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Risk Factors and Risk Management Strategies as Correlates of Profitability and Survival of Selected Small and Medium Enterprises (SMEs) in Nigeria

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Abstract
The study identified risks faced by SMEs. It assessed the use of four risk management strategies (diversification, collaboration, credit scorecard and insurance) by SMEs to manage their risks. The data used for the study was collected through interviews and questionnaire. Data collected was analysed through factor analysis, chi-square and MANOVA analysis. The study established that risk management is a major challenge faced by SMEs in Nigeria. The results show that credit scorecard was the most commonly used strategy by SMEs to manage their risks, followed by diversification and collaboration. Insurance was the least strategy used by SMEs to manage their risks. It also revealed that there is significance difference between risk management strategies adopted by SMEs to manage their risks. The implication for practice is that SMEs favour some risk management strategies over others; hence, SMEs should identify most suitable and effective risk management strategies to manage their risk exposures.
Keyword: Risk, risk factor, risk management strategies, SMEs, Nigeria

1. Introduction

Small and medium enterprises (SMEs) play important role in economy development of both developed and developing countries. SMEs constitute major part of enterprises in many countries. SMEs promote national development and create employment opportunities thereby contributing to the growth of Gross Domestic Product (GDP) in most countries (Ogechukwu, 2011; Peprah, Mensah & Akosah, 2016). The importance of SMEs has been acknowledged in African countries including Nigeria, Kenya, Malawi, Uganda, Ghana and Burkina Faso (Luper & Kwanum, 2012; Smit & Watkins, 2012; Akenroye & Aju, 2013; Kagwathi, Kamau, Njau & Kamau, 2014). SMEs in Nigeria have significant untapped growth potential because they contribute less than 2 percent of the nation's GDP (CBN, 2010).

SMEs are susceptible to several risks which may interrupt their operations and threaten their existence. Such risks can emanate from both internal and external sources (Smit & Watkins, 2012; Kagwathi et al., 2014). This implies that SMEs in Nigeria are also prone to risks. Risk management strategy consist of structured and coherent approach aimed at identifying, analysing and managing risk. Appropriate risk management strategies can be engaged by SMEs to manage risks associated with their operations. The study aimed at identifying and assessing SMEs risks exposures (risk factors) to enhance their survival and profitability. It identified risks faced by SMEs; and assess the usage of diversification, collaboration, credit scorecard and insurance by SMEs in Nigeria to enhance their survivability and profitability. The findings of the study are beneficial to SMEs, government and other stakeholders.

2. Review of Literature

2.1 Small and Medium Enterprises (SMEs) and their Importance

There is no universally accepted definition of SMEs; but, the definition of SMEs may be influenced by country specific legislation and geographical location of SMEs (Leopoulos, Kirytopoulos & Malandrakis, 2006; Smit & Watkins, 2012). SME can be defined based on certain criteria including, turnover, number of employees, profit, capital employed, available finance, market share and relative size of an industry. The National Council of Industry (NCI) (2001) categorised enterprises in Nigeria based on three criteria: size;

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number of employees; and time cost including working capital (excluding land). NCI (2001) categorisation of Nigeria enterprises indicated that enterprises that have between one and ten (1 - 10) employees with less than N1 Million total cost including working capital (excluding land) are micro enterprises; those enterprises with between eleven and thirty-five (11 - 35) employees and total cost including working capital (excluding land) of between 1 Million - less than 40 million are small enterprises; those enterprises with between thirty-six and one hundred (36 - 100) employees and total cost including working capital (excluding land) of between 40 Million - less than 200 million are medium enterprises; and those enterprises with between one hundred and one and above (101 and above) employees and total cost including working capital (excluding land) of between 200 million and above are large enterprises. Likewise, the Central Bank of Nigeria (CBN, 2005, 2017) defined SME as any enterprise with a maximum asset base less than N200 million (equivalent of about $1.43 million) excluding land and working capital, and with the number of staff employed not less than 10 (otherwise will be a cottage or micro-enterprise) and not more than 300 employees. This shows that the definition of SMEs provided by NCI (2003) and CBN (2005, 2017) are similar in terms of definition criteria. NCI (2003) categorised enterprises in Nigeria into four groups, namely: micro enterprises, small enterprises, medium enterprises, and large enterprises. For this study, the NCI (2003) definition of SMEs is adopted – i.e. small enterprises have between 10 – 35 employees and medium enterprises have between 36 – 100 employees. The study avoided both micro and large enterprises, because they are considered inappropriate for the study.

Survivability and profitability of SMEs in Nigeria is essential to ensure national economic growth, improved GDP, and creation of job opportunities. SMEs play vital roles in the development of Nigeria economy by way of employment creation, enhancement of local technology, output diversification, and large-scale industries forward integration (Ogechukwu, 2011; Luper & Kwanum, 2012). However, SMEs in Nigeria have significant untapped growth potential as they contribute less than 2 percent of the nation's GDP (CBN, 2010).

2.2 SMEs Risk Factors and Risk Management Strategies

Risk is associated with uncertainty. Risk may constitute an opportunity (favourable event) and threat (unfavourable event) (Makomaski, 2008; Ugwuanyi & Imo, 2012). However, there is a misconception that risk is a threat to business existence or unfavourable events (Subhani & Osman, 2011). Risks may impact a firm's objectives negatively thereby obstructing its operations and profitability (Hoyt & Liebenberg, 2011). SMEs in Nigeria are faced with several risks which threaten their existence and profitability. For the study, risk is viewed as a threat - from negative perspective. Hence, risk is considered an uncertainty of a firm's financial loss.

Profitability and survivability of SMEs are threatened by several risks. For this study, these risks are referred to as risk factors. Onugu (2005) identified ten problems faced by SMEs in Nigeria including: management, access to finance, infrastructure, government policy inconsistencies and bureaucracy, environmental factors, multiple taxes and levies, access to modern technology, unfair competition, marketing problems and non-availability of raw materials locally. Risks faced by SMEs may be operational or market related risks. It is, however, difficult to determine aggregate components of SMEs risks due to heterogeneity and difficulty of separating business owners from their businesses (Smit & Watkins, 2012). The risk management function of SMEs often resides with firms' owners' assessment of threats and opportunities to their businesses (Kagwathi et al., 2014; Peprah et al., 2016). Risk management activity includes: risk transfer - transferring of risk to another party; risk avoidance - avoiding of certain risks; risk reduction - reduction of negative consequence of risks; and risk retention - acceptance of consequences of certain risks (Hoyt & Liebenberg, 2011). Smit and Watkins (2012) argued that many SMEs owners and managers preferred avoiding risks rather than devising risk control methods. Risk management process involves risk identification, risk analysis, risk management /control and risk tracking/review, as shown in Figure 1 below.

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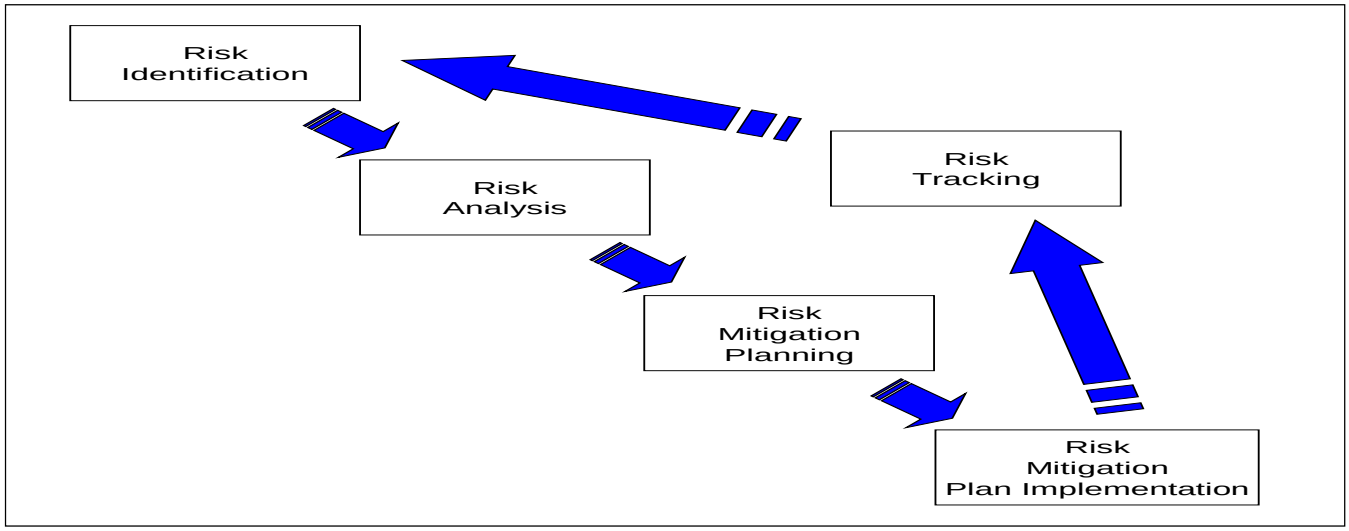
Figure 1: Risk Management Process



Source: United States Department of Defence (2015)

Risk management strategies available to SMEs include diversification, collaboration, insurance and credit scorecard (Qian, Khoury, Peng & Qian, 2010; Hao, Dong & Zhongfeng, 2011; Oyedijo, 2012; Cross, Rebele & Grant, 2016). The study focused on these four risk management strategies with an intention to assess the extent to which SMEs in Nigeria employ diversification, collaboration, credit scorecard and insurance as risk management strategies to enhance their survivability and profitability. These risk management strategies are discussed below.

2.3.1 Diversification

Diversification is a business development strategy that enable an organisation to undertake additional lines of business which are different from the current products, services and markets. It involves running of more than one businesses as a firm's risk management strategy. This approach is based on the saying that one should not put all his eggs in one basket. Reasons why firms diversify, amongst others, is to: grow business; ensure efficient utilization of existing resources and capabilities; enhance a firm competitive capability; and facilitate better use of surplus cash flows. Carter (2003) asserted that SMEs use diversification to some extent, but their problem lies with due observance of diversification process. Kagwathi et al. (2014) also noted that some SMEs owners run more than one businesses as a diversification strategy. SMEs owners and managers can improve their firms' operations through diversification (Chakrrti, Singh & Mahmood, 2007; Dastidar, 2009).

It might be difficult for some SMEs to diversify (Hao et al. 2011; Oyedijo, 2012); but, diversification could improve an enterprise competitive advantage (Hakrabati, 2007; Qian *et al*., 2010). For diversification to be effective, it must pass three tests: (1) attractiveness test - diversification must be directed towards actual or potentially-attractive industries; (2) cost of entry test - the cost of entry must not capitalize all future profits; and (3) better-off test - synergy be achieved (Grant, 2013; Hill & Jones, 2014). Recent studies have shown that the financial performance and sales growth of firms in Nigeria are significantly affected by the mode of diversification engaged (Hao et al., 2011; Oyedijo, 2012). This implies that diversification is a risk management strategy suitable for managing risks associated with SMEs; hence, the study explored the use of diversification as a risk management strategy by SMEs in Nigeria.

2.3.2 Collaboration

Collaboration entails mutual working arrangement whereby SMEs work together to achieve common business purpose. Collaboration should be based on sincerity, openness, knowledge sharing and accountability on the part of participating enterprises (Grant, 2013; Hill & Jones, 2014). Collaboration could

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improve joint operation among SMEs in Nigeria to ensure better and improved business operations. Collaborative efforts among SMEs can also promote technological development, advanced skill, and improved healthy competition among SMEs. Cross et al. (2016) identified three types of collaborative resources which are beneficial to firms: informational, social, and personal resources. Cross et al. (2016) emphasised that informational resources are knowledge and skills which can be recorded and passed on; social resources entail awareness, access, and position in a network; and personal resources include time and energy invested in collaborative initiatives. Government can also encourage collaboration between firms by formulating enterprises collaborative framework. Collaboration can, therefore, be used as a risk management strategy by SMEs in Nigeria to manage their risks; hence, the study explored collaboration as a risk management strategy engaged by SMEs in Nigeria.

2.3.3 Credit Scorecard

SMEs play important role in economic growth; yet SMEs have limited access to formal credit in many developing countries (Gbandi & Amissah, 2014; Taiwo, Falohun & Agwu, 2016). Credit is an essential financial resources requirement for production of goods and services which facilitate the efficiency of other production factors. Considering the importance of credit in business growth, particularly SMEs; there is a limited access to financial resources available to smaller enterprises compared to larger organisations (Ahiawodzi & Adade, 2012). To ameliorate the problem of limited access to financial resources by SMEs in Nigeria, the Federal Government of Nigeria developed strategies aimed at providing credit facilities to SMEs (Ujah, 2013; Daily Trust, 2014). Notwithstanding SMEs credit drive efforts by the government, Nigeria is ranked 145th country in terms of ease of doing business (World Bank, 2017). In terms of ease of getting credit, Nigeria is ranked 6th in 2017, which is a significant improvement compared to 38th and 23th position in 2012 and 2013 respectively (World Bank, 2017).

Access to credit by SMEs can assist in growing SMEs in Nigeria. Fragmentation of credit market and borrower ability to repay granted credit facility impact availability of credit facility to businesses. The fragmented nature of the Nigeria credit market is defined by its formal and informal sources. Credit scorecards are tools suitable for assessing and predicting the behaviour of credit facility applicants based on their previous performance and proposed credit position (Siddiqi, 2006). Scorecards can also be used to predict the performance of existing accounts, based on past experience of accounts with similar characteristics. One major benefit of scorecards strategy is its suitability for quantifying risks which permits precise targeting of portfolio approval rates, loss rates, and pricing which help lenders compensate for the risk taken. The practical implication is that proper use of credit scoring by credit facility institutions could improve SMEs access to credit in Nigeria; thereby matching the risk and performance of enterprises to reduce credit risks among SMEs and SMEs lenders. This implies that credit scorecard is a valuable risk management strategy to SMEs in Nigeria. Hence, the study assessed the use of credit scorecard as a risk management strategy by SMEs in Nigeria.

2.3.4 Insurance

Insurance is another risk management strategy available to SMEs in Nigeria. Insurance is a risk transfer mechanism through which enterprises can reduce negative financial consequences of an uncertain event or possible financial loss; thereby reducing the impact of financial loss on SMEs. Insurance is a risk transfer mechanism that facilitate shifting the cost of a risk away from he (insured) who runs it to an external party (insurer) in exchange for payment of premium (Kaye, 2009; Fadun, 2013). Insurance practice, amongst other, is based on pooling of risk, risk transfer, and law of large numbers. Pooling of risk entails grouping of homogenous exposures to provide an accurate prediction of future losses; while risk transfer entails shifting of risk from the insured to the insurer (Mutenga & Staikouras, 2007). In addition, insurance works on the basis of the law of large numbers. Law of large numbers advocates that as the number of participants gets very large, the average outcome approaches (Rejda, 2011; Fadun, 2013). Insurance can be used by SMEs to manage their risks; hence, the study assessed the use of insurance as a risk management strategy by SMEs in Nigeria.

2.4 Hypothesis Formulation

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Having described diversification, collaboration, credit scorecard and insurance; we posed the hypothesis that: There is no significance difference between risk management strategies adopted by SMEs in Nigeria to manage their risks (risk factors).

3. Methodology

SMEs in Nigeria are the target population of the study; but, the study focused on SMEs within Lagos Metropolis due to logistics reasons. The study adopted descriptive design due to technicalities involved in data collection and homogeneity of SMEs operations. The data used for the study was collected through interviews and questionnaires. Information on SMEs risk factors was collected through interviews of 60 SMEs managers, including SMEs owners. SMEs risk factors consist variables used for factor analysis as shown in Table 2. 120 copies of a structured questionnaires are also administered to 120 enterprises; but, only 84 duly completed questionnaires were retrieved. This represents 70% response rate, which is reasonable for the intended analysis. The questionnaire consists of three sections. The section one of the questionnaire focused on respondents bio data; section two focused on types of risk faced by SMEs; and section 3 focused on risk management strategies used by SMEs to manage their risks. The study was a cross sectionalised as it was undertaking between November 2016 and October 2017. SMEs targeted include general retail shops, cosmetic and beauty shops, transporters, private schools, restaurants, and agribusinesses. The data collected was analysed through factor analysis, chi-square, and MANOVA.

4. Results

4.1 Background Analysis

The study focused on four risk management strategies (i.e. diversification, collaboration, credit scorecard and insurance) suitable for managing SMEs in Nigeria. Closer examination of the findings revealed that that about 68% of enterprises engaged had been in existence for less than six years. This shows that they were relatively new and possibly may not have used most of the risk management strategies being considered. This may also be the reason why majority of SMEs engaged for the study have not used most of the risk management strategy being considered, as they are still new in business. Only 19% had been in existence for over ten years, which may be using most of the risk management strategies being considered. Analysis based on number of employees employed revealed that most of the enterprises fit in the category of small enterprises, which employ up to eleven people while only 23% qualify as medium enterprises. Analysis based on initial capital employed indicated that majority of enterprises (34%) had an initial starting capital of between 1 million and less than 40 million. Only 11% of enterprises had between 40 Million and less than 200 million as their starting capital. Further analysis on source of initial capital showed that 68% sourced the money from their personal savings, 25% from family and friends while only 7% sourced their capital from financial institutions. This is an indication that access to credit facilities is a major challenge among small and medium enterprises in developing countries, particularly from financial institutions. Moreover, the analysis is consistent with findings of recent studies on access to credit facility by SMEs in Nigeria (Gbandi & Amissah, 2014; Taiwo, Falohun & Agwu, 2016).

4.2 Factor Analysis

Risk factors collected through interviews are analysed in this section. In the context of the study, data collected from SMEs managers and owners regarding risks associated with SMEs operations are viewed as SMEs risk factors. These risk factors constitute variables used for factor analysis. Factor Analysis is a multivariate statistical data/variable reduction technique suitable for provide construct validity evidence; and establishing underlying dimensions between measured variables and constructs (Child, 2006; Matsunaga, 2010; Yon & Pearce, 2013). Onugu (2005) identified ten problems of SMEs in Nigeria including: management, access to finance, infrastructure, government policy inconsistencies and bureaucracy, environmental factors, multiple taxes and levies, access to modern technology, unfair competition, marketing problems and non-availability of raw materials locally. For this study, risks faced by SMEs are collected through interview of 60 SMEs managers/owners on risks associated with SMEs

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operations in Nigeria. These risks are viewed as SMEs risk factors, and they constitute variables used for factor analysis in the study.

Factor analysis was conducted based on identified risks faced by SMEs in Nigeria. This is necessary to ascertain the appropriateness of variables (risk factors) captured. Tables 1 and 2 show risk factors captured (variables), communalities test, description of variables, factor loadings, explained percentage (%) variance and categorisation of factors used for the study. Factor loadings represent how much a factor explains a variable in factor analysis. Bartlett's test of sphericity was undertaken to test the hypothesis to ascertain the appropriateness of SMEs risk factors and ensure that variables engaged are uncorrelated. KMO and Bartlett's Test of Sphericity are used to measure sampling adequacy and ratio of variable analysis. The approximate chi-square statistics was 1222.891 with 1029 degrees of freedom, which was significant at the 0.05 level. The values of KMO statistic (.452) is just slightly less than 0.5. Hence, the null hypothesis (that risks correlation matrix was an identity matrix) was rejected via the Bartlett's test of sphericity (Table 1).

Table:1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.452
Bartlett's Test of Sphericity	Approx. Chi-Square	1222.891
	df	1029
	Sig.	.000

Source: The Researcher's Analysis

In addition, factor analysis was conducted using data collected 84 duly completed questionnaires, out of the 120 questionnaires administered during the study. Using Eigen values greater than 1.0, total explained variance, and factor loadings greater than 0.45 as criteria for identifying meaningful risks (Nunnally & Bernstein, 1994); 15 categories of risks were identified based on the forty-four initial variables used for the study, as shown in Table 2. These categories of risks constitute about 81% of total variance explained through factor analysis. The Scree plot also supported the extraction of the fifteen different types of risks. The rotated factor matrix of the 15 factors is deemed significant for this study because the overall factor loading is greater than 0.45 (Table 2). Varimax with Kaiser Normalization rotation method, which allows items sorting from the highest loading to the lowest, was used. The rotated matrix results were used to identify major risks faced by SMEs in Nigeria.

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Table 2: Risk Factors (Variables) Analysis

Variable	Description of Variables	Factor Loading	Explained (%) Variance	Factor Category
VAR00001	Skilled employs are not easily available	0.780	4.661	Technical skills risks
VAR00002	High cost of engaging new technology reduces firm profitability	0.652		
VAR00003	Retention of our trained employee is difficult	0.459		
VAR00004	Too many competitors always lead to downward trend in prices of goods/services	0.824	4.261	Competition risks
VAR00005	Location of my business is not conducive for customers	0.519		
VAR00006	Power supply is always interrupted	0.866	3.711	Interruption risks
VAR00007	Robbery attack in the premises is a frequent occurrence	-0.528		
VAR00008	Theft by employees and customers is a common problem	0.822	6.070	Operational-economic risks
VAR00009	Frequent price fluctuation affects sales volume substantially	0.671		
VAR00010	Lack of full commitment to duty by employees is a big problem	0.639		
VAR00011	High inflation levels reduce profit margin greatly	0.592		
VAR00012	Economic growth in Nigeria negatively impact business activity	0.465		
VAR00013	Limited ways of raising funds prevent expansion of business operations	0.814	6.828	Capital acquisition risks
VAR00014	Exchange rates fluctuation greatly affect importation and export in business	0.899		
VAR00015	High interest on loans have greatly hindered access to additional capital	0.697		
VAR00016	Collaterals demanded by banks are not readily available	0.539		
VAR00017	Business registration fee is a too high	0.801	5.619	Regulatory and compliance risks
VAR00018	Annual licence renewal is too expensive	0.7722		
VAR00019	Maintaining set standard by regulating agency is difficult	0.521		
VAR00020	Lack of technological expertise by management results to loss of profit	0.770	5.841	Customer relations risks
VAR00021	Customer retention is a major concern to business	0.622		
VAR00022	Street hawking greatly reduce number of customers to my business	0.550		
VAR00023	Debt collection from customers is a big problem	0.449		

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VAR00024	Lack of product variety limits the number and types of customer	0.550		
VAR00025	Threat of terrorism to business is likely	0.816	4.841	Intimidation risks
VAR00026	High level of debts to financial institutions prevents further borrowing	0.730		
VAR00027	Business promotion cost is very high	0.719	5.055	Inventory risks
VAR00028	Timely delivery of goods is a big challenge	0.723		
VAR00029	Unreliability of suppliers of goods	0.580		
VAR00030	Poaching of employees by other business is a common trend	0.841	4.730	Employee loss risks
VAR00031	Sales turnover is always below projections	0.759		
VAR00032	Technology used in business gets outdated quickly	0.711	4.936	Continuity risks
VAR00033	Past failure in business reduces confidence to diversify	0.647		
VAR00034	Loss due to death of trained employees poses a business challenge	0.569		
VAR00035	Big firms take most of my potential customers	0.671	5.346	Branding risks
VAR00036	Too much money is spent on attracting and retaining customers	0.638		
VAR00037	Building a good name for business is a big challenge	0.630		
VAR00038	Access to global markets through the internet has reduced demand for my products	0.802	5.630	Global-view risks
VAR00039	My lack of exposure to global markets hinder expansion of my business	0.726		
VAR00040	Natural disasters can impact business negatively	0.825	4.861	Crisis risks
VAR00041	Loss of goods due to accidents on transportation can affect business	0.639		
VAR00042	Availability of alternative goods reduces demand for my products greatly	0.601		
VAR00043	Overdependence on business owner terminates the business in his/her absence	0.720	4.614	Stability risks
VAR00044	Political instability threatens closure of business	0.680		

Source: The Researcher's Analysis

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4.3 Risk Management Strategies Analysis and Hypothesis Testing

SMEs risk management strategies analysis is undertaken in this section. Data collected on the use of risk management strategies by SMEs in Nigeria is presented in Table 3.

Table 3: Risk Management Strategies used by SMEs

Strategies		**Adoption**		**Total**
		Yes	**No**	
Diversification	Count	37	47	84
	Expected Count	38.5	45.5	84
	% Within strategy	44.05	55.95	100%
Collaboration	Count	38	46	84
	Expected Count	39.5	44.5	84
	% Within strategy	47.02	52.98	100%
Insurance	Count	32	52	84
	Expected Count	38.5	45.5	84
	% Within strategy	45.83	54.17	100%
Credit Scorecard	Count	41	43	84
	Expected Count	31.5	52.5	84
	% Within strategy	37.5	62.5	100%

Source: The Researcher's Analysis

The results show that credit scorecard was the most commonly used strategy followed by diversification and collaboration (Table 3). The results indicated that insurance was the least strategy used by SMEs to manage their risks (Table 3). The chi-square (X^2) test result was 9.984, N=84, p = 0.19 (Table 4). Based on the results as p value = 0.019 compared to ($p < 0.05$) we rejected the null hypothesis and concluded that there is significance difference between risk management strategies used by SMEs in Nigeria to manage their risks. The implication is that the choice strategy used by SMEs in Nigeria depend on the range of available risk management strategies.

Table 4: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.984[a]	3	.019
Likelihood Ratio	9.832	3	.020
N of Valid Cases	336		

Source: The Researcher's Analysis

Table 4 depicts the relationship between risk management strategies used by SMEs and their performance and growth. The p values on the multivariate test, as shown in Table 5, are slightly above the p-value of 0.05. This shows that the there is no significance relationship between risk management strategy used, growth and performance of enterprises. Factors used to operationalise the aspects of performance and growth are number of customers, increased profit, employees' qualification, adoption of modern technology, and reduction of operation costs.

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Table 5: Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Noncent Parameter	Observed Power[b]
Intercept	Pillai's Trace	0.931	140.872[a]	7.000	72.000	.000	986.109	1.000
	Wilks' Lambda	0.069	140.872[a]	7.000	72.000	.000	986.109	1.000
	Hoteling's Trace	13.699	140.872[a]	7.000	72.000	.000	986.109	1.000
	Roy's Largest Root	13.699	140.872[a]	7.000	72.000	.000	986.109	1.000
VAR00001	Pillai's Trace	0.392	1.58	21.000	222.000	.055	33.203	.945
	Wilks' Lambda	0.650	1.595	21.000	207.000	.053	38.901	.939
	Hoteling's Trace	0.474	1.598	21.000	212.000	.052	33.567	.948
	Roy's Largest Root	0.294	3.103[c]	7.000	74.000	.006	21.722	.925

Computed using alpha = .05
Source: The Researcher's Analysis

The MANOVA analysis on tests of between-subjects' effects for combined independent variables (risk management strategies) were all insignificant except on the variable on increase of customers, which was significant with p-value equal to 0.007, which is less than significance level of 0.05 as shown in Table 6.

Table 6: Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Noncent Parameter	Observed Power[b]
Corrected Model	Profit	14.227[a]	4	3.556	1.911	.119	7.670	.558
	Technology	9.281[c]	4	2.320	1.466	.217	5.676	.435
	Customers	25.797[d]	4	6.448	3.771	.006	15.088	.877
	Cost reduction	8.496[e]	4	2.121	.981	.426	3.901	.295
	Qualified employee	7.969[f]	4	1.990	1.068	.379	4.290	.319
	Number of business	10.525[g]	4	2.630	0.972	.428	3.901	.295
	Continuity	6.520[h]	4	1.630	1.051	.384	4.207	.312

R Squared = .090 (Adjusted R Square = .043); and Computed using alpha = .05
Source: The Researcher's Analysis

4.4 Discussion

Ability to manage risk is a major challenge of SMEs owners and managers in developing countries, including Nigeria. There are several risks faced by SMEs depending on peculiar features of enterprises such as: size of enterprise, amount of capital employed, quality and number of employees, duration or years of existence, and levels or extend of business operations. This study identified 15 major categories of risks faced by SMEs in Nigeria. These categories of risks constitute about 81% of total variance explained through factor analysis. Capital acquisition risk rated as the greatest challenge of SMEs contributed 6.828 % of the total variance explained. This is consistent with the findings of Smit and Watkins (2012) and Kagwathi et al. (2014) studies. The implication for practice is that this type of risk requires further attention

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from financial institutions and governments of developing countries. In Nigeria for instances, several SMEs financing scheme have been established by the government and private sector to reduce capital acquisition and capital market risks.

SMEs owners and managers also rated operational-economic risk quite highly contributing 6.070% of total variance explained. The implication is that economic instability and unpredictable growth situations in the country has impacted negatively on SMEs in Nigeria. Internal inefficiencies such as theft by employees and lack of commitment also exposed SMEs to higher risk. Internal inefficiency can be caused by inadequate employees training, low salaries, and inadequate or ineffective employees motivation. Good customer relationship is also useful to SMEs in attracting more clients and retaining existing customers. SMEs are exposed to customer relations risks, which impact on their ability in relation to their customers, accounted for 5.841% of the total variance explained. The implication for practice is that customer relationship management is paramount in running successful businesses today, which can be achieved through acquisition of necessary management skills.

Valuable managerial skills useful to SMEs managers include: conceptual, human and technical skills (Jones & George, 2013). The market risk, which impact on enterprises ability to brand their businesses, also accounted for about 5.5% of total variance explained. Good businesses have the capacity to brand themselves thereby enhancing their ability to access segmented and targeted market such that their customers can easily differentiate their products. Many enterprises are lacking in this regard. Many enterprises are also lacking with regard to global view of business (global-view risks), vis-à-vis their understanding of global trends, accounted for 5.630% of total variance. This may be explained by their low levels of exposure, ignorance and inability to apply modern technology in their business. SMEs inability to establish efficient supply system (inventory risk) and crisis events management (crisis risk) accounted for 5.055% and 4.861% of total variance explained respectively. This may be attributed to low working capital and traditions of assuming risks by many enterprises. There are rules and procedures regulating the Nigeria business environment; and the study's findings show that SMEs regulatory and compliance risks accounted for 5.619% of the total variance explained.

Regulatory and compliance risks have serious implication on existence and performance of SMEs in Nigeria. Furthermore, risk arising from competition and interruption risk was perceived not to be major risks faced by SMEs in Nigeria as these risks accounted for 4.261% and 3.711% respectively of total variance explained. This is a bit of surprise, as one would expect that competition should constitute a major risk to SMEs in view of the dynamism of the modern business environment. This is contrary to popular opinions that business environment is very unsafe among SMEs. In addition, robbery by violence received negative loadings which indicated that robbery risk is considered to be a minor risk among SMEs. This is reasonable as the level of fund and valuable by many SMEs is often small. Continuity risks, stability risks, and loss of employees' risks are considered to be relatively low risks faced by SMEs.

5. Conclusion

The study has identified SMEs risk factors. It assessed the use of four risk management strategies (diversification, collaboration, credit scorecard and insurance) by SMEs to manage their risks. The results indicated that the major risks faced by SMEs in Nigeria include: regulatory and compliance risks; inventory risk; crisis risk; global-view risks; market risk; customer relations risks; intimidation risks; operational-economic risks; capital acquisition risks; branding risks; inventory risks; and continuity risks. The results show that credit scorecard was the most commonly used strategy by SMEs to manage their risks, followed by diversification and collaboration. Insurance was the least strategy used by SMEs to manage their risks. This is consistent with findings of Smit and Watkin (2012) and Kagwathi et al. (2014) which reported less use of insurance among SMEs in South Africa and Kenya respectively. It also revealed that there is significance difference between risk management strategies adopted by SMEs to manage their risks. The implication for practice is that SMEs favour some risk management strategies over others; hence, SMEs should identify most suitable and effective risk management strategies to manage their risk exposures.

The following recommendation are put forward:

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1. SMEs should engage a combination of strategies based on their peculiar features in order to ensure effective risk management of their risk exposures.
2. Government and private sector should joint work together to improve SMEs access to credit.
3. Government should also encourage improved collaboration between firms by formulating enterprises collaborative framework.
4. The government should also create conducive business environment by improving infrastructure and formulate SMEs friendly policies
5. Future studies may focus on determination of factors influencing the choice of risk management strategies by enterprises; and identify why insurance is the least applied strategy among SMEs.

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