External Environmental Factors and Failure of Small and Medium Enterprises in Kano Metropolis

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Abstract

This study examines the relationship between external environmental factors and failure of SMEs in Kano Metropolis, using samples of failed SMEs in Kano metropolis. Questionnaire was used to collect primary data from the sampled failed SMEs using snow ball method. The data was analyzed using multiple regression technique and descriptive statistics in order to establish the significance of the estimated relationships. The outcome reveals that external environmental factors have significant impact on the failure of SMEs in Kano metropolis, and inadequate infrastructure (II) is the major contributing factor to the failure of SMEs in the Kano; followed by market competition (MC), market demographics (MD), and financial inadequacy (FI). In order to reduce SMEs failure and achieve significant positive contribution of SMEs sub-sector to the economic development of the state, the study recommends that government and relevant stakeholders should create an enabling business environment with adequate infrastructures, fear competition, sound market places and financial support.

Keywords: SMEs, External factors, Failure, Kano.

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Ethical: This study follows all ethical practices during writing.

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1. Introduction

SMEs sub-sector is an integral component of economic development and a key element in the fight against poverty and unemployment in both developed and developing economies. They are veritable vehicles in accelerating sustained growth and economic transformation in developed and developing economies, Sitharam and Hoque (2016). SMEs provide an effective means of stimulating indigenous enterprises, enhancing greater employment opportunities per unit of capital invested and aiding the development of local technology. Consequently, the performance of SMEs sub-sector is closely associated with the performance of the nation.

The argument that small businesses are the vehicle for rapid industrialization and development of any nation. They also account for 70% of national industrial employment if the threshold is set at 10 – 50 employees, and contribute 10% of manufacturing output. Opines that 75% of the private sector in Nigeria is dominated by SMEs, reiterating that the Organized Private Sector (OPS) is the engine of growth and creator of wealth and employment.

Kano state is the major commercial center of Northern Nigeria, with large concentration of SMEs, despite the increasing number of SMEs, SMEs in Nigeria have not performed creditably well; hence, they have not played the expected role in the economic growth and development of the country. This may be because most of these SMEs in Nigeria failed while some that still exist are not doing well due to one reason or the other (Basil, 2003; Fabayo, 2009, Abeh, 2017). In 2014 the department of industries in the Ministry of Commerce and Industries Kano state conducted a survey of industries in three industrial estates namely Sharrada, Challawa and Bonmai industrial estate; tag Kano State Industrial Survey 2014, the survey reported a total of 378 industries in the three industrial estates, out of which 233 industries are not operational. The rate at which businesses fail and fold up in Nigeria is alarming, as business failures have an adverse effect on the economy, resulting in losses of incomes, employment and other difficulties to the entrepreneur.

The success or failure of businesses depends on both internal and external business environment in which it operate, thus, the external environmental factors are those that are generally out of the control of the firm such as infrastructure, external sources of finance, the industry, technological changes, economical, and socio-cultural factors, including the external stakeholder such as competitors, creditors, customers, government. Observes that there is an increased rate in business failure, as many new businesses rarely survived their first year in operation and many SMEs are closed down every year. The research on small business development has shown that the rate of failure in developing countries is higher than in the developed world (Arimatse, 2006). Therefore, the reason for the increased failure rate of SMEs in developing countries like Nigeria is worth investigating.

This study notes that in Nigeria and Kano in particular, such research effort on failed SMEs has not yet been made, thus, this study investigates whether external environmental factors contribute to SMEs failure in Kano metropolis, in order to achieve the stated objective of the study; the following formulated hypothesis is proposed for testing:

1.1. Hypotheses

External environmental factors do not play significant role in SMEs failure in Kano metropolis.

This research work is organized into five sections: section one is this brief introduction, followed by the literature review, methodology, result and discussion and final section which is conclusions and recommendations.

2. Literature Review

Small and Medium Enterprises (SMEs) are very heterogeneous in nature. They are found in a wide array of business activities worldwide. The definition of SMEs varies by country and is usually based on employment, capital investment, sales turnover, accessibility, and output and in some cases, a blend of some or all of these criteria. Due to its ease of collection, the most commonly used variable (criteria) is the number of employees. The criteria adopted in the recent Micro, Small and Medium Enterprises (MSMEs) collaborative survey in Nigeria is that; Micro Enterprise is a venture with less than 10 employees, Small Scale Enterprises is one that has between 10–49 employees Medium, Scale Enterprises: 50–199 employees, and Large Scale Enterprises 200 and above employees. This study adopted these criteria in identifying the SMEs. Also, Oshagbemi (2003) notes that one of the major criteria that have been used in the definition of SMEs in Nigeria is the number of employees.

According to Ogundele (2007) SMEs represent 90% of the enterprises in African, Caribbean and Pacific (ACP) countries. A survey of industries in three industrial estates namely Sharrada, Challawa and Bonmai industrial estates; Kano State Industrial Survey 2014, the survey reported a total of 378 industries in the three industrial estates, out of which 233 industries are not operational. The role of SMEs is even more obvious and conspicuous to the degree that they dominate economic activities, Lutfim et al. (2018). They are expected to provide the driving force for the industrialization and overall development of the Nigerian economy (Akoja and Hasret, 2010; Abeh, 2017) but their performance fall below expectation due to high rate of failure experience in the sector.

The environment at its various levels of aggregation (global, regional, sector, enterprise), is the underlying determinant of the performance of businesses, Francis (2000). The business environment consists of the factors that either help or hinder the development of business. Business grows and prospers in a healthy environment, while the wrong environmental conditions, in contrast, lead to business failure, loss of jobs, and a low standard of living and quality of life. Therefore understanding the external environmental factors that may lead to business failure is paramount to organizational effectiveness and efficiency. The external environment is also called the operating environment and comprises external stakeholders, Mika (2003).

The negative effect of external environmental factors cause business failure and consequently leads to an adverse effect on the economy. The failure rate in small and medium businesses in Nigeria is a matter of concern. A high failure rate is a huge negative for an economy, especially a developing economy with limited capital such as Nigeria (Okpara and Wynn, 2007). This situation however subsists in Nigeria despite relevant government policies.
and programmes to aid enterprises. Sunday (2008) observed that Nigerian business organizations are confronted with myriad of problems.

There are diverse opinions among previous studies concerning the factors contributing to firm failure, a large number of factors seem to be associated with firm failure. The theory of multiple origins or causes of business failure as a perspective for explaining small business failure emphasises problems such as small business management difficulty, internal organizational environment issues and external business environmental problems, as Barker (2005) and Stanger (2010) confirm, this theory provides the theoretical validity for the conduct of this research. This study investigates whether; inefficiencies in infrastructure, market demographics, inadequate funding and market competition contribute to SMEs failure in Kano metropolis.

According to Basil (2005) other challenges which SMEs face in Nigeria includes: irregular power supply and other infrastructural inadequacies such as water, roads etc. Sunday (2008) states that the external difficulties facing SMEs in Nigeria include infrastructural problems. According to Ayinla (2007) and Okpara and Wynn (2007) some of the obstacles to small business development in Africa include: poor location and poverty among others, the issue of poverty here relates to consumers’ income. Poor external market conditions, including stiff competition, slow market growth, and small market size, have been found to be major factors associated with firm failure not only by entrepreneurs but also by venture capitalists (Syamala et al., 2017).

Fatoki (2014) find that some of the primary reasons for the discontinuance of new businesses in South Africa include too much competition and a lack of customers. Basil (2005) in his study identifies many factors as the possible causes or contributing factors to the premature death of SMEs, which include: inability to procure the right plant and machinery, cut-throat competition, lack of official patronage of locally produced goods and services. Inadequate finance is a critical problem which has a huge impact on the growth of SMEs and even poses threat to their survival. Bouazza et al. (2015) conclude that inability to access financial recourses/ credit from banks and suppliers is a critical failure factor of SMEs. Find that the primary reasons for the discontinuance of new businesses in South Africa are financial reasons. Respondents said it was hard for them to get access to external fund, and it is clear that factors like interest rates, and the state of economy would affect all ventures.

From the above review, empirical examination of several studies made in the preceding sections indicates that there is vast literature on business failure, there by placing this study within the framework of existing literature. But this study notes that the results of most of these researches conducted have not been all conclusive in terms of environmental factors determining SMEs failure. This study also found that in Nigeria, such research effort on failed SMEs has not yet been made. Therefore, this study aims at investigating the external environmental factors determining SMEs failure in Kano metropolis through study of failed SMEs in order to fill this gap in the literature.

3. Methodology

This research investigates the influence of external environmental factors on failure of SMEs in Kano metropolis. The research is descriptive-explanatory in nature, so that the information collected can be statistically inferred on the population. The study also focuses on studying the business failure problem in order to explain the relationship between external environmental factors and SMEs failure in Kano metropolis. The study adopts survey research strategy using questionnaire technique to examine the external environmental determinants of failed SMEs in Kano metropolis from 2000 to 2018.

The research uses primary data collected using questionnaire administered on the target respondents i.e. owners/managers of failed SMEs in Kano metropolis. Multiple regression statistics and descriptive statistics were used to analyze the data collected. The study uses four selected external environmental factors (i.e. inefficiencies in infrastructure, market demographics, financial inadequacy and market competition) for analysis in order to investigate the role of these selected environmental factors in the failure of SMEs in Kano metropolis. The study uses these factors as variable for analysis and each of these factors is measured with three indicators as defined below:

a) Inadequate Infrastructure (II):- Relates to indicators such as; poor access road, inadequate water supply, and power supply.

b) Market Demographics (MD):- Relate to indicators such as; size of the market, population in the area, and consumer income.

c) Market Competition (MC):- Relates to indicators such as; non-patronage due to competitors, competitors employs better technology, and they have more access to advertisement facilities.

d) Financial Inadequacy (FI):- Relates to indicators such as; lack of access to external fund, high interest rate, and lack of collaterals.

The population of interest to this study is all SMEs situated in Kano metropolis that failed from 2000 to 2018, and to best of our knowledge there is no statistics of failed SMEs in Kano state, no survey conducted on failed SMEs and there is no study conducted on failed SMEs. The 2014 industrial survey conducted at Sharada, Challawa and Bompai industrial estates in Kano state revealed that majority of those industries are medium and large scale industries. Therefore since there is no existing database from which to clearly determine the population of failed SMEs in Kano metropolis, the study deals with an infinite or unknown population. Since population of this study is unknown, therefore the sample size was determined using a formula for determining sample size for unknown and large (infinite) population as follows:

\[ n = \frac{C^2 \times S(S)}{E^2} \]

We arrive at the 150 sample size using the 1.96 Z-score (95% confidence level), 50% standard deviation and 8% margin of error (sampling error).

Since there is no record of failed SMEs that will guide us in tracing and locating the owners or managers of failed SMEs, in order to make initial contact, the study created a database of failed SMEs containing business names and location addresses using NBS past (previous) and present (updated) records of existing SMEs in the state, that SMEs that appear in previous record and did not appear in the updated record is considered as failed
SME, which guides us during questionnaire administration. The owners or managers were identified by “tracing and locating approach” using snowball method. This is done by visiting the physical location of the failed SMEs to acquire information about owners/managers.

For the purpose of testing the hypothesis, the study uses multiple regression models. The independent variables are the four selected external environmental factors, while the dependent variable that is SME failure represented by life duration/survival time of the sampled failed SMEs which is identified with the abbreviation SMEF in the regression equation. Thus, the regression equation formulated for testing the hypothesis is as follows:

$$\text{SMEF} = \alpha + \beta_1 \text{II} + \beta_2 \text{MD} + \beta_3 \text{MC} + \beta_4 \text{FI} + \epsilon$$

Where: $\text{SMEF} = \text{SME Failure.}$

$\text{II} = \text{Inadequate Infrastructures.}$

$\text{MD} = \text{Market Demographics.}$

$\text{MC} = \text{Market Competition.}$

$\text{FI} = \text{Financial Inadequacy.}$

4. Result and Discussion

This section presents some descriptive data analysis, and the result of inferential data analysis and test of hypothesis of the research. A total of 150 questionnaires were administered and 134 were retrieved out of which only 80 SMEs closed down between 2000 and 2018 which is the scope for this study and the data from those 80 failed SMEs are used for analysis. The Table 1 summarise the outcome of the respondents’ rating of indicators of the four external environmental factors that determined the failure of SMEs in Kano Metropolis.

<table>
<thead>
<tr>
<th>Possible Determinants of SMEs’ Failure</th>
<th>Ranking</th>
<th>Total Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>To a little extent</td>
</tr>
<tr>
<td>Inadequate Infrastructures</td>
<td>31</td>
<td>26</td>
</tr>
<tr>
<td>Lack of good access road</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Lack of adequate water supply</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Market Demographics</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Population</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Consumers income</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Market Competition</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Competitors enjoy better patronage by customers</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Competitors employ better technology</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>Competitors have more access to advertisement facilities</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>Financial Inadequacy</td>
<td>6</td>
<td>12</td>
</tr>
</tbody>
</table>

The descriptive analysis of indicators of inadequate infrastructures as shown in Table 1 indicates that majority of the respondents rated lack of adequate power supply as contributing to very large extent to the failure of SMEs i.e. 84% of the total respondents, which make lack of power supply as the major contributing factor under inadequate infrastructures. The findings agree with the study of Charles (2006) where 50% of the respondents of his study indicated power shortage as the major cause of business failure. Under market demographics; size of the market is the major contributing factor to SMEs failure in Kano metropolis as 43% and 31% of the respondents rated size of the market as contributing to large extent and very large extent respectively. The findings on market size is in line with works of who agree that few customers and markets are the major factors influencing firm failure.

Table 1 indicate that the majority of the respondents rated all the three indicators of market competition as contributing to an average extent to the failure of their SMEs, but the findings still revealed that among the three indicators of market demographics lack of patronage (Competitors enjoy better patronage by customers) is the major contributing factor to the SMEs failure in Kano metropolis. Similarly, Egeln et al. (2010) agree that causes of business failure include problem with demand. Under financial inadequacy all the three indicators make similar contributions to the SMEs failure in Kano metropolis. Rambwale et al. (2015) and Iffat et al. (2015) reported that lack of financial support is among the major causes of SMEs failure.
4.1. Hypothesis Testing

External environmental factors do not play significant role in SMEs failure in Kano metropolis. For the purpose of testing this hypothesis, four predictor variables were used and the multiple regression was run on SPSS. The result from the analysis is presented in Table 2.

From the statistical results in the Table 2, the R value of 0.665 indicates that our model is well fitted, because the greater the R value, the better fit the model is. Therefore the R² of 0.416 indicates that 41.6% of the variations in the life duration of SMEs in Kano metropolis is explained or accounted for by the variation in “inadequate infrastructures, market demographics, market competition and financial inadequacy”. The F statistics show a positive value of 5.179 which also indicates that external environmental factors have significant impact on the life duration of SMEs in Kano metropolis.

The B-coefficient on II, MC and FI are all negative showing an inverse relationship with survival time of SMEs, this indicates that for every extra unit increase in hazard rate of II, MC and FI we expect 4.710, 3.009 and 1.240 years reduction in survival time of SMEs respectively, holding all other variables constant. The B-coefficient for MD is positive showing a direct relationship with survival time of SMEs, indicating that for every extra unit of “market demographics” increase, the survival time of SMEs is expected to increase by 2.064 years holding all other variables constant. Table 2 also shows that II and MC have significance value of 0.1% and 3.4% respectively which is less than 5% alpha indicating that they make significant contributions to the failure of SMEs in Kano metropolis, while the contributions of MD and F1 to the SMEs failure in the metropolis are insignificant with 20.5% and 42.6% significance values respectively.

However, the joint or collective significant value of all the external environmental factors in the model is 0.0% which is less than 5% alpha. We therefore infer that external environmental factors make significant contribution in the failure of SMEs in Kano metropolis, and consequently reject the hypothesis that “external environmental factors do not play significant role in SMEs failure in Kano metropolis”.

Beta weight is a measure of the total effect of an independent variable on the dependent variable (LeBreton et al., 2004). Therefore beta values in this study indicate the hazard rate contributed by the selected external environmental to the SMEs failure in Kano metropolis, the beta coefficients of −0.441, −0.226 and −0.126 for II, MC and FI respectively, indicate a negative relationship between life duration (survival time) of SMEs, on one hand, and II, MC and FI on the other. These findings revealed that II is the most contributing factor to the SMEs failure in Kano metropolis, follow by MC, then FI. The finding that inadequate infrastructures are most prominent factor causing SMEs failure, agrees with the works of Basil (2005) and Sunday (2008) who reported that one of the most critical external difficulties facing SMEs in Nigeria is infrastructural inadequacies.

5. Conclusion

In view of the findings that emerged after data analysis and the test of hypotheses, as well as evidence that emerged from the review of empirical studies in the existing literature. The study concludes that external environmental factors contribute to the failure of SMEs in Kano metropolis, but different environmental factors make different contributions to SMEs failure. Among the selected environmental factors in this study, inadequate infrastructure (II) is the major cause of SMEs failure in Kano metropolis.

6. Recommendations

In view of the findings that emerged from this study, and the conclusions drawn, the study recommends that in order to reduce SMEs failure and achieve significant positive contribution of SMEs sector to economic development of Kano state and Nigeria in general; government and relevant stakeholders should create an enabling business environment by provision of power which will ease the operational problems experienced by SMEs in the metropolis. Power supply can be enhanced by reorganizing the Power Holding Company of Nigeria (PHCN) and Nigerian Electricity Regulatory Commission (NERC) in order to increase their operational efficiency, through restructuring the organizational structure and enhancing human resource management practice of the organizations that are geared toward improving discipline and dedication of the workforce. Also to improve efficiency and productivity of those organizations more electricity generating, transmission and distributing stations should be provided in the state.

Table 2. Regression result on the role of selected external environmental factors on SMEs failure in Kano Metropolis

<table>
<thead>
<tr>
<th>Statistical variables</th>
<th>Business failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.665</td>
</tr>
<tr>
<td>R Square</td>
<td>0.416</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.375</td>
</tr>
<tr>
<td>F statistics</td>
<td>5.179</td>
</tr>
<tr>
<td>B:</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>-4.710</td>
</tr>
<tr>
<td>MD</td>
<td>2.064</td>
</tr>
<tr>
<td>MC</td>
<td>-3.009</td>
</tr>
<tr>
<td>FI</td>
<td>-1.240</td>
</tr>
<tr>
<td>Significance:</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>0.001</td>
</tr>
<tr>
<td>MD</td>
<td>0.205</td>
</tr>
<tr>
<td>MC</td>
<td>0.034</td>
</tr>
<tr>
<td>FI</td>
<td>0.426</td>
</tr>
<tr>
<td>All factors</td>
<td>0.000</td>
</tr>
<tr>
<td>Beta:</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>-0.441</td>
</tr>
<tr>
<td>MD</td>
<td>0.192</td>
</tr>
<tr>
<td>MC</td>
<td>-0.226</td>
</tr>
<tr>
<td>FI</td>
<td>-0.126</td>
</tr>
</tbody>
</table>
The problem of small market size and lack of access to market under market demographics can be minimised through government intervention by provision of market places, patronizing locally made products and purchases from local producers for exportation. The study also recommends provision of simple and affordable credit facilities to SMEs via microfinance institutions as well as grants from the government, relevant stakeholders and donor agencies such as NGOs will reduce the financial problems face by SMEs owners.

References