Effect of Risk Management on the Financial Performance of Food and Beverage Industries in Nigeria

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Abstract

This paper aims to examine the effect of risk management on the performance of food and beverages company in Nigeria, in apply this, proxies were introduced (operational and liquidity risk) to examine their effect on the financial performance of food and beverages company in Nigeria. The study adopts ex-post facto and time series research design by employing the Augmented Dickey- Fuller Test (ADF) method of data analysis and co-integrated regression analysis methods were used. The study covers (10) Ten listed of food and beverages company quoted in the Nigeria Stock Exchange for the period of 2010-2021.The research findings reveal that operational risk and liquidity risk have negative relationships with the return on asset, but insignificant impacts on return on asset and also the regression also showed that operational risk and liquidity risk have no significant effect on the return on asset (ROA) within the periods under study. However, the management of the study company should ensure that the operational risk and liquidity risk are properly managed having seen that the variables have negative impact on the return on asset, also considering the negative relationship but insignificant impact of operational risk and liquidity risk on the performance of food and beverages, it is pertinent that the financial regulatory authorities concerned in the company should review the prevailing state of the company, in order to ease the financial irregularities in the company.

Keywords: Liquidity risk, Operational risk and Return on Asset (ROA)

INTRODUCTION

Food and Beverage firms in Nigerian are surrounded by uncertainties (risk), and some of those risks are operational risk, market risk, financial risk, liquidity risk, and credit risk, and so on which affected the growth and operation of such firms. Kanchu and Kumar, (2013) opined that risk as anything limiting the achievement of a certain pre-defined objectives. Some of those risks as stated above. Risk management activities operate within the overall trend of the governance structure Kurt (2009). Risk is used when referring to the possibility of an event occurring and negatively affecting the achievement of objectives, such as, employee fraud, loss of skilled manpower, breakdown of computer system. Introducing control is an integral part of risk management, risk management is the process undertaken by strategic administration to reduce risks to acceptable levels in a firm. A successful risk management program helps an organization to consider all forms of risks it might face. Risk management is a system faced by the organization for risk control. Companies often deliberately take certain risks, seeing the potential returns behind those risks Thus, all these process focus on achieving the goals of the organization in terms of portfolio management and stock market analysis.

Hanafi (2006) explained that risk can be grouped into two types of risk, pure risk and speculative risk.Pure risk is the risk that the possibility of loss exists, while speculative the possibility of a gain is absent. This paper is interested on the analysis of pure risk, using operational and liquidity risks to measures the effects on financial performance. Hanafi, (2006), Kanchu and Kumar, (2013) affirmed that pure risk is a certainty. Oyerogba and Ogunlade (2016), Ekinci (2016), and Augustine Odubuasi et.al (2020), in their studies also supported that risk management affected firm financial performance negatively. Moreover, a lot of researchers in Nigeria and beyond had actually examined and studied on the various risks that affected the smooth operations of the financial sector of the economy. The likes of Oyerogba and Ogunlade (2016) examined links between risks and financial sector in Nigeria, Ekinci (2016) the same studied in Turkey, and Muriithi, Muturi. In addition, Waweru, (2016) carried out a study

of risks and bank performance in Kenya, George Kaliti(2014) studied on effect of risk management practices on the financial performance of firms in the hospitality industry in Nairobi Kenya, where primary data were used, which were criticized based on the fact that primary data collection is subjective to individual opinion. However, nearly all the researchers in Nigeria and beyond who had worked on the risk management focused on financial sector of the economy as what they believed as the driving agent of the economy, and also, its believed to be prone to risk than any other business in the whole world. Augustine Odubuasi et.al (2020), examined effect of market risks on the financial performance of firms in Nigeria, but it only focuses on Oil and Gas sector. This study tries to fill the gap of risk management as its affect the financial performance of Food and Beverage Companies in Nigeria, and to help in adding value to the study.

In Nigeria, Food and Beverage Company is among the industries that contributing to the growth and development of Nigeria economy as it plays an important role in development of industrial sector, especially in their contribution to non- oil and gas sector. In order words, in the last five (5) years, not less than ten (10) Food and Beverage companies have shut their operations in Nigeria, due to the harsh working environment and government policies, which stifling the nation's economy and severe impact of the "COVID 19" pandemic as well as other risks. As a result of this, it's become imperative therefore to conduct a study on how risk management has influenced or affected the financial performance of food and beverages companies in Nigeria. The study covers 10 (Ten) listed of food and beverage company quoted in the Nigeria stock exchange, for a period of twelve (12) years from 2010- 2021 were selected so as to have a clearer picture of the study under review. Given the foregoing, the underlisted hypothesis are those which are germane to this study;

i. **$H0_1$:** There is no significant relationship between operational risk and the financial performance of Food and Beverage Company in Nigeria.
ii. **$H0_2$**: There is no significant relationship between liquidity risk and the financial performance of Food and Beverage Company in Nigeria.

LITERATURE REVIEW

Conceptual Framework

Risk management

Risk management can be examined in this study, as a means or technique or process by which the management of an organization mitigates against any risk that may affect the smooth operation of an organization. It can also be expressed as a system that works proactively by examining the various risks that may happen and explaining the procedures and measures that improve the firm's ability to avoid or reduce the impact of risk processes and procedures. Risk management can also be seen as the process of identifying, assessing and controlling threat to an organization's capital and earnings. These risks stem from a variety ofsources including financial uncertainties, legal liabilities, technology issues, strategic management errors, accident and natural disasters. Also, Risk management is defined as the process of identifying, monitoring and managing potential risks in order to minimize the negative impact they may have in an organization. Examples of potential risks include security breaches, data loss, cyber attacks, system failures and natural disasters. However, several researchers and scholars have expressed their varying definitions on the Risk Management. Wenk (2005), opined that Risk Management model or ideas consists of risk valuation, and risk identification, and ranking of risks, followed by harmonized and reasonable application of resources to, observe, minimize, and control risk.(Ranong and Phuenngam, 2009), defined risk management as something that can bring benefits to all organizations, whether large or small, public or private sector.

Operational Risk

This study tries to explain operational risk as it relates to Food and Beverages Company as a situation whereby an institution suffered losses in a business as a result of possible failure in the operation of the firm, which are not associated with market or liquidity risk. Such failure in the operations are; fraud by employee, breakdown of computer, virus in computer software, litigations, loss of key staffs, product failure, error, and loss of suppliers, etc. Operational risk has been defined by many scholars and authors as: 'The risk that arise as a result of failed or ineffective internal processes, people and systems, or from external events' - Basel Committee on Banking Supervision, (2004). CIMA Official Terminology (2005), defined operational risk as the risk relates to activities carried out within an entity, arising from structure, systems, people, products or processes. However, operational risks are generally within the control and management of the organization through some risks measures that are put in place by the organization. such as internal control system, risk assessment, and management practice etc.

Liquidity Risk

Liquidity risk is the risk that a firm will not be able to meet efficiently both expected and unexpected present and future cash flow, without affecting either daily operations or the financial condition of the firm or organization. Aladdin (2020), define Liquidity Risk as risk that a firm has inadequate financial resources to meet its obligation as they fall due, or can only secure the resources at excessive cost. In that sense, the likelihood of not being liquid would suggest that there is liquidity risk. This study defines liquidity risk as a type of risk in an organization or firm whereby an organization or firm is unable to meet its financial obligation as at when due.

Financial Performance

Firm's financial performance can be measured in so many ways to determine whether the firm is making profit or loss. It's an indicator on the efficiency and effectiveness of the business. The categories of such measurements or indicators are Return on Investment (ROI), Return on Equity (ROE), Earning before interest and tax (EBIT), and the popular one is Return on Asset (ROA). ROA had been the one adopted by previous researchers on their studies, as a proxy for either dependent or independent variables such as Augustine Odubuasi, et.al (2020), Erlane (2016), Yvonne (2013), Maria and Cross (2021), Mardiana (2018), Oehmen, Josef, Olechowski, Alison; Kenley, C. Robert, and Ben-Daya, Mohamed (2014). For the purpose of this study, Return on Asset (ROA) would be used as proxy to measure the dependent variable of financial performance of Food and Beverage Company in Nigeria. Return on Asset (ROA) can be expressed in this context as the indicator to measure the profitability of the food and beverage company in relation to their financial performance.

Empirical Framework

A study carried out by Maria Omiagbo, and Cross Ogohi Daniel (2021) conducted a study on the effect of risk management on the financial performance of commercial banks in Nigeria, the study establishes the degree to which banks risk management have impacted profitability in the Nigerian banks. The study makes used of panel data regression analysis. It helps to understand the magnitude of the independent variable on dependent variables. Data collection was done using ordinary least squares regression. The findings of the study show that there is a significant and positive relationship between risk management and banks return on assets, and conclude that the efficient risk management strategy plays a key role in commercial banks financial performance in Nigeria. To this end, the study recommended that banks need to develop and design a credit strategy that ensures that in the event of defaults or bad debts they can still remain solvent. Aladdin, Saadi and Jaber, (2020) investigates the impact of risk management practices on the organizational performance in insurance companies in the Hashemite Kingdom of Jordan. In order to implement this study, data were collected from 120 managers who work in Jordanian insurance companies through questionnaire. Descriptive analysis was performed and the correlation between the variables was investigated. Data were analyzed using regression analysis and SPSS 19. The study finds that risk management practices have an impact on firm's performance; also, risk management practices

have a positive impact on organizational performance. It therefore, recommended that insurance companies should take cost-effective measures to identify risks in a timely manner and effectively mitigate risks, it also recommend that Insurance companies in Jordan should educate their employees about the importance of risk management and their practices and they must continuously evaluate risk management practices to ensure that they are still able to remain in a changing work environment. It however, concludes that in the future, collection of more data over a longer period of time to verify the validity of the current model and measuring instrument is still practicable.

Mardiana, Endah and Dinata, (2018), studied the effect of risk management on financial performance with good corporate governance as a moderation variable. Proxies by the Capital Adequacy Ratio (CAR), Operating Efficiency (BOPO), and Non Performing Loan (NPL), to the financial performance projected with Return on Assets (ROA) in Islamic Banking Companies listed on the Indonesia Stock Exchange (BEI) in the period 2011 to 2016. The data is obtained from the Financial Statements of Sharia Banking Companies Listed on Indonesia Stock Exchange in the period 2011 to 2016. The studyfinding showed that the variable of Capital Adequacy Ratio (CAR), and Non Performing Loan (NPL) had negative and insignificant effect on Return on Asset (ROA), and Operating Efficiency (BOPO) had negative and significant effect on Return on Assets (ROA). Thus, he concluded that the bank is expected to pay more attention to the level of operating efficiency to improve the profitability of the firm'sfinancial performance, then concludes thatthe Capital Adequacy Ratio (CAR) and Non Performing Loan (NPL) did not significantly affect the Return on Asset (ROA) of the company during the study under review, because the bank intermediation function was not as expected. Anthony Wood and ShaniseMcConney, (2015) in their paper sought to examine the impact of risk management on the financial performance of the commercial banking sector in Barbados using quarterly data for the period 2000 to 2015. The empirical results indicate that Capital Risk, Operational risk, Liquidity Risk, Interest Rate Risk and Credit Risk have statistically significant impacts on financial performance. The only risk variable which does not derive this result is Country Risk. In addition, of those variables which proxy external factors, only GDP Growth has a statistically insignificant influence on financial performance. Operational risk exerted a negative impact on the banks' financial performance, thus the banks must ensure they adopt appropriate measures to minimize the impact of this risk. Higher levels of capital impacted positively on the banking sector's profitability. However, banks must pay close attention to their liquidity management and identify alternative measures to manage operational risk. They must also closely monitor theeffects of macroeconomic variables on their profitability.

Erlane (2016) examined the effect of risk management and operational information disclosure on financial performance of public listed firms in Malaysia. It uses 318 annual reports over a three-year period of 106 listed firms in Bursa Malaysia as the study sample, using content analysis as the research instrument. The finding of the study showed that the level of risk management and operational information disclosed affects firms' financial performance in terms of return on equity. However, it concluded that the results show that there is no significant effect from the level of operational information disclosure on increasing earnings and efficiency in terms of managing assets as measured by the return on asset and EBITDA. The findings in this study indicate that the amount of risk management and operational information disclosed in the firms' annual reports could influence the firms' performance and provides evidence on the importance of risk management and operational information disclosure on a firm's performance. Oehmen, Josef, Olechowski, Alison; Kenley, C. Robert, and Ben-Daya, Mohamed (2014) investigated the association or relationship of risk management practices with fivetypes of product development program performance; quality decision making; high program stability; open problem solving organization; overall NPD project success and; overall product accomplishment. The results show that six categories of risk management practices are most efficient and effective: The categories are; Developing risk management skills and resources; Tailoring risk management and integrating it with new product developments; Calculating impact of risks on the main objectives; Maintenance of all critical decisions with risk management results; Monitor and review theactions that will mitigation any risk, and it is management process; and finally; and Produce transparency as regarding the new product

development risks. The study's finding shows that the risk management practices are directly associated with outcome measures in the first three categories (improved decision making, program stability and problem solving). It is recommended that evidence in the risk management practices indirectly associate with the remaining two categories of outcome measures (project and product success), and concluded that research is needed to describe the exact mechanisms through which risk management practices influence NPD program success.

Theoretical Framework

Agency Theory

Agency theory originates from the paper of Berle and Means (1932) on the separation between ownership and control in bigfirms. According to Jensen and Meckling (1976), the firm can be viewed as a network of contracts, implicit and explicit, among various parties or stakeholders, such as shareholders, employees, and society at large. In modern firms, the shareholders (principals) are widely dispersed and they are not normally involved in every-day's activities and managements of the organizations, rather they hire mangers (agents) to manage the organizations on behalf of the principals (Habbash, 2010). The separation of ownership from management provides the context for the functioning of the agency theory. In the agency theory, the interests of stakeholders are not always aligned. Problems occur when the interests of agents (managers) are not in line with those of principals. Depending on the parties involved in conflicts, agency problems can be categorized as: managerial agency, share-holders orstockholders'management, (Debentures), agency (between stockholders and bond-holders); social agency (between private and public sectors); and political agency (between agents of the public sector and the rest of society or taxpayers). The agency theory is about management risk and is therefore beneficial to this study.

Stakeholder Theory

The theory originated by Freeman (1984) as a managerial instrument, it focuses explicitly on equilibrium of stakeholder interests as the main determinant of corporate policy. The greatest likely contributions to risk management is the extension of implied contracts theory from employment to other contracts, including sales and financing, Cornell and Shapiro, (1987). In some firms or industries, particularly computerized industries andservices, for a consumer trust to continue in the company, it mustbe offering its services which can substantially contribute to company value. Nevertheless, the value of these implicit claims is highly sensitive to expect costs of financial distress and bankruptcy. Since Corporate risk management practices lead to a decrease in these expected costs, Klimczak, (2005) provides that stakeholder theory provides a new insight into possible justification to risk management. Though, this has not yet been tested directly.

Financial Economy Theory

This approach builds upon classic Modigliani-Miller paradigm Miller and Modigliani, (1958) which states conditions for irrelevance of financial structure for corporate value. This model was later stretched to the field of risk management. This theoryspecifies that hedging leads to lesser volatility of cash flow and consequently,lesser volatility of firm value. Bases for corporate risk management were gathered from the irrelevance conditions and higher debt capacity. Miller and Modigliani, (1963), progressive tax rates, lower expected costs of bankruptcy Smith and Stulz, (1985), securing internal financing, Froot et al., (1993), information asymmetries Geczy et al., (1997) and comparative advantage in information Stulz, (1996). The final result of hedging, if it is beneficial to the firm, should be a higher value (a hedging premium). Financial Economy Theory also provides simplification, an opportunity to understand the impact of financial decision in a constrained environment and insight into the real world problem, a framework in which to analyze problem and a foundation upon to build more complex models.

Portfolio Theory

Harry Markowitz, introduced modern portfolio theory on the analysis of the portfolio investments in his article that was published in the Journal of Finance (1952). The new approach presented in this articleincluded in the portfolio formation, by considering the expected return on asset of Food and Beverage Company in Nigeria and operating and liquidity risk of individual stocks and importantly, their interrelationship as measured by correlation. Prior to this, investors would examine investments individually, build up portfolios of attractive stocks, and consider how they related to each other. Markowitz showed how it might be possible to better of these simplistic portfolios by taking into account the correlation between the returns on these stocks The diversification plays a very important role in the modern portfolio theory. Markowitz approach is viewed as a single period approach, at the beginning of the period the investor must make a decision in what particular securities to invest and hold these securities until the end of the period. Because a portfolio is a collection of securities, this decision is equivalent to selecting an optimal portfolio from a set of possible portfolios.

Based on the theoretical approach theories listed above, agency theory is more relevant to the research work, as its more on strategic level of management, where risk associated with management are resolved. Decisions are taking by management level of operation to solve all problems and challenges associated with risk of a firm.

METHODOLOGY

This study adopts both the ex- post factor and the time series research analysis by employing Augmented Dickey-Fuller test (ADF)for unit root data analysis where all the variables are stationery at first 1 (1) which indicates not having a short run relationship among individual time series data. Thus, since all variables are non-stationery, there is need to conduct aco-integratedtestfor the variables so as to examine the long run relationship between them, according to Gujarati (2004). The choice of ex-post facto is becausesecondary sources of data collection were used from the publish annual reports of the individual companies.

Model Specification

The time series regression analysis was used for the study and the analysis incorporated theAugmented Dickey-Fuller test (ADF) and method of data analysis was conducted to evaluatethe unit root test and co-integrated results ofthe linear association between the risk management on financial performance of food and beverage companies in Nigeria. A regression model was built to suit the variables under study and it presented as below;

$ROA = \beta o + \beta_1 opr + \beta_2 liqr + €$……

Where:

ROA = Return on Asset.

$\beta 0$= constant term

$\beta_1 opr$= Operational risk

$\beta_2 liqr$ = Liquidity Risk.

€ = Error Term.

RESULT AND DISCUSSION

Raw Data

Year	ROA	OPR	LIQR
2010	0.33	3.65	0.0401
2011	0.79	4.001	0.0113
2012	1.33	2.342	0.0223
2013	1.22	3.1	0.0411
2014	1.99	3.332	0.0322

2015	1.001	1.006	0.1004
2016	0.91	2.022	0.1321
2017	0.62	2.732	0.0555
2018	0.33	3.567	0.0422
2019	0.82	2.034	0.0465
2020	0.91	3.461	0.0456
2021	0.44	0.01	0.0499

Source: CBN Statistical Bulletin (2021)

Unit Root Test Results

The Augmented Dickey-Fuller (ADF) was used to test for the unit root in the individual variable. The test was done based on the following hypotheses;
H_0: variable is non-stationary
H_1: variable is stationary

The results from the Augmented Dickey-Fuller test for unit root are summarized below:

Table 1: ADF Test for Unit Root

VARIABLES	ADF test Statistics	5% critical Value	Order of Integration
ROA	-2.158009	-1.950117	Stationary at first difference, I(1)
OPR	-4.661998	-3.536601	Stationary at first difference, I(1)
LIQR	-5.956844	-3.540328	Stationary at first difference, I(1)

From the tabular illustration, all the variables under study: return on asset (ROA), Operational risk (OPR) and Liquidity risk (LIQR) are stationary at first difference, thus they are integrated at first difference; I (1). Not having a stationary time series data indicates not having a short run relationship among the individual time series data, this result is expected since most financial indicators are known to exhibit such behavior. Since all the variables are non-stationary at level form, there is need to conduct a co-integration test. The essence is to show that although all the variables are non-stationary at level form, the variables may have a long term relationship that is, and the variables may be co-integrated and will not produce a spurious result.

Co-integration Test Result

According to Gujarati (2004), a regression involving non-stationary time series variables will produce a spurious (non-meaningful) result. But if such variables are co-integrated, having long run relationship, the result will therefore be acceptable. Econometrically speaking, two variables will be co-integrated if they have a long run equilibrium relationship between them, (Gujarati, 2004). To test for co-integration among the variables, the researcher will carry out ADF test on the regression residuals as proposed by Gujarati (2004). The ADF unit root test on the residuals work with the same decision rule as unit root test. The co-integration test result is summarized as follows:

Table 2: Co-integration Test Result

Null Hypothesis: ECT has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.592285	0.0443
Test critical values:	1% level	-4.226815	
	5% level	-3.536601	
	10% level	-3.200320	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(ECT)
Method: Least Squares
Date: 03/10/21 Time: 16:15
Sample (adjusted): 2010 2021
Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECT(-1)	-0.540806	0.150547	-3.592285	0.0010
C	-0.003976	0.013138	-0.302605	0.7640
@TREND("1981")	0.000273	0.000585	0.466145	0.6441

R-squared	0.279735	Mean dependent var	0.001340
Adjusted R-squared	0.237367	S.D. dependent var	0.041802
S.E. of regression	0.036505	Akaike info criterion	-3.705130
Sum squared resid	0.045309	Schwarz criterion	-3.574515
Log likelihood	71.54490	Hannan-Quinn criter.	-3.659082
F-statistic	6.602438	Durbin-Watson stat	1.983630
Prob(F-statistic)	0.003779		

From the result above, the ADF test statistics (-3.592285) is greater than the 5% critical value (-3.536601) in absolute terms. This implies that the residuals are stationary (i.e. the variables are co-integrated or that the linear influence of the independent variables cancels out).

Error Correction Mechanism Result

Table 3: ECM Test Result

VARIABLE	COEFFICIENT	STD ERROR	T-STATISTICS	PROBABILITY
ECM(-1)	-0.501322	0.151176	3.316144	0.0023

From table 3 above, the magnitude of the short run disparity is -0.501322, that is to say the degree of the short run dynamics is 50.1322. This shows a very low speed of adjustment to equilibrium after a shock.

Regression Result

Dependent Variable: D(ROA)

Method: Least Squares
Date: 03/10/21 Time: 16:17
Sample (adjusted): 2010 2021
Included observations: 11 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.039566	0.010662	3.710986	0.0008
D(OPR)	-2.10E-07	6.57E-06	-0.031936	0.9747
D(LIQR)	-0.001641	0.001660	-0.988747	0.3302
ECT(-1)	-0.501322	0.151176	3.316144	0.0023

R-squared	0.270845	Mean dependent var	0.042191
Adjusted R-squared	0.179701	S.D. dependent var	0.041292
S.E. of regression	0.037398	Akaike info criterion	-3.609296
Sum squared resid	0.044756	Schwarz criterion	-3.391605
Log likelihood	71.77198	Hannan-Quinn criter.	-3.532550
F-statistic	2.971611	Durbin-Watson stat	1.996381
Prob(F-statistic)	0.034051		

Evaluation of Regression Results

From the result, operational risk and liquidity risk have negative relationship on the return on asset such that an increase in operational risk and liquidity risk will lead to decrease in the return on asset on the average. The constant term is 0.039566, which means that the model passes through the point 0.039566 mechanically. If the independent variables are zero, return on asset would be 0.039566, (Gujarati, 2007). The estimated coefficient for Operational risk is -0.00000021. This implies that if we hold all other variables affecting return on asset constant, a unit increase in operational risk will lead to a 0.00000021-unit decrease in return on asset on the average. Similarly, the estimated coefficient of liquidity risk (LIQR) is -0.001641. This means that holding every other variable that affect return on asset constant, a unit increase in liquidity ratio will bring about a -0.001641 decrease in return on asset.

R^2 –Result and Interpretation

This subsection applies the R^2, the t-test and the f-test to determine the statistical reliability of the estimated parameters. These tests are performed as follows; The coefficient of determinations, R^2, from the regression result is given as 0.270845. This implies that 27.0845% of the variation in return on asset is being explained by the variations in operational risk and liquidity risk on the average.

t–Test Result and Interpretation

The researcher also employs the 95% confidence interval or 5% level of significance (i.e.α=0.05) and 39 as our degree of freedom.

From the distribution table, $t_{0.025,39}$= 2.042

The result of the t-test of significance is shown in table 4.5 below:
The result of the t-test is presented below and evaluated based on the critical value (2.042) and the value of calculated t-statistics for each variable.

Table 4: Result of t-Test of Significance

VARIABLES	t-computed (t*)	t-tabulated ($t_{a/2}$)	Conclusion
OPR	-0.031936	2.042	Insignificant
LIQR	0.988747	2.042	Insignificant

Significant (Reject H_o; accept H_1),
Insignificant (Accept H_o).

From the t-test result above, for OPR, $t^* < t_{a/2}$, therefore, the null hypothesis is accepted. Hence, operational risk is not statistically significant, thus operational risk has no significant impact on return on asset. For LIQR, $t^* < t_{a/2}$, therefore, the null hypothesis accepted. Hence, liquidity risk is not statistically significant, thus liquidity risk has no significant impact on return on asset.

Result and Interpretation of F–Test of Significance

The degree of freedom for the numerator (v_1) and for the denominator (V_2) are given as K-1 and N-K
Where
N= sample size
K= number of parameters including the constant term.
V_1=4-1=3, V_2=39-4=35, df = (3,35) at 5% level of significance and df = (3,35), $f_{0.05}$ = 2.92 and F* = 2.971611 Since $f^* > f_{0.05}$, the null hypothesis is rejected, hence the conclusion that the variables (OPR and LIQR) have joint influence on return on asset. This implies that the entire regression is significant.

Table 5: Result of f-Test of Significance:

Computed f-ratio value	Critical f-ratio value	Result
2.971611	2.92	Statistically significant

Result and Interpretation of Autocorrelation Test

Using the Durbin-Watson statistic, the region of no autocorrelation (positive or negative) is given as follows:
du< d*< (4-du)
du= 1.72
d*= 1.996381
(4-du)= 4 – 1.72 = 2.28
By substitution, the region becomes:
1.72<1.996381< 2.28

Du	d*	4-du	Result
1.72	1.996381	2.28	Autocorrelation absent

The result shows that there is absence of autocorrelation problem in the model as the computed Durbin-Watson statistic falls within the zero autocorrelation regions.

Normality Test Result and Interpretation

The Normality test will be done using the Jarque-Bera test of normality.Jarque-Bera test of normality is hinged on the hypothesis that K is close to or exactly 3 and S is close to or exactly 0, thus making the JB value close to or equal to 0, which is the condition for normal distribution.

Table 6: Result of Normality Test

Skewness	Kurtosis	Jarque-berra	Probability	Test
-0.295858	3.636626	1.164608	0.558610	NND

From the normality table, the Jarque-Bera does not draw close to zero (0) as stated; in order words the residuals are not normally distributed.

Evaluation of Research Hypotheses

Hypothesis one: The null hypothesis is accepted for the variable, operational risk because the t-computed value (-0.031936) is less than t-tabulated value (2.042). Hence, operational risk has no significant impact on the return on asset.

Hypothesis two: The null hypothesis is accepted for the variable, liquidity ratio because the t-computed value (0.988747) is less than t-tabulated value (2.042). Hence, liquidity ratio has no significant impact on the return on asset in Nigeria.

Discussion of Findings

Despite the varying findings of various authors on the effect of risk management on financial performance of food and beverage companies in Nigeria, this study reveals that operational risk and liquidity risk have negative relationships with the return on asset. This implies that an increase in the units of operational risk and liquidity risk will lead to an increase in the return on asset. However, the regression also showed that operational risk and liquidity risk have no significant effect on the return on asset within the periods under review.This finding is in line with finding of Mardiana, et.al, (2018), who found that the variable of Capital Adequacy Ratio (CAR) and Non Performing Loan (NPLNon Performing Loan (NPL) had negative and insignificant effect on Return on Asset (ROA), because the bank intermediation function was not as expected.

CONCLUSION AND RECOMMENDATIONS

It is therefore, worthy of conclusion that operational risk and liquidity risk havenegative relationships but insignificant impacts on return on asset. Generally, the study concludes that risk management has negative relationship on the return on asset, but the level of effect is insignificant. The effect of risk management on financial performance of food and Beverages Companies in Nigeria is evident from the findings and calls for deliberate action to make these areas more additive to economic growth. Sequel to the findings of this study, the researcher specifically made the following policy recommendations to encourage the fortunes of food and beverages companies in Nigeria;

i. From the findings of this study, operational risk and liquidity risk have a negative relationship and insignificant with return on asset; hence, the management of the study company should ensure that the operational risk and liquidity risk are properly managed having seen that the variables have negative impact on the return on asset.

ii. Considering the negative relationship but insignificant impact of operational risk and liquidity risk on the performance of food and beverages, it is pertinent that the financial regulatory authorities concerned in the company should review the prevailing state of the company, in order to ease the financial irregularities in the company.

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