and future sustainability (Manab et al., 2006; Arena, Arnaboldi & Azzone, 2010). Enterprise Risk Management (ERM) framework helps the management of organizations to oversee risk exposure and develop risk management techniques to manage these risks (Beasley, Clune & Hermanson, 2005). The ERM framework is geared to achieve a firm's overall objective of performance and strategic vision. A strong risk management system boosts shareholders' value and prevents the destruction of shareholders wealth, thereby protecting the asset in order to create more sustainable performance (Stulz, 2003).

Empirical Review

(Gordon, Loeb, & Tseng, 2009) explored the relationship between ERM and firm performance using contingency approach. The study adopted Value at Risk (VAR) method to measure ERM with return on asset (ROA) used to measure firm performance. They argued that this relationship depends on five variables that influence the impact that ERM has on a firm's performance. These five variables are leverage, profitability, firm

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size, institutional ownership, and international diversification. The study found that there is a positive relationship between ERM and firm performance. These variables measure the effectiveness of a firm's ERM based on the ability to achieve its strategic objectives.

(Pagach & Warr, 2007) examined the effects of Enterprise Risk management on the firm performance of companies listed on Polish Stock Exchange for 5 year period (2000-2005). The study used Tobin's Q to measure firm performance while leverage, firm size, profitability were used as a proxy to control for ERM. Multiple regression and Pearson correlation were used in data analysis. The study found that ERM increases firm performance by 3.6%. Their studies also suggest that if an organization practices ERM, the performance of that firm would increase between 4% and 17% than a firm without ERM practice. Therefore, it is argued that ERM is one of the factors that add value to a firm's performance.

(Sharma, 2006) investigated the impact of risk management on the value of 20 listed firms in the manufacturing sector in India for the period of 4 years from 2001 to 2005. The study employed the method of pooled OLS regression. The study found that there is a strong positive relationship between enterprise risk management and firm value while other control variables such as firm size, institutional ownership, and firm age had a positive and strong significant relationship with firm value. The study recommended that board and management should develop a holistic risk management framework that is capable of minimizing risk threats and will go a long way to enhance profitability and create value for their companies.

(Kolapo et al., 2012) examined the impact of credit risk on the performance of commercial banks in Nigeria using a panel model approach for seven (7) year period (2005-2011). The study analyzed the credit risk exposure using value at risk (VaR) method while Return on Capital Employed (ROCE) and Return on Asset (ROA) was used as a proxy for performance. The study found a negative relationship between credit risk and banks performance. The result was due to non-adherence to risk management practice in the Nigerian banking sector. Consistent with this study, (Owojori et al., (2011) examined the challenges of risk management in the Nigerian banks during the post-consolidation period. The study provides an in-depth review of risk management practices in the Nigerian banks. The study found that lack of governance structure, low awareness of global risk issues and pursuance of aggressive profit at the expense of risk management framework were among the challenges faced by banks in Nigeria in a bid to implement strong risk management framework.

(Teoh, Lee, & Muthuveloo, 2017) examined the impact of ERM on the performance of Malaysian public listed firms. The study used survey research to carry out the study with a total of 137 respondents from the questionnaire distributed in the main market of Bursa Malaysia. The study used COSO (2004) framework to capture ERM implementation while financial and non-financial indicators were used as a proxy for firm performance. The study found that ERM implementation in Malaysia impacted firms' performance positively; however, there is still need for more oversight function from the regulatory authorities. Similarly, (Ugwuanyi & Imo, 2012) investigated the impact of ERM on the performance of brewery industry in Nigeria. The study used cross sectional

survey design as the methodology for the study. 375 respondents were selected in response to a questionnaire distributed. The study found that ERM has a positive and significant effect on the performance of brewery industry in Nigeria.

(Tahir & Razali, 2011) explored the relationship between ERM and value of Malaysian listed firms. The study sampled 528 firms in the year 2007 from OSIRIS database. Correlation matrix and panel regression analysis was used to analyze the data. The firm value was measured through Tobin's Q formula while size, leverage, majority ownership, international diversification, and profitability were used as control variables in the study. The study found a positive relationship between ERM and value but it is not significant. The finding suggests that firms with ERM implementation do not necessarily have a higher Tobin's Q value than firms without ERM.

(Mojtaba & Davoud, 2017) conducted a study on the influence of ERM on the performance of listed firms in Iran financial market. The study sampled 66 firms listed on Tehran Stock Exchange for the period of 2001-2015. The selection of the sampled firms was based on the implementation of Risk Assessment Unit (RAU) in those firms. The study used multivariate analysis and logit model to examine the difference between firms that adopted RAU and firms without RAU. Risk Assessment Unit was used as proxies for ERM while the firm's performance was measured using Return on Asset (ROA). The study found a negative relationship between ERM and performance for firms listed on Tehran Stock Exchange. ERM has not added any meaningful value to firm performance as recorded in the study.

(Li, Wu, Ojiako, Marshall, & Chipulu, 2014) examined the effect of ERM on the value of Insurance companies operating in China in the year 2014. The study sampled 135 insurance companies listed in Tokyo Stock Exchange. Regression analysis and Pearson correlation were used to analyze the data. The study found a positive and significant relationship between ERM and firm value using correlative matrix, but the result showed a negative relationship between ERM and firm value using regression analysis. The study recommends that risk managers should development a holistic risk management framework in order to capture all risk elements.

(Onafalujo & Eke, 2012) studied the influence of ERM on the competitive advantage of firms in the manufacturing sector in Nigeria. The study evaluated 15 firms operating in the manufacturing industry in the year 2011 using survey design method. Questionnaires administered to 350 respondents were used to source information about the competitive edge gained by use of ERM in firms in the manufacturing sector. Regression analysis and Pearson correlation were used to analyze the data. The study found that implementation of ERM would enhance the value creation process and the competitive advantage of firms in the manufacturing sector in Nigeria.

(Shima, Mohmood, Happy & Akbar, 2013) investigated the relationship between ERM and performance of listed firms on Malaysia Stock Exchange. The study examined 175 listed companies from the year 2008-2012. The study used multiple regressions to test the research hypothesis stated in the study. The study found a negative relationship between ERM and performance of listed firms in Malaysia. This result is consistent with the

finding of (Tahir & Razali, 2011) which found that firms with ERM implementation do not necessarily have a higher Tobin's Q value than firms without ERM framework.

Theoretical Framework

There are several theories used in the literature on risk management research; such as stewardship theory, agency theory, and rational choice theory. For the purpose of this study, agency theory serves as the theoretical foundation. Agency theory stresses the need for resolution of conflict of interest between the principal (shareholders) and the agents (managers) by enhancing monitoring mechanisms such as Enterprise Risk Management (ERM), corporate governance and effective internal control system (Nocco & Stulz, 2006; Jensen, 1993). This theory underscores the need for the firm to reach its goal of improving financial performance, thereby increasing shareholders value by implementing Enterprise Risk Management (ERM) practices. Agency theory serves as the interplay between the principal and the agent in ensuring that organization achieves its corporate objective.

Methods

This study is a longitudinal study because it involves repeated observation of the same subjects or variables (ERM and financial performance) over a 5-year period (2012-2016). The choice for the scope of this study was based on the fact that the Central Bank of Nigeria (CBN) mandated all firms in the Nigerian financial sector to adopt ERM in the year 2012, hence the need to carry out this study from the year of implementation (2012) to the year 2016. It combines both time series and cross sectional method because the study used Panel data. According to (Argyrous, 2005), panel data are dataset where multiple cases (individuals, companies, countries, etc.) were observed at two or more time periods. There are two kinds of information in cross-sectional time-series data: the cross-sectional information reflected in the differences between subjects (e.g. companies) and the time-series or within-subject information (e.g. years) reflected in the changes within subjects over time.

Due to the nature of the research, descriptive statistics, correlational design and regression analysis were used. Correlation and regression method that examines the extent and causal relationship between the independent variable (Enterprise Risk Management (ERM)) and the dependent variable (financial performance) was also adopted. The data were analysed through the use of SPSS statistical package. The total numbers of firms operating in the Nigeria financial sector were 67 firms and the firms were listed on the Nigerian Stock Exchange as the end of 2016 (NSE Factsheet, 2016); however, only 40 companies have effectively adopted ERM for the period under study. The data on the study variables were collected from the annual reports sourced from the company's website and African financials website for the periods of 2012 to 2016.

Variable Measurement

In this section, we provide the variables that were used in this study. The following measurements were employed in order to examine the impact of ERM on financial performance.

Dependent Variable (Financial Performance)

This study uses the Return on Assets (ROA) as a measure of financial performance. It is calculated as net profit divided by total asset employed.

Independent Variable (Enterprise Risk Management)

This study used Value at Risk (VaR) as a measure for Enterprise Risk Management. VaR measures the total risk element of an organization into a composite value. A lower VaR means that organization is able to control its risk appetite which invariably has a positive impact on financial performance while a higher VaR signifies a negative impact on financial performance. It is calculated as [Expected weighted return on the portfolio minus (z-score of the confidence interval * standard deviation of the portfolio)] multiplied by portfolio value. Mostly it is calculated yearly or monthly.

Control Variables

ERM alone may not produce an accurate measure that impact financial performance, therefore, the following control variables were used as intervening variables in measuring financial performance. They include leverage, board size, firm size, institutional/majority ownership and risk management committee size. The control variables are explained as follows:

Leverage: In this study, leverage is measured as total liability divided by market value of equity.

Board Size: The total number of directors (independent and non-independent) sitting on the board.

Firm Size: Firm Size is measured by the natural logarithm of total assets and other investment.

Institutional Ownership: It is measured as majority ownership (30 percent of largest shareholders).

Risk Management Committee Size: It is based on the number of directors that is directly involved in risk management committee.

Model Specification

There are quite a number of studies (Li et al., 2014; O'Connel & Cramer, 2009; Shima et al., 2013; Gordon et al., 2009) in developed economies on the relationship between

ERM and financial performance. To examine the association between ERM and financial performance, a fixed effect panel regression model was used to perform an analysis on the various parameters included in our model. Based on the variables and proposed relationship used in these previous studies, the following regression model has been proposed to the test the relationship between ERM and financial performance:

$$ROA_i = \beta_0 + \beta_1 VaR_i + \beta_2 LEV_i + \beta_3 BSIZE_i + \beta_4 FSIZE_i + \beta_5 INTOWN_i + \beta_6 RMC_i + \epsilon_i$$

Where:

ROA represents the dependent variable for the firm $_I$, proxy for financial performance

VaR_i = represents the independent variable for the firm $_I$, a proxy for Enterprise Risk Management. The expected sign for VAR is positive.

LEV_i = Leverage (Total Liability divided by market value of equity). The expected sign for LEV is positive.

$BSIZE_i$ = The total number of directors on the board. The expected sign for BSIZE is positive.

$FSIZE_i$ = Total Asset (in Log), Investment, Loan and other earning assets. The expected sign for FSIZE is positive.

$INTOWN_i$ = Institutional/Majority Ownership (Percentage of 30 largest shareholders). The expected sign for INTOWN is positive.

RMC_i = This represents the number of directors in risk management committee. The expected sign for RMC is positive.

Results and Discussion

This section presents the descriptive and inferential results obtained from the study and findings from the results are discussed on the basis of the literature.

Table 1: Descriptive Statistics

	N	Min	Max	Mean	Std. Dev.
ROA	200	0.0937	0.6421	0.3679	0.0869
VaR	200	0.0975	0.4678	0.2826	0.0829
LEV	200	0.2569	0.5971	0.4270	0.0443
BSIZE	200	0.2012	0.7697	0.4854	0.0053
FSIZE	200	0.1457	0.6912	0.4185	0.0753
INTOWN	200	0.3512	0.7196	0.5354	0.2112
RMC	200	0.1420	0.4578	0.2359	0.0142

Table 1 presents the descriptive statistics which show that there are 200 observations (5 years annual computation of 40 sampled companies). It contains the value of minimum, maximum, mean and standard deviations for all the variables. The minimum value for VaR is 9% while the maximum value stands at 47%. This signifies that VaR ranges from 9% to 47% for firms in the Nigerian financial sector. The number of directors involved in the Risk Management Committee (RMC) ranges from 14% to 46%. This shows that directors are well represented in RMC compared to a number of people in the committee. Furthermore, the result of INTOWN shows that 30% of largest shareholders control about 53% (mean value) of shares owned by firms in the Nigerian financial sector. The other control variables show the following mean value: LEV (0.4720), FSIZE (0.4185), and BSIZE (0.4854).

Table 2: Correlation matrix

	ROA	VAR	LEV	BSIZE	FSIZE	INTOWN	RMC
ROA	1						
VaR	0.199	1					
LEV	-0.186	0.360	1				
BSIZE	0.172	0.439	-0.556	1			
FSIZE	0.252	0.615	0.475	0.398	1		
INTOWN	0.318	0.565	0.467	0.558	0.763	1	
RMC	0.177	0.090	0.251	0.236	0.018	0.43	1

Table 2 provides a correlation matrix for the variables. It shows that VaR (0.199) reveals a positive relationship with financial performance. The same is observed for BSIZE (0.172), FSIZE (0.252), INTOWN (0.318) and RMC (0.177) whereas LEV (-0.186) shows a negative relationship with financial performance. The positive relationship between ROA and BSIZE signifies that a large size of board tends to have a significant impact on financial performance. Similarly, when directors are duly represented in the risk management committee, this has a positive impact on the value of VaR which invariably affects financial performance positively. The analysis provides evidence that implementation of ERM is positively correlated to financial performance; implying that strict adherence to ERM could enhance and boost firms' financial performance. It thus suggests that firms that are highly levered may not necessarily translate to firms with better financial performance under the ERM implementation regime.

Table 3 presents the result of regression analysis. We provide analysis of the Variance Inflation Factor (VIF); this enables us to test that the explanatory variables are not perfectly correlated together. The collinearity value ranges from 1.257 to 2.245; which signifies that the values are within the acceptable limit of 10. The VIF test reveals that the explanatory variables are not perfectly and strongly correlated; therefore, the issue of multicollinearity does not arise (Lind, Marchal & Wathen, 2010; Argyrous, 2005). In addition, it shows a Durbin-Watson test (which measures the presence of autocorrelation) d=1.755 which lie between the two critical values of 1.5 and 2.5 (i.e. $1.5<d<2.5$). The results of the hypothesis are discussed below.

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Table 3: Regression Analysis

Dependent Variable: ROA

Variables	Coefficient	Std. Error	t-statistic	Prob.	Collinearity
					(VIF)
Constant	1.201	0.054	20.176	0.0001	1.257
VaR	0.216	0.014	4.934	0.0001*	1.305
LEV	-0.572	0.006	0.121	0.2057	1.468
BSIZE	0.218	0.021	4.471	0.0001*	1.899
FSIZE	0.021	0.032	2.472	0.0004*	2.115
INTOWN	0.001	0.001	4.811	0.0001*	2.168
RMC	0.032	0.041	2.112	0.0005*	2.245
R-Squared	0.761			F-Statistic	64.271
Adj R-Squared	0.592				
Durbin-Watson Stat	1.755			Prob. (F-Statistics):	0.0001

Hypothesis Restatement and Discussion

H_0: Enterprise Risk Management has no significant effect on the financial performance of listed firms in the Nigerian financial sector.

H_1: Enterprise Risk Management has a significant effect on the financial performance of listed firms in the Nigerian financial sector.

The above analysis shows a positive and significant relationship between VaR and financial performance. The aggregate VaR stands at 21.6% which is relatively low; which is a good sign of ERM implementation for firms operating in the Nigerian financial sector. This result reveals that ERM framework in the Nigerian financial sector has an impact on the level of financial performance. This finding is consistent with this study of (Hoyt & Liebenberg, 2006, 2008) which shows that ERM implementation has a positive impact on the financial performance of US insurance companies.

The regression coefficient of LEV (-0.572) is negative and not significant at p-value (0.257) which is higher than 0.05. This result indicates that financial sector in Nigeria is highly leveraged with an aggregate value of 57.2%. It is a general proposition that any firm with leverage higher than 40% is highly leveraged. This finding is in contrast with the studies of (Sharma, 2008; Rayan, 2008) which believe that high leverage will increase

firm's performance. This study shows that high leveraged firm may not produce a high financial performance.

The result for BSIZE and FSIZE show that the size of the board and firm size have a positive and significant impact on financial performance. The regression coefficient for BSIZE (0.218) and FSIZE (0.021) is positive and significant (0.0001 and 0.0004) respectively, which is less than 5% level of significance. This supports the general proposition that the larger the firm the better the firm's performance and a well-represented board size signify a positive impact on financial performance of a firm.

The regression coefficient for INTOWN is positive and significant. It shows there is a direct relationship between institutional/majority ownership and financial performance. It means that pressure from institutional owners in Nigerian financial sector could be considered as an influential factor in increasing financial performance. This result supports previous studies of (Steiner, 1996; Chen et al., 2008). Similarly, the size of the risk management committee (RMC) has a significant impact on the financial performance. The result shows that involvement of directors in risk management committee of firms in the Nigerian financial sector helps to build strong ERM framework, thereby impacting positively on firm performance.

The overall adjusted R^2 of 59.2% explains that explanatory variables have an impact on the return on asset (ROA). This result supports the hypothesis that ERM has a significant effect on the financial performance of listed firms in the Nigerian financial sector. Therefore, the null hypothesis is rejected while the alternative hypothesis is accepted. This study, therefore, argues that effective ERM framework will likely improve the financial performance of the financial sector in an emerging economy like Nigeria.

Conclusion and Recommendation

The study examines the impact of Enterprise Risk Management on the financial performance of listed firms in the Nigerian financial sector for the period 2012 to 2016. The study used return on assets (ROA) as a proxy for financial performance while value at risk, leverage, board size, firm size, institutional ownership, and risk management committee size was used as explanatory variables in this study. The findings show that almost all the explanatory variables (VaR, BSIZE, FSIZE, INTOWN, and RMC) have a positive and significant effect on financial performance except LEV which has a negative relationship. This study reveals that Enterprise Risk Management has contributed significantly to financial performance in the Nigerian financial sector. This study concludes that Enterprise Risk Management (ERM) has a significant and positive impact on the financial performance of listed firms in the Nigerian financial sector.

The study recommends that the regulatory authorities (Central Bank of Nigeria, Financial Reporting Council of Nigeria) in charge of the financial sector should ensure that all firms in the financial sector adopt ERM implementation as a matter of urgency and continue to ensure strict compliance with the ERM framework. There is the need for managers in the financial institutions to pay adequate attention to the issue of risk management by avoiding and minimizing threats or risk that could hinder financial

performance. The implication of this finding is that adherence to ERM implementation in the Nigerian financial sector would improve the financial health of the sector which will prevent the financial failure that bedevilled the sector in recent time.

This study contributes to the literature in the area of finance and risk management research in the emerging economy. Our study advances understanding of how ERM affects financial performance in financial institutions. This finding is important for finance managers, risk professionals, and various capital market participants. Further studies could extend the scope of our research on the impact of ERM on financial performance to the non-financial sector.

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