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ENTERPRISE RISK MANAGEMENT AND FINANCIAL SUSTAINABILITY: EVIDENCE FROM NIGERIAN LISTED CONSUMER GOODS FIRMS

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ABSTRACT

Consumer goods firms in Nigeria play a major role in transforming the economy towards sustainable development through massive contribution to production and consumption patterns that meet consumers' satisfaction sustainably. Hence, this study examined the relationship between enterprise risk management and the financial sustainability of selected Nigerian listed consumer goods firms. The study adopted an ex-post facto research design and a judgmental sampling technique was used to select 10 consumer goods firms out of 24 listed as of 2018. Panel data were extracted from annual reports and accounts of the selected firms over 10 years (2009-2018). Ordinary Least Square (OLS) regression was the analytical tool adopted for the study. The study found a significant and positive relationship between financial risk management; leverage; operational risk management and return on assets. However, there was an insignificant relationship between audit committee; firms' size, and return on assets. The study concluded that listed consumer goods firms should incorporate operational risk management and financial risk management strategies into business operations. Besides, financial leverage and audit committee contributed to financial sustainability with closer attention to the firms' size. The study suggested that consumer goods firms should monitor risk management policies and practices to improve the firms' sustainability.

Keywords: Enterprise risk management; financial risk management; Operational risk management; Leverage; Return on asset, Sustainability

INTRODUCTION

Risk management is the systematic identification of threats and the evaluation of appropriate strategies for minimizing threats for the sustainability of business (Stanton, 2012). Every firm is confronted with situations that threaten the existence; survival and sustainability of the business. Risk is the most important factor that influences the full attainment of the goal of every enterprise (Liu, 2012). Risk is anything that hinders an organization from achieving the set objectives (Woods, 2007). In today's business environment, firms are faced with a variety of risks which may be a hazard, financial, operational, or strategic. Risk is a primary threat that may turn to opportunity if well managed. Gordon, Loeb, and Tseng (2009) submitted that risk management is essential for sustainable development in today's global dynamic environment. Businesses must recognize and deal with risks to turn threats into potential opportunities and sustainable development (Reuvid, 2012).

Dickinson, (2001) describes risk management as a set of the decision-making process in an organization between the late 1940s and early 1950s. However, this is limited in scope to pure loss exposures. In the past, insurance companies used to manage asset and liability with other related insurable risks. Recently, organizations observe and manage risks as an elementary aspect of an organization instead of a traditional risk management method that is based on a silo approach (Lai, Azizan, & Samad, 2011). Gordon *et al.*, (2009) concluded that enterprise risk management is a total approach adopted by organizations to manage risk for sustainable development.

Antonius (2015) posits that financial sustainability is the ability of a company to manage scarce resources to achieve organizational objectives. Financial sustainability may be financial or non-financial. Common ratios usually used to measure financial sustainability among others include; liquidity ratio, profitability ratio, solvency ratio, efficiency ratio, and leverage ratio. Every business activity is expected to be profitable and possesses an appropriate measurement of financial sustainability (Horne & Wachowicz, 2001). However, this study adopted Returns on Asset (ROA) as a surrogate for the financial sustainability of the selected Nigerian listed consumer goods firms, considering its appropriateness to the industrial operations.

Enterprise risk management is of great concern due to colossal losses frequently sustained by corporations across the globe (Emmy & Gladys 2018; Teoh & Rajendran 2015; Dickinson,

2001). Operational risk management is one of the important elements of enterprise risk management that affects the operations of organizations (Kittipat & Nopadol, 2014). Financial risk management is the ability of an organization to meet its short and long-term financial obligations (Shima, Mahoom, Happy & Akbar, 2013). Arif (2011) asserts that the audit committee's traditional responsibility is to oversee financial reporting risks. Emmy and Gladys (2018) affirmed that proper accountability is required as a firm's debt increases if the debt conditions are stringent; a firm's enterprise risk management disclosures are required. Committee of Sponsoring Organization (COSO), (2004) submitted that firm size is one of the characteristics that affect enterprise risk management.

A great deal of research to date has considered the involvement of consumer goods firms in the context of sustainable development, as well as results related to the implementation of enterprise risk management on the performance of consumer goods firms. Various studies such as Adegboyega, Olabisi, Kajola, and Asaolu, (2019); Kimotho (2015) have found analyses on the positive and negative influence of enterprises risk management on sustainable development brought about by the performance of consumer goods firms but there is a gap in the existing literature regarding the importance of enterprise risk management on financial sustainability. The paper reviews the extant literature on the subject and presents the results of empirical research relating to the concept of enterprise risk management and the financial sustainability of consumer goods firms in Nigeria.

Hence, the study examined the relationship between enterprises' risk management and financial sustainability of consumer goods firms in Nigeria. To achieve the main objective of the study the following specific objectives are to:

- assess the relationship between operational risk management and financial sustainability of Nigerian listed consumer goods firms;
- ii. determine the effect of financial risk management on the financial sustainability of
 Nigerian listed consumer goods firms;
- iii. investigate the influence of financial leverage on the financial sustainability of Nigerian listed consumer goods firms;
- examine the relationship between audit committee size and financial sustainability
 of Nigerian listed consumer goods firms; and
- v. evaluate the effect of firm size on the financial sustainability of Nigerian listed consumer goods firms.

The preceding parts dealt with conceptual and empirical review while section three describes research methods employed. Section four discussed the results and findings of the study. The last section concluded the study and made suggestions.

LITERATURE REVIEW

Conceptual Review

The pursuit of financial sustainability has influenced risk management thinking and this has motivated consumer goods firms to incorporate the concept of sustainable development into business operations such as operational risk management, financial risk management, and financial leverage. Businesses operating in consumer goods firms are facing growing business risk and threats such as competitive, turbulent, and rapidly changing environment. It is noteworthy that consumer goods firms in Nigeria are unable to survive growing international competition without good enterprise risk management practices. Sustainable development has given an impetus to sustainable enterprise risk management and maintains a sustainable competitive advantage by incorporating sustainable development into operations.

Dickinson (2001), the risk is the enterprise level of outcomes of a corporate strategy of a firm that is different from the corporate objective. The risk may affect business operations within different categories such as hazard risk, financial risk, strategic risk, and operational risk. Risk management is a continuous process of formulating and implementing decisions that minimize exposure to risk and uncertainty that may harm the business sustainability (Martin, 2013). In another word, risk management is a systematic process of identifying significant risks and obtaining a consistent and understandable operational risk measure to select the risk that minimizes losses or maximize the opportunity for business sustenance (D'Arcy, 2001).

COSO (2004) describes enterprise risk management as the identification of potential risks that threaten the entity's sustainability and devising a strategy to manage such within its risk appetite, which provides reasonable confidence to achieve the entity's objectives. ERM emphasizes an inclusive view and seeks to solve all the problems that might adversely impact the organization's sustainability.

In recent times, due to the incessant global financial crisis and corporate failures, shareholders are demanding thorough oversight functions to ensure business sustainability and growth (Afolabi, Olabisi, Kajola, & Asaolu, 2019). ERM is an internal control system in response to the

growing expectation and emergence of a new paradigm. Kalita (2004) argued that, in today's market, managing risk alone attracts less attention; while ERM or integrated risk management (IRM) is the current buzzword (Kalita, 2004). Casualty Actuarial Society (2003) describes ERM as a holistic risk management strategy that does not adopt managing risks within an enterprise alone.

Businesses use enterprise risk management to manage various operational and financial risks confronting firms (Banham, 2004). Casualty Actuarial Society (2003) defined Enterprise risk management as a strategy used by an organization to assess, control finance, and monitor risks from all sources to improve firms' short and long-term value to its stakeholders.

The implication of adopting enterprise risk management is to inform the company about the risk profile and commitment to risk management with openness. Incorporating enterprise risk management into business activities allows management to achieve the company's strategic goal; especially by providing value-added to shareholders through sustainable development.

Theoretical Review

Stakeholder's theory is rooted in the field of management in 1970 and has been developed by Freeman (1984). This theory underpinned the study as it shows how different stakeholders are significant to the extent that the management has to safeguard their interest through risk management practices. Stakeholder's theory proposes that a company is a separate entity connected with several individuals to fulfill a wider range of interests. Contingent on stakeholder theory is a new approach to risk management. The Stakeholder theory takes a holistic approach instead of focusing on shareholders. Stakeholders include shareholders, employees, suppliers, creditors, and every individual or group that has one or another thing to lose if the company is liquidated.

Markowitz (1952) introduced Modern Portfolio Theory (MPT). This concept has attracted so much popularity over the years and has significantly influenced portfolio structure and management practice. MPT is an investment theory that maximizes return and minimizes risk by judiciously selecting various combinations of assets (Markowitz, 1952). It is a construction of the mathematical concept of diversification of investment portfolio to be able to select a combination of assets with a lower risk than any individual asset. MPT is used in asset distribution that entails selecting the appropriate asset classes and weights for portfolios. For risk management, MPT provides an avenue to minimize risk through investing in portfolios with lower overall risks.

MPT manages risk by adopting a systematic and holistic approach, to identify risk and enhance shareholders' value through business sustainability.

Empirical Review

Teoh and Rajendran (2015) examined the influence of Enterprise Risk Management (ERM) on firm performance of Public Listed Companies (PLCs) in Bursa Malaysia in line with COSO (2004) ERM Integrated Framework. The study also assessed the moderating role of Board of Directors' (BODs) monitoring, firm complexity, and firm size of the implementation of ERM on firm performance. A structured questionnaire was used to solicit information from 103 respondents via mail. Partial Least Squares and Structural Equation Modeling Tool (Smart-PLS 2.0 M3) was used to analyze the data. The results showed that ERM has a significant influence on firm performance. Besides, monitoring and implementation of ERM by the board of directors, firm size, and firm complexity had a significant influence on firm performance.

Kimotho (2015) examined the relationship between enterprise risk management practices and financial performance among Commercial State Corporations in Kenya. The surrogates for Enterprises Risk Management were Operational risk management, strategic risk management, financial risk management, and Governance risk management. A semi-structured questionnaire was used to collect quantitative and qualitative data for analysis. Quantitative data were collected over 5 years from 2010-2014. The collected data was analyzed using descriptive statistics and factor analysis while content analysis was used to analyze the qualitative data. The study found that operational, strategic, financial, and governance risk management had a positive effect on the financial performance of the Corporations to an extent of 70%, 71%, 66%, and 72% respectively.

Emmy and Gladys (2018) examined the effect of risk management practices on the financial performance of commercial state corporations in Kenya. The study adopted a descriptive research design and secondary data were extracted from audited financial statements for 2011 to 2016. Regression analysis was used for analysis. They found significant relationships between operational risk; financial risk; strategic risk management practices and financial performance of the corporations to the extent of 98.7%, 92.7%, and 87.4% respectively. The results showed a moderately strong positive relationship between operational risk management and financial performance (56.2%). Operational risk management led to a reduction in operating costs and

thereby improves profitability. The study suggested that practices that reduce liabilities positively affect financial performance.

Erin, Eriki, Arumona, and Jacob (2017) examined the impact of Enterprise Risk Management (ERM) on the financial performance of developing markets with the Nigerian financial sector in focus. The study generated panel data from 40 companies over 5 years, 2012 to 2016. Return on Assets (ROA) was the surrogate for financial performance while Value at Risk (VaR) as a proxy for Enterprise Risk Management (ERM). The study incorporated Leverage (LEV), Board Size (BSIZE), Firm Size (FSIZE), Institutional Ownership (INTOWN), and Risk Management Committee Size (RMCS) as control variables. The results of the regression analysis showed that VaR (0.216), BSIZE (0.218), FSIZE (0.021), INTOWN (0.001), and RMC (0.032) were significant except LEV (-0.572) which was inversely related. It was suggested that the Nigerian financial sector regulatory authorities should enforce the adoption and strict compliance of the ERM framework.

Ugwuanyi and Imo (2012) investigated the influence of enterprise risk management practices on the performance of the brewery industry in Nigeria. The study employed a cross-sectional survey design where copies of the questionnaire were administered to 375 respondents comprising top and middle-level management staff of the three major brewing firms in Nigeria. The study made use of the Z-test statistic for analysis. The study found a positive and significant relationship between enterprise risk management and the performance of the Nigerian brewery industry. The study suggested that Nigerian brewery should incorporate enterprise risk management practices into business operations.

RESEARCH METHODS AND PROCEDURE

The study adopted *an ex-post facto* research design where data had already been in existence before the study. The study population comprised twenty-one (21) Nigerian listed consumer goods firms as of 31st December 2018. The study adopted a judgmental sampling technique to select 10 firms. The selected firms were based on the availability of up-to-date relevant data over 10 years (2009- 2018).

Table 1: Measurement of Variables

S/N	Variables	Types of variable	Measurements
1	Return on Asset	Dependent	Profit after tax divided by total assets
2	Operational Risk Management	Independent	Using the Operating Expense Ratio (OER) approach, this is equal to Operating expenses plus the cost of goods sold divided by gross revenue
3	Financial Risk Management	Independent	Using the Solvency Ratio (SOLV) approach, this is equal to Net income plus depreciation divided by total liabilities
4	Leverage	Independent	Long term debt divided by total equity
5	Audit Committee	Independent	Number of members of the audit committee
6	Firm Size	Independent	Natural log of total assets

Source: Researchers' compilation

Model Specification

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The study adopted a linear regression model to analyse the relationship between enterprise risk management and financial sustainability. The model has explanatory variables namely operational risk management, financial risk management, firm size, audit committee, and leverage. Financial sustainability (measured with ROA) represents the dependent variable. The mathematical and conceptual framework is expressed below:

 $ROA_{it} = f(\beta_0 + \beta_1 ORM_{it} + \beta_2 FRM_{it} + + \beta_4 LEV_{it} + \beta_5 ACOM_{it} + \beta_6 FSIZE_{it} +$

Research Hypotheses

The following hypotheses are formulated in the null form to guide the study

 \mathbf{H}_{01} : There is no significant relationship between operational risk management and

financial sustainability of listed consumer goods firms in Nigeria

 H_{02} : There is no significant relationship between financial risk management and financial sustainability of listed consumer goods firms in Nigeria

 H_{03} : There is no significant relationship between financial leverage and sustainability of listed consumer goods firms in Nigeria

 H_{04} : There is no significant relationship between audit committee size and financial sustainability of listed consumer goods firms in Nigeria

H₀₅: There is no significant relationship between firm size and financial sustainability of listed consumer goods firms in Nigeria

RESEARCH FINDINGS/RESULTS

Data Estimation Technique

Data estimation techniques used were both descriptive and inferential. Table 2 presents the summary of descriptive statistics of the variables used in the study.

Table 2: Descriptive Statistics Test Result

VARIABLES	ROA	ORM	FRM	LEV	ACOM	FSIZE
Mean	0.0968	0.8658	0.2616	0.3689	5.8100	7.8254
Maximum	0.2652	1.1454	0.9671	1.7508	6.0000	8.5891
Minimum	-0.2853	0.6697	-0.2698	-0.8098	4.0000	6.7364
Std. Dev.	0.0903	0.0912	0.2063	0.3586	0.5064	0.4611
Skewness	-0.4548	0.2575	0.8782	1.0233	-2.6452	-0.5629
Kurtosis	4.8528	2.7797	4.3437	5.8031	8.9429	2.5842
Jarque-Bera	17.751	1.3070	20.3767	50.193	263.78	6.0003
Probability	0.0001	0.52022	0.00004	0.0000	0.0000	0.0498
Observations	100	100	100	100	100	100

Source: Researchers' computation

From Table 2, the mean of returns on asset is shown as 0.0968 which signified that the financial sustainability measured with ROA for all the years under consideration is about 9.7%. The maximum and minimum returns during the period are 0.2652 and 0.2853. This indicated a very poor performance level during the period under the study. The results also showed the

average values of operational risk management, financial risk management, leverage, audit committee size, and firm size as 86.58%, 26.16%, 36.89% 5.81, and 7.83 respectively.

The result showed that the maximum amount expensed on operational activities relative to the gross revenue is 1.14: 1 while the minimum amount expensed on operational risk and gross revenue comparatively is 0.67:1. This implied that a relatively high amount was expended on operating activities that did not show effective operational risk management. The result also showed that the maximum net income generated comparatively to total liabilities is 96.7% and a loss of 26.98%. The minimum value for leverage is shown as -0.8098 and the maximum value is 1.75. This implies an increase in debt by 75% compared to equity and a reduction in debt by 80.9 percent as compared to equity. The highest number of members of the audit committee is given as 6, while the minimum number is 4. The minimum log on the natural assets is 6.73634 and the maximum is 8.5891.

The standard deviation shows the dispersion of the data series from their mean value. The higher the standard deviation the higher the dispersion while the lower the standard deviation, the lower the deviation. As given in table 2, the variable of ROA deviates from the average value by 9.03%, while the variable with the highest dispersion is the ACOM with a high value of 0.5064. This means that the value of audit committee size is highly dispersed during the period.

The descriptive analysis also provided a yardstick for the decision on the skewness and kurtosis of distribution and also their normality. From Table 2, ROA, ACOM, and FSIZE were negatively skewed, which implies that these variables have a long-left tail. ORM, FRM, and LEV are positively skewed which implies a long right tail.

ROA, FRM, LEV, and ACOM were leptokurtic because their kurtosis values are greater than the standard value of 3. These variables have a peaked curve with higher values than their mean values respectively. On the other hand, ORM and FSIZE were platykurtic with their kurtosis values less than 3. This implies that these variables have flattered curves and have lower values than their respective mean.

The two tests of Skewness and Kurtosis, however, are not individually sufficient in defining the distribution of the series, hence the need for the Jarque-Bera normality test. Since the Jarque-Bera test combines skewness and kurtosis properties, it provides more comprehensive information on the normality of each variable. From Table 2, the Jarque-Bera probability values

of ROA, FRM, LEV, ACOM, and FSIZE are 0.000140, 0.000038, 0.000000, 0.000000, and 0.049779 and all of these are below the significance level of 0.05. Therefore, we reject the hypothesis of normality of the variables. However, the probability value for ORM is 0.520224 and this is above the significance level of 0.05. Therefore, we failed to reject the hypothesis of normality of operational risk management.

Diagnostic Test

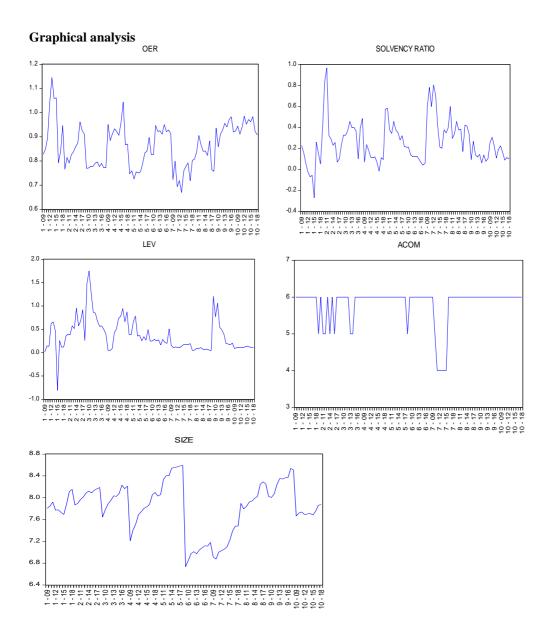
The tests adopted for stationarity of the series were the Levin, Lin & and Chu (LLC), and PP-Fisher unit root tests as presented in Table 4. While LLC assumes a common unit root process for the series, PP-Fisher assumes an individual unit root process. The superiority of the LLC lies in its ability to capture any inherent heterogeneity among the cross-sections.

Table 4: Unit Root Test

Variables	Constant	Probabilities	Constant and Trend	Probabilities	Remarks
ROA	- 4.16474	0.0000	-8.06518	0.0000	I(0)
OER	-1.75920	0.0393	-3.88906	0.0001	I(0)
SOLV	-3.38549	0.0004	-12.9743	0.0000	I(0)
LEV	-1.87858	0.0302	-4.28843	0.0000	I(0)
ACOM	-2.83548	0.0023	-2.09108	0.0183	I(0)
FSIZE	-5.12695	0.0000	-6.19665	0.0000	I(0)
FSIZE	-5.12695	0.0000	-6.19665	0.0000	1((

Source: Researchers' computation

Table 4 showed that each of the variables reverted to their respective mean which suggested the stationarity of each of the series. The probability values of each variable under the unit root test for both constant and trend were below the significant level of 0.05. This implies that all variables were stationary at level. Therefore, we rejected the hypothesis of non-stationarity of the series.



Interpretation and Discussion

Table 3 and the graphs above showed that each of the variables reverts to their respective mean which suggests the stationarity of each of the series. Furthermore, the probability values of each variable under the unit root test for both constant and trend are below the significance level of 0.05. Therefore, we reject the hypothesis of non-stationarity of the variables. This implies that all variables are stationary.

Regression Analysis

The variables for this study have gone through the unit root test and validated stationarity of the series. Hence, the fixed-effect model and random effect model were computed and the Husman test was used to choose the most appropriate model for the study. The Husman test result validated the random effect model at the expense of the fixed-effect model.

Table 4: Regression Results

Variables	Fixed Effect	Ra	Random Effect		
Constant	0.413408		0.382581		
	(0.0204)		(0.0027)		
ORM	0.407811		- 0.395988		
	(0.0000)		(0.0000)		
FRM	0.271764		0.269424		
	(0.0000)		(0.0000)		
LEV	0.055978	0.0557			
	(0.0000)		(0.0000)		
ACOM	0.008211	0.01146			
	(0.1436)		(0.1339)		
FSIZE	0.013160		-0.012858		
	(0.4856)		(0.3106)		
\mathbb{R}^2	0.91102		0.82814		
Adjusted R ²	0.89637		0.81900		
F-statistic	62.1637		90.5924		
Prob. (F-statistic)	(0.0000)		(0.0000)		
Durbin Watson statistics	1.86801		1.76441		
Hausman test	<u> </u>				
Test summary	Chi-square statistics	Chi-square d.f.	Probability		
Cross-section effect	2.161899	5	0.8263		

Null Hypothesis (H_0) : Random Effect Model is appropriate Alternate Hypothesis (H_A) : Fixed Effect Model is appropriate

Source: Researchers' computation

Interpretation of Results

The regression results showed a significant relationship between operating risk management; financial risk management; leverage and return on assets of consumer goods companies. However, there was an insignificant relationship between audit committee size; firm size, and return on assets. Furthermore, a positive relationship existed between financial risk management; leverage; audit committee size, and return on assets which implied that an increase in each of these variables will increase return on asset by 1 unit and vice versa. Also, a negative

relationship existed between operational risk management; firm size, and return on asset, which implies that a decrease in each of operational risk management; firm size will lead to a decrease in return on assets by 1 unit and vice versa.

The results showed the value of R squared (coefficient of determination) to be approximately 82.81%, which implies that Enterprise Risk Management accounts for about 82.81% of the variation in financial performance. In other words, the explanatory ability of the model for the systematic variations in the dependent variable is 82.81%. An evaluation of the Table 4 revealed the absence of autocorrelation (serial correlation) as evidenced by the Durbin-Watson Statistics of 1.764407 which is approaching 2. F-statistics of 90.59242 is significant at 5% indicating that the model specification to be fit at predicting financial performance (ROA). The implication of this is that the explanatory power of the model is strong as the independent variables significantly explained the dependent variable. Also, the coefficient of determination (R-squared) of the model showed approximately 82% variations in ROA attributable to the variables in the model while the remaining 18% are attributable to other factors not included in the model.

Some of the results of the study are however inconsistent with *a-priori* expectations as it was expected that all the proxies of enterprise risk management would have a positive and significant effect on return on asset. The model is however adequate. Hence, while financial risk management, leverage, and audit committee size have a positive effect on returns on assets, operational risk management, and firm size have negative effects on returns on assets of selected listed consumer goods companies in Nigeria.

Table 5: Variance Inflation Factor

Variable	Observation	Centered VIF
ORM	100	1.663203
FRM	100	1.787237
LEV	100	1.002989
ACOM	100	1.070370
FSIZE	100	1.108893

Source: Researchers' computation

Table 5 formed the basis of the conclusion under the variance inflation factor which is whether the cantered VIF is up to 10 or not. From the result presented in Table 5, none of the variables has a value of up to 10. The result validated the absence of multicollinearity among the

series (Gujarati and Porter, 2005) and we concluded that the model is the best linear and unbiased estimate.

DISCUSSION OF FINDINGS

A sustainable business directs efforts at developing knowledge, creativity, analytical skills, and learning to minimize business risk and thus achieve long-lasting competitive advantage. Fundamentally, sustainable development of an enterprise means that every rule requirement of sustainable development is incorporated into the enterprise's risk management process to enhance financial sustainability.

The study found a negative relationship between operating risk management and financial sustainability. Since operational risk management deals with how an organization manages its overall daily activities and this is mostly experienced through business disruption, control failures, errors, misdeeds, or external events. These situations bring about additional or increment in the operational expenses of an organization. Therefore, an increase in operational cost will lead to an increased operating expense ratio (operating risk management). Practically, an increased operating ratio signifies a low and ineffective operational risk management while a reduced or low operating expense ratio signifies effective operational risk management. From the analysis in this study, the operating expenses ratio was averaged very low which implies weak operational risk management. Therefore, it could be deduced that low operational risk management leads to low sustainability as a high operating ratio (which signifies low operational risk management) led to a reduction in returns on asset.

The result of the study is in line with the findings of Emmy and Gladys (2018); Erin, Eriki, Arumona, and Jacob (2017); Teoh and Rajendran (2015); Kimotho (2015) and Ugwuanyi and Imo (2012). For example, the study of Teoh and Rajendran (2015) found that operational risk management, financial risk management, and firm size have a significant relationship with return on assets. It could be inferred from the study that firms' financial risk management which is indicated by the company's ability to meet short and long-term obligations is directly related to profitability. This implies that adequate financial risk management will increase the business sustainability. It is important to know that financial risk caused by variation in interest rates, currency exchange rates, default, and poor liquidity management may have negative effects on the bottom-line of an organization. This affects the stability and sustainability of a firm as it depicts how solvent and financially stable the organization is. A high solvency ratio depicts a

high level of effective financial risk management as it shows that the company makes more earnings than its obligations. From the study, financial risk management has a significant and positive effect on financial sustainability. This implies that consumer goods firms need to recognize the import of this type of risk management. If proper measures are taken on financial risk management, it will enhance a smooth financial portfolio and this will increase business sustainability. This also implies that sound financial risk management is required in an organization to protect the organization against financial losses and hedge the loss from the risk and maximize the returns from the financial transaction. The ability to meet up the short and long-term obligations signifies sustainable business.

From the hypothesis tested, the result shows that the relationship between leverage and financial sustainability is positive and significant. This indicated that a firm's ability to secure a good standing in the capital structure and have more equity than liabilities is directly related to profitability. This found out that there is a relatively positive degree of correlation between LEV and ROA. This implies that an adequate capital structure and fund sourcing scheme and also the level of debt in the organization will increase the company's performance. Financial leverage showed that the organization could safely secure capital and funds from an outsider and avoid debt capital. This is where the debt management scheme fits and risk management practices. Financial leverage has a very strong effect on financial sustainability. This means that, if financial leverage increases, there will be very fast or sharp response from financial sustainability.

Since one of the objectives of an audit committee is to reduce financial risk through the institution of an effective control mechanism. Then a significant relationship between the audit committee and financial sustainability is expected. The study however found that audit committee size has a very weak and insignificant relationship with financial sustainability. This means that an increase or decrease in audit committee size does not affect firms' sustainability.

The study found a negative relationship between firm size and financial sustainability. The bigger the company, the more interests, and risks faced. Besides, the broader disclosure made by the company will have an impact on the amount of information to be published and the costs incurred by the firms.

CONCLUSION AND RECOMMENDATIONS

The study concluded that operational risk management reduces operational expenses which eventually increase the returns on asset of the company. Financial risk management is found to be significant and enhance sustainability. When this is achieved, it increases the ability of the firm to settle financial obligations. The debt management of an organization that is represented by leverage is found to be significantly contributing to financial sustainability. This indicated that leverage is necessary to boost the financial sustainability of Nigerian listed consumer goods firms.

Consequent to findings and the objective of the study, the following recommendations were made:

- Consumer goods firms should carefully develop their risk measurements techniques
 to sufficiently achieve the financial risks resulting from increased financial
 involvement in the sector;
- ii. Consumer goods firms should implement better risk management practices with a key focus on financial leverage, operational and financial risk management;
- iii. Consumer goods firms should always examine their risk management policy and practices and streamline them with global standards;
- iv. The management should assume the responsibility of implementing a risk management plan, monitor the risks to ensure that risks taken are within the set tolerable levels, and frequently review the implementation of the risk management framework every quarter; and
- v. The management should continuously review their risk management practices to ascertain if they are still practical in the face of a continuously changing operating environment.

REFERENCES

Adegboyega, A., Olabisi, J., Kajola, S. O., & Asaolu, T. O. (2019). Does leverage affect the financial performance of Nigerian firms? *Journal of Economics and Management*, *37*(3), 5–22. http://doi.org/10.22367/jem.2019.37.01

Antonius, A. (2015). The essentials of enterprise risk management. *Indonesia Institute of Commissioners and Director*, Retrieved August 11, 2016, from www.ikdi.org/cms/wp-contents/englishversion.

Arif, S. (2011). The analysis of the company's financial performance before and after implementing ERM: An empirical study in Indonesia. *Asian Journal of Business and Management Sciences*, 17(1), 92-105.

Banham, R. (2004). Enterprising views of risk management: Businesses can use ERM to manage a wide variety of risks. *Journal of Accountancy*, 197(6),14-20. https://www.journalofaccountancy.com

Casualty Actuarial Society (CAS), (2003). Overview of Enterprise Risk Management Committee Report, Arlington: *Casualty Actuarial Society Forum*

Committee of Sponsoring Organizations of Treadway Commission (COSO), (2004). *Enterprise Risk Management- Integrated Framework*, New York: COSO. https://www.coso.org

D'Archy, S. P. (2001). Enterprise risk management, *Journal of Risk Management of Korea*, 12(1), 234-245

Dickinson, G. (2001). Enterprise risk management: Its origins and conceptual foundation. *The Geneva Papers on Risk and Insurance*, 26(3), 360-366.doi:10.1111/1468-0440.00121https://www.link.springer.com/ article

Emmy, C. R., & Gladys, R. (2018). Effect of enterprise risk management on the financial performance of commercial state corporations in Kenya; a case of Jomo Kenyatta foundation. *international journal of finance and accounting*, 3 (2), 19 - 39.

Erin, O., Eriki, E., Arumona, J., & Jacob, A. (2017). Enterprise risk management and financial performance: Evidence from an emerging market. *International Journal of Management, Accounting and Economics*, 4 (9), 1-16.www.ijmae.com

Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*, 3rd ed., Cambridge: Cambridge University Press

Gordon, L. A., Loeb, M. P., & Tseng, C. (2009). Enterprise risk management and firm performance: A contingency perspective *Journal of Accounting and Public Policy*, 28: 301 327https://www.sciencedirect.com/pii

Gujarati, N. D., & Porter, D. C. (2005). *Basic Econometrics*, 5th ed. New York: Mc-Graw-Hill/Irwin.

Horne, J. C. V. & John M. W. (2001). *Fundamentals of Financial Management*, 12th ed. Prentice-Hall, Inc.IAI,(2016) https://www.amazon.com

Kalita, M. (2004). Enterprise-wide risk management: Myth or reality? *Business Credit*, 106(3): 22-23

Kimotho, G. W. (2015). Relationship between Enterprise risk management practices and financial performance among commercial state corporations in Kenya. Retrieved http://erepository.uonbi.ac.ke/handle / 11295/94898

Kittipat, L., & Nopadol, R. (2014). A study of the relationship between a successful enterprise risk management system, a performance measurement system and the financial performance of Thai listed companies, *Journal of Applied Business and Economics*, 16(2), 81-92

Lai, F. W., Azizan, N. A., &Samad, M. F. A. (2011). A strategic framework for value-enhancing enterprise risk management, *Journal of Global Business and Economics*, 2(1), https://www.ideas.repec.org

Liu, J. (2012). The enterprise risk management and the risk-oriented internal audit. *International Business Journal*, 10(4), 287-292. https://doi.org/10.4236/ib.2012.43036

Martin, A. J., (2013). Academic buoyancy and academic resilience: Exploring 'everyday' and 'classic' resilience in the face of academic adversity, Journal of School Psychology International 34(5):488-500 DOI.10.1177/0143034312472759

Markowitz, H. (1952). Portfolio Selection, *the Journal of Finance*, 7(1), 77-http://links.jstor.org/sici?sici

Reuvid, J. (2012). Managing business risk: A practical guide to protecting your business. *Annals of Actuarial Science*, 7(1), 155-157. https://www.asf.com.pt/winlibimg

Shenkir, W. G., & Paul, L. W., (2006). Enterprise risk management and the strategy risk-focused organization. *Cost Management*, 20: 1–43

Stanton, T. H. (2012). 'Why some firms thrive while others fail'. Oxford University Press https://www.global.oup.com/product

Teoh, A. P., & Rajendran, M. (2015). The impact of enterprise risk management on firm performance: Evidence from Malaysia. *Asian Social Science*; 11 (22), 22 http://dx.doi.org/10.5539/ass.v11n22p149

Ugwuanyi, U. B., & Imo, G. I. (2012). Enterprise risk management and performance of Nigeria's brewery industry. *Developing Country Studies*, 2 (10), 1-8. https://www.iiiste.org

Woods, M. (2007). Linking risk management to strategic controls: A case study of Tesco Plc. *International Journal of Risk Assessment and Management*, 7(8), 1074-1088. https://www.inderscienceonline.com

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