

Risk Taking and the Performance of Small and Medium Enterprises (SMEs) in Nigeria

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Abstract: - The objective of this study was to look at the relationship between risk taking and performance of SMEs in Nigeria. On average, the findings of the study revealed that majority of the respondents agreed with the statements on risk-taking as shown by a mean of 3.68. The responses given by the respondents were varied as indicated by a standard deviation of 1.30. The study also recommends the SMEs to borrow heavily so as to invest in new business products, technologies, markets and services. Moreover, the study recommends the SMEs to employ a brave and open minded approach so as to achieve business goals.

Key Words: Risk - Taking, Performance of SMEs, Nigeria

I. INTRODUCTION

SMEs are known to improve the economic growth base on its importance on the economy across the globe, and this has properly been documented, and because of this, its performance is properly connected with the financial performance of these countries (Moses, 2015). The accountability of SMEs and its importance on economies across the globe cannot be overemphasized. Small and Medium Enterprises are seen as a means for economic growth in most the underdeveloped economies of the world. All this while, it has been noted by Muritala, Awolaja and Bako (2012) and were of the opinion that SMEs are known for better likelihood using labour intensive technologies as a result of reducing joblessness that is witnessed in most economies of the third world countries. From advanced countries of the world for instance, the SMEs in these developed economies have been in the knowing of encouraging job creation, promoting innovation and occupying and being in the front line in creating jobs in developing countries of the world. In advanced economies, many governments internationally, have come to the realization of establishing SMEs so that they can impact or influence the growth and development of their respective economies.

Statement of the Problem

It has been asserted that SMEs really promote growth and development in many societies of different economies of the world. In particular, in countries like Malaysia, Thailand, China, and India, SMEs have been accountable for over 70 percent of exports so this is the reason these economies, as noted by Duro (2013) have been growing in leaps and bounds. Coming back to the Nigerian scenario, SMEs are confronted with a lot of problems and challenges which are in no small

measure affecting her growth and development. The most pronounced, however, is access to finances, and effective infrastructure to operate upon, especially electricity and other social amenities. SMEs are supposedly seen as the foundation that lead to the growth and development of the Nigerian economy but these SMEs have not really had a friendly environment to operate and thrive. In view of the problems confronting SMEs in Nigeria alongside the efforts the government has put in to ensure their growth for them to perform effectively the roles expected of them, the study aimed to look at risk - taking and the performance of Small and Medium Enterprises in Nigeria.

II. THEORETICAL REVIEW

The study was hinged on the Frank Knight's Bearing theory.

Frank Knight's Risk Bearing Theory

Knight (1921) came up with an element of risk-taking as an innermost attribute of free enterprise. Knight clearly differentiated between uncertainty and risk and pointed out that because of uncertainty, perfect competition does not get rid of all profits. According to Knight (1921) had a perception that quantifiable uncertainty or "risk" is distinct from unquantifiable one which is not an uncertainty. For that reason, separation between "risk" and "uncertainty" must be effected. According to Knight (1921), the entrepreneur is an economic agent that bears the real uncertainty.

Knight (1921) stated that the entrepreneurial ability of a person is distinct by how the person deals with "true" uncertainty and that the entrepreneurial achievement is determined by it. As a result, the advantages of utilizing the uncertainty ultimately accumulate to economic environment. One option of explaining of risk-bearing theory is that entrepreneurs put up with the total risks, instead of distinctive ones. If an assumption exists by an individual that there is no likelihood for entrepreneurs to envelop against these risks, while workers are perfectly insured, it is easily noticed that poor agents can become workers while the rich become entrepreneurs. But once again, this does not tally with total risk sharing. For instance, it is not difficult to demonstrate whether aggregate risk is in existence or not, and the entrepreneurs will put up with risk that is relative to his first bequest.

The theory was relevant to this study in linking risk taking behaviour to performance of SMEs. The theory argued that

risk-bearing is a central function of the entrepreneur and that the difference in the capability and ability linking individuals

to bear this risk is a significant determinant of the achievement of a venture.

Conceptual Framework

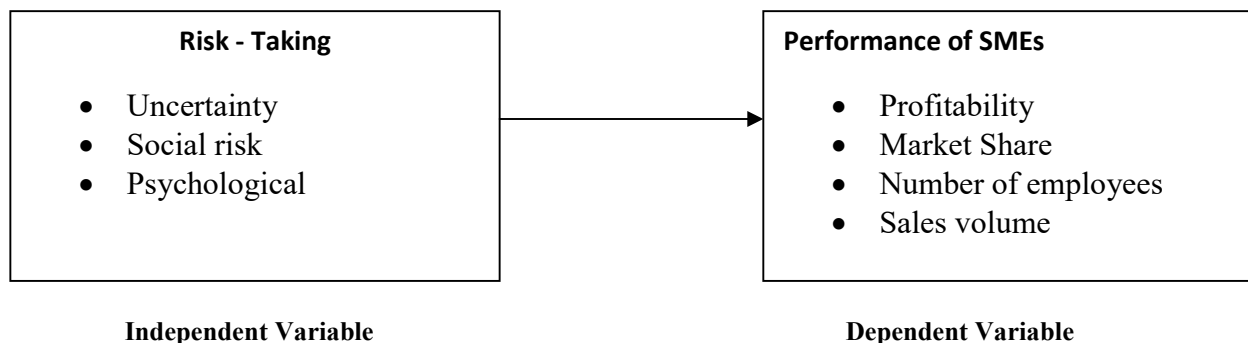


Figure 1: Conceptual Framework

III. RESEARCH METHODOLOGY

The study adopted positivism research philosophy since it focused on empirically measuring facts using statistical analysis of data obtained from the study variables, after formulating hypotheses which were tested using quantitative techniques (Ogbuabor, Malaolu, & Elias, 2013). The study adopted a descriptive research design. The target population was 3,120 SMEs operating in Plateau state Nigeria. Yamane (1967) formula indicated below was used to determine a sample size of 354 SMEs. $n = \frac{N}{1 + N(e)^2}$; Where: n = sample size, N = Population size, e = margin of error set at 5%, for this study: N=3120, (Total number of SMEs in Plateau State Nigeria) and e=5%. A structured questionnaire was used to collect quantitative data for the study. Before administering the questionnaire, a pilot study was conducted on 20 SMEs to establish reliability and validity of the research instrument. Descriptive and inferential analysis involving correlations and regressions were conducted to establish the relationship between the variables. Before analysis using an ordinary least square regression model, the study conducted diagnostic tests involving normality test, multicollinearity test, linearity test and test of homogeneity. The following regression model was used: $Y = \beta_0 + \beta_1 X_1 + \epsilon$, Where: Y= Performance of SMEs, β_0 = Constant, β_1 = regression coefficient, X_1 = Creativity and ϵ = error term.

Research findings

The number of questionnaires that were administered was 354. A total of 325 questionnaires were filled and returned. This represented an overall successful response rate of 91.8%. This confirms an argument by Kothari (2004) that a response rate of 50% or more is adequate for a descriptive study.

IV. RELIABILITY TEST RESULTS

The study conducted a pilot test on 20 SMES to test for the instrument reliability. The 20 participants in the pilot test were not included in the final study. The reliability of an instrument

refers to its ability to produce consistent and stable measurements. Reliability of this instrument was evaluated through Cronbach Alpha which measures the internal consistency. Cronbach Alpha value for the two variables was greater than 0.7 which indicates that the questionnaire was reliable (Nunnally, 1978).

Table 1: Reliability Test Results

Variables	Number of Items	Cronbach's Alpha	Comment
Risk taking	7	0.991	Accepted
Performance	5	0.919	Accepted

Descriptive Results of Risk - Taking

The purpose of this study is to evaluate risk-taking and performance of SMEs in Nigeria. The respondents were asked to show the degree to which they concur or do not concur with the statements regarding risk taking based on a Likert scale where 1=Strongly Disagree, 2= Disagree, 3= moderately agree, 4=Agree and 5=strongly agree. The results are as presented in table 2 below.

The results of the study showed that 30.5% of the respondents indicated that they usually practice “wait and see” tendency to minimize risks, majority 32.6% of them indicated agree, those who indicated moderately agree were 12.9% while those who indicated disagree were 9.2% and those who strongly disagree were only 14.8%. Majority of the respondents agreed to practice “wait and see” tendency to minimize risks (mean=3.55).

The findings of the study also revealed that the majority 43.3% of the respondents strongly agreed that their business borrows heavily to invest in new products, technologies, markets and services, 14.5% the respondents indicated agree, 27.4% of them moderately agreed while only 3.75 of them indicated disagree and those who strongly disagreed were 11.1%. Overall, the respondents strongly agreed that their

business borrows heavily to invest in new products, technologies, markets and services (mean=3.75). Moreover, the results of the study revealed that 30.5% of the respondents strongly agreed to employ a brave and open minded approach to achieve business goals, majority 54.2% of the respondents strongly agreed, those who indicated agree were 27.4% while those who indicated moderately agree and disagree were both 7.4% while those who strongly disagreed were only 3.7%. Overall, the respondents agreed to employ a brave and open minded approach to achieve business goals (mean=4.21).

The findings of the study further revealed that 30.5% of the respondents strongly agreed that they have a specific strategy that enables me to spread business related risks, those who indicated agree were 32.6, 12.9% of the respondents moderately agreed with the statement while only 9.2% of them indicated disagree and 14.8% of the respondents strongly disagreed. Largely, the respondents indicated that they have a specific strategy that enables me to spread business related risks (mean=3.55). Additionally, the results of the study showed that majority 43.4% of the respondents strongly agreed with the statement that the firm invests in high risk projects, unexplored technologies and take new products to new markets, those who indicated agree were 14.5%, those who moderately agreed with the statement were 27.4% while those who indicated disagree were only 3.7% and those who strongly disagreed with the statement were 11.1%. Generally, the respondents agreed that the firm invests in high risk projects, unexplored technologies and take new products to new markets (mean=3.75).

Last but not least, the findings of the study showed that 10.8% of the respondents strongly agreed that the Entrepreneurs who

enter unknown new markets are likely to grow their businesses, those who indicated agree were the majority 56%, those who moderately agreed were 7.4% while those indicated disagree were 14.8% and lastly those who strongly disagreed were 11.1%. Overall, the respondents moderately agreed that the Entrepreneurs who enter unknown new markets are likely to grow their businesses (mean=3.41). Finally, the results of the study revealed that majority 32.3% of the respondents strongly agreed that the Businesses that commit a large portion of resources to ventures with uncertain outcomes grow in business, those who indicated agree were 27.1%, those who moderately agreed with the statement were 11.1% while 22.2% of them indicated disagree and only 7.4% of the respondents strongly disagreed with the statement. In general, the respondents agreed that the Businesses that commit a large portion of resources to ventures with uncertain outcomes grow in business (mean=3.55).

On average, the findings of the study revealed that majority of the respondents agreed with the statements on risk-taking as shown by a mean of 3.68. The responses given by the respondents were varied as indicated by a standard deviation of 1.30. The results of the study are in accord with the findings of a study by Singapore Government (2012) which found that the most significant risk among small businesses involves human factor. High degree of employee turnover and shortage of know-how experts both result in wastage of manpower and additional cost of training. In long term, human factor will lower the productivity and affect the brand image of small businesses as an employer.

Table 2: Descriptive Statistics of Risk-Taking

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean	Std Dev
I usually practice "wait and see" tendency to minimize risks	14.8	9.2	12.9	32.6	30.5	3.55	1.39
My business borrows heavily to invest in new products, technologies, markets and services	11.1	3.7	27.4	14.5	43.4	3.75	1.34
I employ a brave and open minded approach to achieve business goals	3.7	7.4	7.4	27.4	54.2	4.21	1.10
I have a specific strategy that enables me to spread business related risks	14.8	9.2	12.9	32.6	30.5	3.55	1.39
The firm invests in high risk projects, unexplored technologies and take new products to new markets	11.1	3.7	27.4	14.5	43.4	3.75	1.34
Entrepreneurs who enter unknown new markets are likely to grow their businesses	11.1	14.8	7.4	56.0	10.8	3.41	1.19
Businesses that commit a large portion of resources to ventures with uncertain outcomes grow in business	7.4%	22.2	11.1	27.1	32.3	3.55	1.34
Average						3.68	1.30

Performance of SMEs

The study tried to find out the trends for the profitability of SMEs in Nigeria between the years 2012 to 2016. The trend results revealed an increasing trend for the profitability of SMEs in Nigeria. The trends showed an addition in profitability from 22 million Naira to 51 Million Naira in 2016.

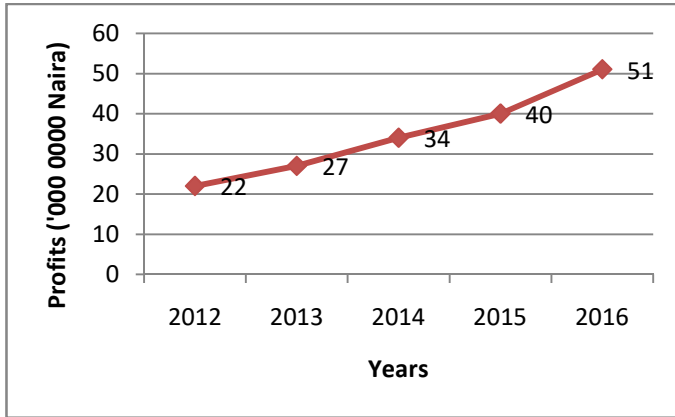


Figure 2 Trends for Profitability of SMEs

The study also tried to evaluate the number of employees for the SMEs in Nigeria between the years 2012 to 2016. The trend results revealed an increasing trend in vis -avis the number of workers for SMEs in Nigeria. The trends reveal an addition in the number of workers between the years 2012 from 127 employees to 249 employees in the year 2016. This implies an improvement in sustainability of the businesses in Plateau state over the years.

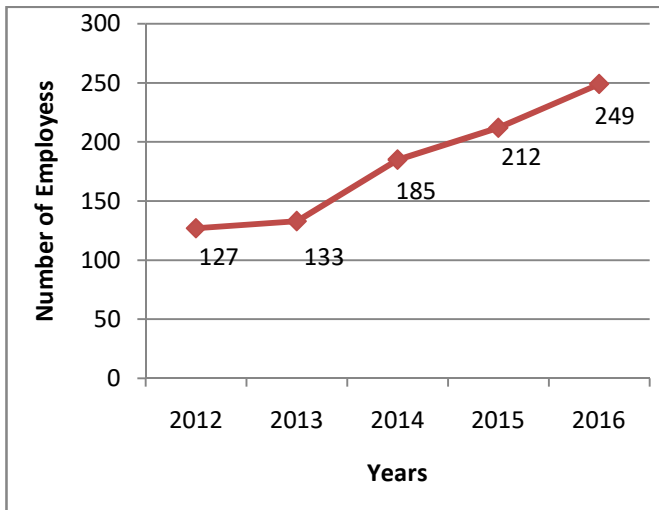


Figure 3 Number of the SMEs

The study also sought to find out the sales volume for the SMEs in Nigeria between the years 2012 to 2016. The trend results revealed an increasing trend in sales for SMEs in Nigeria. The trends reveal an increase in the number of sales between the years 2012 from 127 Million Naira to 800Million

Naira to1213 Million Naira in the year 2016. The findings confirm that the performance of SMEs in Plateau state in Nigeria is unsteady.

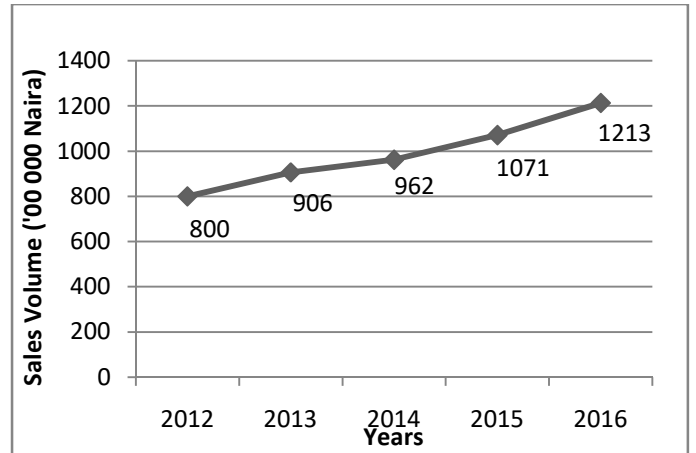


Figure 4 Sales Volume the SMEs

The study also sought to assess the market share for the SMEs in Nigeria between the years 2012 to 2016. The trend results revealed an increasing trend in market share for SMEs in Nigeria. The trends reveal an increase in the market share between the years 2012 from 31.2% employees to 52.7% in the year 2016.

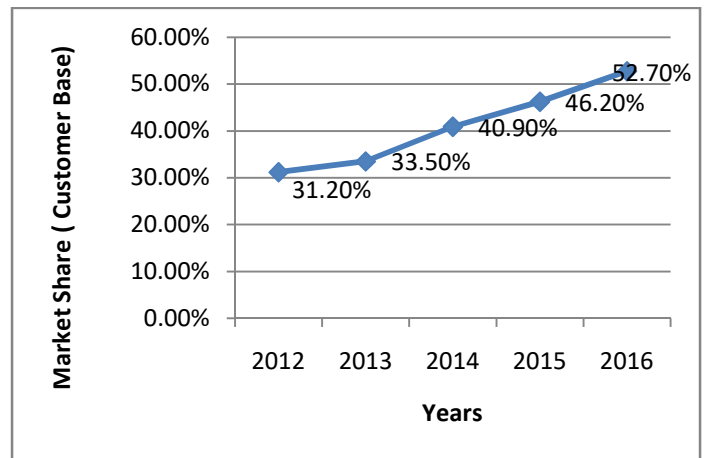


Figure 5 Market share of the SMEs

The study also sort to establish the rating on statements on the dependent variable on a likert scale from a range of strongly disagree to strongly agree. Please show the degree to which you concur or you do not concur with the statements regarding sustainable growth of SME. With regard to performance, majority of the respondents indicated an improvement in market share (79.5%). A further 82.1% of the respondents revealed an increase in revenue while 83.35% agreed that there is reliable cash flow. The finding

s also showed that 67.9% indicated an increase in both employee retention rate and business branches. The findings are presented in Table 3.

Table 3 Descriptive Statistics of Performance of SME

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean	Std Dev
The business has experienced an increase in the market share since its inception	3.80%	1.30%	15.40%	30.80%	48.70%	4.19	1.00
The business has experienced an increase in revenue since its inception	3.80%	3.80%	10.30%	33.30%	48.70%	4.19	1.03
The business has continued to experience a reliable cash flow	0.00%	3.80%	12.80%	24.40%	59.00%	4.38	0.85
The business has continued to experience a high employee retention rate	12.80%	3.80%	15.40%	34.60%	33.30%	3.72	1.31
The business's branches has increased over the years	12.80%	3.80%	15.40%	34.60%	33.30%	3.72	1.31
Average						4.04	1.10

Diagnostic Tests

The study conducted diagnostic tests to make sure that the supposition of classical linear regressions was not debased. Specifically, the diagnostic tests that were conducted included normality test, test of linearity, test of multicollinearity and test of Homogeneity Variance.

Normality Test

One-Sample Kolmogorov-Smirnov Test (KS) was carried out to assess the normality of the dependent variable. The Kolmogorov-Smirnov test is a non-parametric method that determines whether a sample of data comes from a precise distribution, such as normal, uniform, Poisson, or exponential distribution. The null and alternative hypotheses are stated below as follows:

Ho: The data is normally distributed (Not different from a normal distribution)

H1: The data is not normally distributed (Different from a normal distribution)

The rule is that if the p-value is greater than 0.05 (Not significant), Ho is not rejected and H1 is rejected, if the p - value is less than 0.05 (Significant), Ho is rejected and H1 is not rejected. The study findings revealed in Table 4.8 revealed that the p value is greater than 0.05 and hence the null hypothesis is not rejected. It is hence concluded that the dependent variable is normally distributed.

Table 4 Kolmogorov Smirnova Test of Normality

One-Sample Kolmogorov-Smirnov Test		
N		325
Normal Parameters a, b	Mean	4.368
	Std. Deviation	0.4198
Most Extreme Differences	Absolute	0.26

	Positive	0.166
	Negative	-0.26
Kolmogorov-Smirnov Z		4.68
Asymp. Sig. (2-tailed)		0.064
Test distribution is Normal.		
Calculated from data.		

In addition, a normal Quantile- Quantile (Q-Q) plots of performance was obtained showing that the line representing actual data for the dependent variable closely follows the diagonal representing normally distributed data suggesting a normal distribution as shown in Figure 7. The observed values were found to coalesce along the line of best fit, which implies that the data was normally distributed. Confirmation of normal distribution was a critical prerequisite for carrying out subsequent parametric statistical tests such as regression analysis.

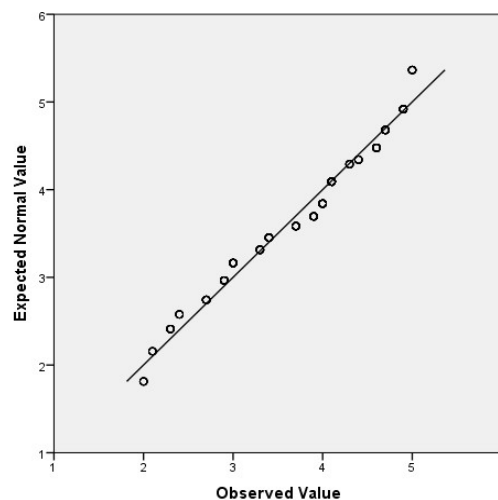


Figure 7 QQ plot for Normality

Test of Linearity

The study used a scatter plot for multiple regression computed using statistical package for social sciences version 21 to test for linearity and then examine the resulting plot for linearity. Linearity is shown by the data points being arranged along the fitted line to obtain the shape of an oval. The findings in Figure 8 reveal that the data was arranged along the fitted line in an oval shape and the R square of the variable in explaining performance was 0.517 indicating that the variables are linear and predict 51.7% of performance of SMEs.

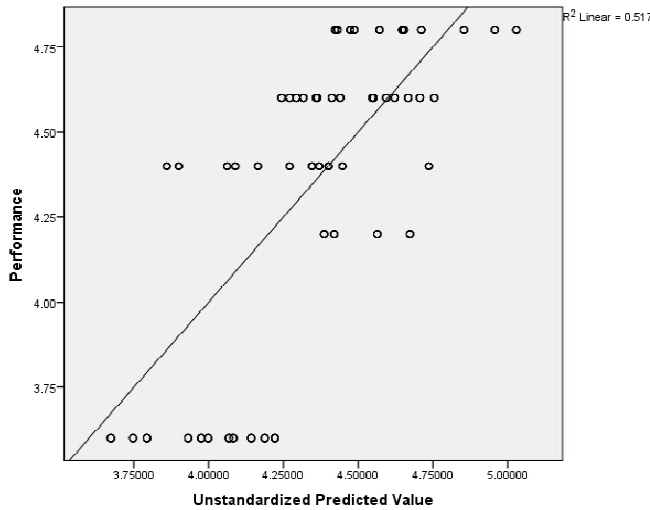


Figure 8 Scatter Plot for Linearity

Test of Multicollinearity

The study used Variance Inflation Factor (VIF) which was applied using the threshold of 10 for severe multicollinearity. In general, the typical acceptable values are VIF less than 10 and tolerance values (1 / VIF) values greater than 0.2. The findings in Table 8 reveals that the VIF values were less than 10 and tolerance values were greater than 0.2 hence there was no problem of multicollinearity. The use of an ordinary least square was therefore encouraged.

Table 5 Variance Inflation Factor Test of Multicollinearity

Collinearity Statistics		
Variable	Tolerance	VIF
Risk-taking	0.208	4.814

Dependent Variable: Performance

Test of Homogeneity variance

Homogeneity variance of the study variables was tested using Levene tests. Levene's test is an inferential statistic used to evaluate the sameness of variances for a variable calculated for two or more groups. It tests the null hypothesis that the population variances are not equal. Levene tests results are shown in Table 5. The Levene statistics significance values

are less than 0.05 when tested against the 5% level of significance hence the conclusion that there is no enough proof to claim that the variances are not equal.

Table 9 Levene's Test of Homogeneity

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Risk taking	6.431	4	320	0.000

V. CORRELATION ANALYSIS

The study used a correlation analysis to find out the relationship connecting risk taking and the performance of SMEs in Nigeria. A Pearson correlation was used since the data was discrete. A negative Pearson correlation value indicated negative association while a positive Pearson association value indicated a positive association. The potency of the association increases as the value approaches either -1 or +1. The correlation results were presented in Table 10 below.

Table 10 Correlation Analysis

Correlations		Risk - Taking	Performance
Risk taking	Pearson Correlation	.183**	0.006
Performance	Pearson Correlation	.240**	1
	Sig. (2-tailed)	0.000	
	N	325	325

VI. REGRESSION ANALYSIS

The study used a univariate linear regression model to examine the relationship between creativity and the performance of SMEs in Nigeria. The model summary results for the study variables are presented in Table 11. The results of the study indicated that Risk - Taking account for 24.8% of the variation in the performance of SMEs in Nigeria. This is indicated by an R-square value of 0.248.

Table 11 Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.498	0.248	0.245	0.3647

Predictors: (Constant), Risk - Taking

The ANOVA results of the for the study variables showed that the overall regression model of risk - taking and performance of SMEs in Nigeria was significant as indicated by F (106.246) statistic at 0.000 level of significance which was less than 0.05 significance level. This indicates that the overall model was statistically significant at 5% significance level. The results of the study are as shown in table 12.

Table 12 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	14.135	1	14.135	106.246	.000
Residual	42.972	323	0.133		
Total	57.107	324			

Dependent Variable: Performance
Predictors: (Constant), Creativity

This showed that risk-taking had a positive and insignificant influence on the performance of SMEs in Nigeria ($\beta = 0.013$, Sig = 0.773). This implies that practicing “wait and see” tendency to minimize risks, borrowing heavily to invest in

new business products, technologies, markets and services, employing a brave and open minded approach to achieve business goals, having a specific strategy that enables spread of business related risks, investing in high risk projects, unexplored technologies and take new products to new markets, entering of unknown new markets by the Entrepreneurs to grow businesses, commit a large portion of resources to ventures with uncertain outcomes growth in business leads to 0.013 unit effect on performance of SMEs in Nigeria. The findings agree with the findings of a study by (Muritala, Awolaja, & Bako , 2012) and revealed that SMEs are vulnerable to risks, such as business risks, funding and budgeting among others. Despite the necessity, many SMEs rarely carry out detailed risk assessment and management strategies.

Predictor Variables	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	0.013	0.353		0.038	0.970
Risk-taking	0.013	0.045	0.025	0.289	0.773

Dependent Variable: Performance of SMEs in Nigeria

VII. CONCLUSION OF THE STUDY

The study concluded that the effect of risk taking on the performance of SMEs in Nigeria was positive and insignificant. The study concluded that practicing “wait and see” tendency to minimize risks, borrowing heavily to invest in new business products, technologies, markets and services, employing a brave and open minded approach to achieve business goals, having a specific strategy that enables spread of business related risks, investing in high risk projects, unexplored technologies and take new products to new markets, entering of unknown new markets by the Entrepreneurs to grow businesses, commit a large portion of resources to ventures with uncertain outcomes growth in business positively influences the performance of SMEs in Nigeria. The study established that pro-activeness had a positive and significant effect on the performance of SMEs in Nigeria.

VIII. RECOMMENDATION

Risk-Taking

The study recommends the SMEs in Nigeria to practice “wait and see” tendency so as to minimize risks. The study also recommends the SMEs to borrow heavily so as to invest in new business products, technologies, markets and services. Moreover, the study recommends the SMEs to employ a brave and open minded approach so as to achieve business goals. The study further recommends the SMEs to ensure that they have a specific strategy so as to enable them spread business related risks. Furthermore, the study recommends the SMEs to invest in high risk projects, unexplored technologies and

taking of new products to new markets. There is also a need for the Entrepreneurs to enter into unknown new markets so as to grow their businesses. In addition, the study recommends the SMEs to commit a huge piece of resources to undertake with unsure results intensification in business.

REFERENCES

- [1]. Duro, K (2013). “Multiple Charges Stifle SMEs’ Growth”. Nation Newspaper, November18,
- [2]. Kothari, C. R. (2008). *Research methodology, research and techniques*. New Age International publishers. Second revised edition.
- [3]. Moses A.Y. (2015). Determinants of SMEs Growth: An Empirical Perspective of SMEs in the Cape Coast Metropolis Ghana
- [4]. Muritala, T. A., A. M. Awolaja & Y. A. Bako (2012). Impact of Small and Medium Enterprises on Economic Growth and Development. *American Journal of Business and Management*, 1(1), 18–22.
- [5]. Nunnally, J. C. (1978). *Assessment of Reliability*. In: Psychometric Theory (2nd ed.). New York: McGraw-Hill. pages 245-246
- [6]. Ogbuabor, J. E., Malaolu, V. A., & Elias, T. I. (2013). Small scale enterprises, poverty alleviation and job creation in Nigeria: Lessons from burnt bricklayers in Benue State. *Journal of Economics and Sustainable Development*, 4(18), 120 – 133.