EFFECTS OF ENVIRONMENTAL FACTORS ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMEs) IN ABUJA, NIGERIA

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ABSTRACT
The world over, small businesses in-terms of SMEs accounts for about 60% to 80% of employment generation in the economy. This implies that the SMEs sector constitutes the largest employer of labour in many economies of the world and particularly in Africa and Nigeria in specific. Therefore, understanding the factors negating or improving the performance of this very important sector becomes desirable and germane. This study examines the effect of environmental factors on the performance of SMEs in Abuja metropolis. The target population of the paper constitutes two thousand six hundred and ninety (2690) registered SMEs operating within Abuja metropolis. A sample size of 97 respondents was determined using the Yamane formula at 10% precision level. A random sampling technique as well as stratified sampling were used in selecting the sample size of the study. Both descriptive and inferential statistics were employed to analyze the data obtained. The findings revealed that level of education of SMEs owners or managers, spending on marketing and other promotional activities, and the use of technology exact positive impact on the performance of SMEs. The current tax regime and operationalization as well as inflation also exact positive effect on the performance of SMEs. Inadequate power supply significantly negates the performance of SMEs in Abuja metropolis. The study recommends that the owners and or managers of SMEs should strive to acquire necessary and good understanding of the business environment and ensure hiring of competent and quality employees for effective running and managing of their businesses. The paper also recommends that government should continue to provide more tax incentives to SMEs sector in order to trigger more employment within the economy.

Keywords: SMEs Performance; Internal Environmental Factors; External Environmental Factors
1.0 INTRODUCTION
Improving the performance of small medium enterprises (SMEs) is a major concern because they are a significant source for creating value added, employment, innovation and economic growth. Despite the vital role of SMEs in building a competitive private sector and contributing significantly to economic growth and job creation, SMEs are facing more challenges around the world in general and in developing countries in particular. Likewise, Nigerian SMEs face numerous and serious challenges to their growth and these include the cumbersome legal and regulatory constraints, lack of access to external financing, marketing, poor infrastructure especially power supply, low human resources capacities, lack of management skills and training, and low technological capacities (Bouazzal, Ardjouman, and Abada, 2015). This section of the paper discusses background to the study, problem statement and objectives of the study among others.

1.1 Background
The Nigerian Government has made substantial effort on the development of small-scale industries; nevertheless, part of the huge SMEs problems could be traced to the government. This is mostly in the area of improper implementation of its policies towards SMEs and a serious neglect in the area of incentive and infrastructural development to facilitate business activities of SMEs. The frequent changes, and sometimes conflicting government monetary policies, have also tended to hurt the SMEs. For instance, while the government raised total credit allocation to SMEs from 16 to 20 per cent, the same government would at the same time, remove excess liquidity in the banking industry through increase in the Monetary Policy Rate (MPR), transfer of government and parastatals accounts to the Central Bank and the creation of Stabilization Security Account (SSA) whereby the banks were debited with excess liquidity in their accounts with central banks (Ikharehon and Briggs, 2016). Another shortfall of government is the misappropriation of funds and wrong allocation of credit facilities.

Obi (2001) pointed out that the plan to provide modest loan to small scale business operations was a flop, because loans were granted in most cases on political rather than on commercial or project viability considerations. Another factor is the government’s improper implementation of its policies, insufficiency of trained manpower and adequate equipment to aid the extension services it put in place to support the SMEs. Obi (2001) also pointed out that there is no adequate manpower to carry out technical appraisal of applications for loans from surging applicants. It has also been found that government policy programs on SMEs are concentrated in the cities where there is strict competition between the SMEs products and large scale business while rural areas where their
activities will impact on the macroeconomic environment through provision of employment, reduction in rural-urban migration and overall contribution to the GDP have been neglected (Ireghan, 2009; Ikharehon and Briggs, 2016).

This study investigates whether the growth and performance of SMEs in Nigeria is hampered by several interrelated factors. These factors relate to the business environmental factors that the SMEs cannot control and the SMEs' internal factors. The external factors include the legal and regulatory framework, access to external financing, infrastructure especially power, and human resources capacities. The internal factors include entrepreneur characteristics, management capacities, marketing skills, and technological capacities.

1.2 Statement of the Problem
In today's Nigeria, industries, particularly small medium enterprises (SMEs), operate under various conditions and constraints relating to their internal and external environments which militate against their organizational goals. These are high cost and shortage of raw materials, shortage of funds, inadequate technology, marketing skills, and managerial capacity. Others include firm size, location, speed of growth, and irregular power supply. Also, a section of the organized private sector contends that the various policies, incentives and strategies so far are inappropriate to address the problems of the SMEs sub-sector, or to stimulate growth and enhance performance of the SMEs (Ojo, 2006; Ikharehon and Briggs, 2016).

The contending strategic and environmental factors above suggest that some issues that are critical to the development and performance of the SMEs have not been factored into the various strategies and management of the SMEs. These therefore calls for the reexamination and analysis of the various issues and factors responsible for the relatively low performance of the SMEs sub-sector in Nigeria. In so doing, this study highlight these critical factors, which if properly addressed, would propel SMEs performance by including marketing, level of technology in use, and business rules perception as explanatory variables which were absent in previous studies by Gbolagade, Adesola, Oyewale (2013), Ikharehon and Briggs (2016), Mba and Cletus (2014), and Kamuga, M. S., Njeru, A. & Tirimba, O. I. (2014).

1.3 Research Questions
The following research questions were raised:

i. How do internal environmental factors affect the performance of SMEs in Abuja?

ii. To what extent does external environmental factors affect the performance of SMEs in Abuja?

1.4 Objectives of the Study
The purpose of this study is to analyze the
EFFECTS OF ENVIRONMENTAL FACTORS ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMEs) IN ABUJA, NIGERIA

2.0 LITERATURE REVIEW

This section examines the conceptual definition of SMEs, environmental factors affecting SMEs performance, theoretical framework, and the review of empirical studies.

2.1 Concept of SMEs

SME has no standard definition. SMEs have been identified differently by various individuals and organizations, such that an enterprise that is considered small and medium in one country is viewed differently in another country. Some common indicators employed in the various definitions include total assets, size of the labor force employed, and annual turnover and capital investments (Bouazza1 et al., 2015). The concept of SMEs as viewed by various multilateral development partners are presented in Table 1.

<table>
<thead>
<tr>
<th>Institution (Region or Country)</th>
<th>Maximum number of Employees</th>
<th>Maximum Revenue or Turnover</th>
<th>Maximum Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>10-250</td>
<td>40 Million Euros</td>
<td>-</td>
</tr>
<tr>
<td>World Bank</td>
<td>300</td>
<td>15 Million Dollars</td>
<td>15 Million Dollars</td>
</tr>
<tr>
<td>IMF</td>
<td>100</td>
<td>3 Million Dollars</td>
<td>-</td>
</tr>
<tr>
<td>African Development Bank</td>
<td>50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>UNDP</td>
<td>200</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OECD</td>
<td>20-500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SMEDAN</td>
<td>10-49</td>
<td>5 to 49 Million Naira</td>
<td>-</td>
</tr>
</tbody>
</table>

Sourced: Bouazza et al. (2015) and modified by researchers
It is obvious from Table 1 that no single definition of SMEs exists among officials of multilateral development institutions and in Nigerian context.

2.2 The Environmental Factors that Affect SMEs' Performance
Researchers have used different approaches to explain the factors affecting the growth of SMEs. Some of them have considered environmental factors to have a big impact on the performance and growth of small firms (Lumpkin and Dess, 1996). The environmental factors that affect SMEs performance could be internal or external factors and are examined in this subsection.

2.2.1 External Environmental Factors Affecting SMEs
The external environmental factors are those that the businesses do not have the capacity to influence. We can summarize the external factors affecting the growth of SMEs as follows:

2.2.1.1 Legal and Regulatory Framework
According to Lumpkin and Dess, (1996) the growth of SMEs are affected by its business climate. An unfavorable business climate in the form of legal and regulatory environment has negative effect on SMEs growth. Also, an unfavorable tax system, complicated rules and regulations can heavily hamper small firms' performance. Krasniqi (2007) showed that the cost of complying with regulations and increased tax rates increases small firms' expenses while limiting their growth. Likewise, St-Jean, E., Julien, P., & Josée, A. (2008) noted that cumbersome regulations, and tax rates are the main obstacles on small business growth.

2.2.1.2 Inadequate Power Supply
A study done by International Finance Corporation (IFC; 2013), based on responses of more than 45,000 firms in developing countries, found that the top obstacles to their operations are a poor investment climate due to high tax rates, competition from the informal sector, and inadequate infrastructure, especially an insufficient or unreliable power supply. Whereas informality is a major hindrance of SMEs in middle-income countries, an inadequate power supply is the most important challenge for companies in low-income countries.

2.2.1.3 Access to Finance
Lack of access to external financing is considered a major challenge to the growth and performance of SMEs, and it has accounted for high rates of failure among those SMEs. In developing countries, SMEs face greater financing obstacles than large firms do. According to Shah et al. (2013), financial institutions behave more cautiously when providing loans to SMEs, and SMEs are usually charged comparatively high interest, high
collateral and loan guarantees. Krasniqi (2007) find that loan policies and collateral requirements discourage firms from obtaining loans from banks. Also, small firms have less access to external financing, which makes them to be more restrained in their operations and growth compared to large firms. Ayyagari., M., Asli, D. K. & Vojisavl, M. (2006) shows that financing, crime, and political instability directly affect the rate of growth of small firms, with financing being the most significant constraint affecting small firms' growth. Rocha R., Farazi S., Khouri R., & Pearce, D. (2011), found that access to financing is among the most binding obstacle to SMEs' performance while other obstacles appear to matter much less.

2.2.1.4 Competition
Competition has been identified as one of the major hindrances to the growth of small firms (Bouazzaiet et al., 2015). Small and large firms could be producing similar products. Since they go to the same market to buy their raw materials, operate in the same banking system, and access the same advertising media, the big firms and indeed older small firms have greater opportunities and advantages than the small firms especially the new ones. This affects the growth and performance of SMEs.

2.2.2 Internal Environmental Factors Affecting SMEs
Success and failure of SMEs is not only related to external business environment aspect. It also depends on firms' internal factors that are key and strategic, which can be summarized as follows:

2.2.2.1 Characteristics of Entrepreneurs
Entrepreneur characteristics have been extensively studied, with mixed results on the impact on small firm growth. Several studies convincingly confirmed that some characteristics have positive and significant relationships with small firm growth while other studies find insignificant relationships (Sidika, 2012). Some authors have approached their studies from the perspective of the mindset and personality of the entrepreneur while others have looked at it from the perspective of the entrepreneur's education, family background, and capability (Bouazzaiet et al., 2015; Kor, 2003). The personal role of the entrepreneur and his growth aspirations have also been identified as a factor that could enhance performance (Pasanen, 2007; Bouazzaiet et al., 2015). Entrepreneurs' stable and inherent characters influence how they manage their businesses. In addition, they will tend to conduct their business based on the strengths of their specific characteristics (Sidika, 2012). Many other aspects have been examined regarding the characteristics of entrepreneurs such as age, gender, motivation, experience, educational background, risk-taking propensity, and preference for innovation (Pasanen, 2007; Sidika, 2012).

2.2.2.2 Managerial Capacities
Several studies have considered the
management capacities of the top management team as key factors for small business growth. According to Olawale and Garwe (2010), management capacities are sets of knowledge, skills, and competencies that can make the small firm more efficient. Singh, R., Garg, S. & Deshmukh, G. S. (2008) emphasized that management skills are necessary for SMEs to survive and achieve growth. Aylin, A. Garango, P., Cocca, P. & Bititchi, U. (2013), stated that management skills are a crucial factor for the growth of SMEs and that the lack of management skills is a barrier to growth and is one of the factors that can lead to failure. Pasanen (2007) suggests that the growth pattern of small firms is associated with their managerial capacities. Bhide (1996) notes that a shortage of core competence and a skilled top management team is one of the main challenges faced by SMEs.

2.2.2.3 Marketing Skills
Marketing skills have been considered as one of the most effective factors to firm survival and growth. According to Van Scheers (2012) the lack of marketing skills has a negative impact on the success of small businesses. Pandya (2012) noted that marketing limitations of an SME resemble other limited resources such as financial and human resources.

2.2.2.4 Human Resources Capacities
Human resources capacities form one of the most significant factors for the development of small firms. Firms with a skilled and well-educated workforce are likely to be more efficient. As noted by Lee (2001), human resource capacities form one of the most significant areas for the success of SMEs. In general, human resource capacities have a positive effect on the growth of small firms, which increase employee skills and motivation, and eventually result in improving the productivity and long-term sustainability of small firms (Bouazzaïet al., 2015).

2.2.2.5 Technological Capacities
Drucker (1985) noted that new technologies improve efficiency, enable greater production, and are a source of profit for SMEs. Technological capabilities benefit SMEs in several ways: they enhance SME efficiency, reduce costs, and broaden market share, both locally and globally (Bouazzaïet al., 2015). As noted by Lee(2001), a small business that adopts greater levels of technological sophistication can be expected to grow more rapidly than a similar firm that does not. Romijn (2001) pointed out that low technological capabilities hinder and discourage SMEs from fully reaching their potential. Countries with high levels of technological growth tend to have high levels of entrepreneurial growth (Bouazzaïet al., 2015). From the foregoing, we could conclude that the growth and performance of SMEs is dependent on a range of internal and external factors.

2.3 Theoretical Framework: The Balanced Scorecard (BSC)
The BSC theory suggests that managers should view organization's performance
from four facets, customer perspective, internal perspective, innovation and learning perspective, and financial perspective (Kamuga, M. S., Njeru, A. & Tirimba, O. I. 2014). BSC incorporates financial and non-financial measures in one measurement system. The objectives and measures of BSC are derived from an organization's vision and strategy. The Balanced Scorecard provides executives with a comprehensive framework that translates a company's vision and strategy into a coherent set of performance measures.

According to Kaplan and Norton (1996) as cited in Kamuga et al. (2014), the balanced scorecard not only allows the monitoring of present performance, but also tries to capture information about how well the organization is positioned to perform in the future. Furthermore, the Balanced Scorecard has evolved to become a core management tool, in that it helps CEOs not only to clarify and communicate strategy, but also to manage strategy. In practice, companies use the BSC approach to accomplish four critical management processes; clarify and translate vision and strategy, communicate and link strategic objectives and measures, plan, set targets, and align strategic initiatives and enhance strategic feedback and learning.

2.4 Review of Empirical Studies

A number of empirical studies have been conducted on the impact of environmental factors on SMEs. These include the work of Bouazzai, Ardjounan and Abada (2015) that examined the factors that influence the growth rate of small medium-sized enterprises (SMEs) in Algeria and explores the extent to which their success or failure depends on the wider business climate. The study also examines different internal factors that may be responsible for the unstable and limited growth of SMEs, and the research reveals that the growth of SMEs in Algeria is hampered by several interrelated factors, which include business environmental factors that are beyond the SMEs' control and internal factors of the SMEs.

In another study, Rusu and Roman (2016) analyzed the evolution of the SMEs performance in terms of employment in the last years, and further examined which of the macroeconomic performance indicators are influencing the growth of SME's employment in seven CEE countries. The study used correlation and multiple linear regression models on panel data. The results show that GDP, total private final consumption, gross capital formation and wages have a strong influence on SMEs employment.

Gbolagade, Adesola, Oyewale (2013) investigated the impact of marketing strategy on business performance of selected SMEs with Olayole local government area Ibadan, Nigeria as special reference. A survey research design method was used with a self-design questionnaire for collecting data from one hundred and three (103) respondents. The instrument used in the study is a close-ended questionnaire that was designed by the researchers. Correlation coefficient
and multiple regression analysis were used to analyze the data. The findings show that the independent variables (i.e., product, promotion, place, price, packaging, and after sales service) were significant joint predictors of business performance in terms of profitability, market share, return on investment, and expansion.

Similarly, Ikharehon and Briggs (2016) in their paper examined the impact of strategic factors on the performance of small and medium scale enterprises in Nigeria. The target population of the paper constitutes four hundred and fifty (450) enterprises, representing 18% of 2500 registered SMEs operating within Abuja metropolis. A sample size of 97 respondents was determined using the Yamane formula. A random sampling technique was used in administering questionnaires to the respondents, and it was however administered in a way to give each respondent equal opportunity of being selected to be part of the study. The findings revealed that insufficient capital, deficiencies in infrastructure and inadequate fiscal incentives framework are the main challenges facing the Small and Medium scale enterprises in Nigeria.

Mba and Cletus (2014) examined the issues, challenges and prospects of small and medium scale enterprises (SMEs) in Port-Harcourt City, Nigeria. The paper adopted a descriptive research design using 120 randomly selected registered operators of SMEs in Port-Harcourt city. Data collected were analyzed using descriptive statistics while formulated hypotheses were tested using z-test. Results from the data analysis indicated that poor financing, inadequate social infrastructures, lack of managerial skills and multiple taxation were major challenges confronting SMEs in Port-Harcourt city.

Bouazzai, A. B. Ardjouman, D. &Abada, O. (2015) in their study sought to establish the factors affecting the performance of small and micro enterprises (SMEs) traders at Limuru town market in Kiambu County, Kenya. The study employed a descriptive research design to achieve the objectives. The target population under study was the 965 licensed SMEs by Limuru sub-county operating in Limuru Market in 2014. The study used a questionnaire to collect the required data from a sample of 274 SMEs. The data collected was coded, quantified and analyzed quantitatively and qualitatively. Quantitative data was analyzed by the use of statistical package for social sciences (SPSS). The study concluded that access to finance and availability of management experience are the key socio-economic factors affecting the performance of businesses in Limuru Town Market. The other key factors that were found to affect businesses in Limuru Town Market positively are: access to business information, access to infrastructure and government policy and regulations.

In view of the above literature reviewed, in today's Nigeria, industries, particularly small medium enterprises (SMEs), operate under various conditions and constraints relating to their internal and external environments which militate against their
organizational goals. These are high cost and shortage of raw materials, shortage of funds, inadequate technology, marketing skills, and managerial capacity. Others include firm size, location, speed of growth, and irregular power supply. Also, a section of the organized private sector contends that the various policies, incentives and strategies so far are inappropriate to address the problems of the SMEs sub-sector, or to stimulate growth and enhance performance of the SMEs (Ojo, 2006; Ikharehon and Briggs, 2016).

The contending strategic and environmental factors above suggest that some issues that are critical to the development and performance of the SMEs have not been factored into the various strategies and management of the SMEs. These therefore calls for the reexamination and analysis of the various issues and factors responsible for the relatively low performance of the SMEs sub-sector in Nigeria. In so doing, this study highlight these critical factors, which if properly addressed, would propel SMEs performance by including marketing, level of technology in use, and business rules perception as explanatory variables which were absent in previous studies by Gbolagade, Adesola, Oyewale (2013), Ikharehon and Briggs (2016), Mba and Cletus (2014), and Kamuga, M. S., Njeru, A. &Tirimba, O. I. (2014). Therefore, this provide the need for the research problem in order to be addressed.

3.0 METHODOLOGY

The research is conducted in order to investigate the potential factors that affect the start-up and hinder the development of SMEs in Abuja. In order to achieve the research goals, the study employed both qualitative and quantitative methods. The study reviewed the literature in an exploratory nature in order to explain and comprehend the research findings on the environmental factors that constrain the growth and performance of SMEs. A quantitative method was employed to measure the factors that affect the development of SMEs in Abuja following the work of Ikharehon and Briggs (2016). For this purpose, the target population of the paper constitutes two thousand six hundred and ninety (2690) registered SMEs operating within Abuja (SMEDAN, 2015). A sample size of 96 respondents was determined using the Yamane formula as specified below.

\[ n = \frac{N}{1+N(e)^2} \]  

where:  
\( n \) = sample size  
\( N \) = population size  
\( l \) = constant term  
\( e \) = margin of error

Given that the population of the SMEs is 2690, a 95% confidence level, and thus 5% level of precision are assumed for the study. Therefore, the sample size of the study can be determined as follows:

\[ = 96 \]

From the above sample size, the study added a margin of 30% as posited by
kothari, (2011) in order to make up for non-
returned questionnaire. Therefore, 30% of 96 is 29. Therefore, 96 + 29 = 125. In view of this, the total number of sampled respondents stands at 125.

A random sampling technique as well as stratified sampling were used in administering questionnaires to the respondents, and it was however administered in a way to give each respondent equal opportunity of being selected to be part of the study (Kothari, 2011). The respondents are the SMEs owners and managers spread across the six area councils of the Federal Capital Territory (FCT). The profitability and size of employees of SMEs is used as index for measuring performance following the work of Ikharehon and Briggs (2016) and Kamuga et al. (2014). The independent variables are the level of education of owner, size of funds for marketing, perception of tax system, perception of level of complication of business rules, perception of inflation as hindrance to SMEs performance, adequacy of power supply, ease of sourcing for finance, and the level of technology in use. The responses of the respondents regarding these variables were coded and fed into the SPSS, regressed using ordinary least squares (OLS) technique, and then analyzed. The model for the study is specified as follows.

\[
\text{PERF} = \beta_0 + \beta_1 \text{EOWN} + \beta_2 \text{MSIZE} + \\
\beta_3 \text{PTAX} + \beta_4 \text{BRUL} + \beta_5 \text{PINF} + \\
\beta_6 \text{APOW} + \beta_7 \text{LTEC} + u........................(1)
\]

Where:

\text{PERF} = \text{Profitability and size of employees of the SMEs}

\text{EOWN} = \text{Educational level of business owner or manager}

\text{MSIZE} = \text{Skills and Size of funds for marketing and promotions}

\text{PTAX} = \text{Perception of tax system}

\text{BRUL} = \text{Perception of level of complication of business rules}

\text{PINF} = \text{Perception of inflation as hindrance to SMEs performance}

\text{APOW} = \text{Access to adequate power supply}

\text{LTEC} = \text{Level of technology in use}

\text{U} = \text{Error Term}

\beta_0 = \text{Intercept}

\beta_1, \beta_2, \ldots, \beta_7 = \text{Coefficients of the explanatory variables}

4.0 RESULTS AND DISCUSSIONS

This section focuses on presentation, analysis and interpretation of the data collected through the use of questionnaires that were distributed to the respondents under consideration. This section is in four subsections with the next dealing with the response rate. Thereafter, the study examined the reliability test, descriptive statistics, and regression results.

\[
n = \frac{2690}{1 + 2690 (0.1)^2} = \frac{2690}{27.9}
\]
4.1 Response Rate

Table 1: Analysis of Returned and Unreturned Questionnaires

<table>
<thead>
<tr>
<th>Options</th>
<th>No of Respondents</th>
<th>Percentage</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returned</td>
<td>95</td>
<td>76%</td>
<td>76%</td>
</tr>
<tr>
<td>Unreturned</td>
<td>30</td>
<td>24%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Field survey (2019)

The table and graph above show that out of 125 questionnaires distributed, 95 representing 76%, were filled and returned while 30 representing 24% were not returned.

4.1 Reliability Results

To ensure and ascertained the reliability of the research instruments (items), Cronbach's basic alpha reliability test was employed.

Table 2 Reliability Statistics

<table>
<thead>
<tr>
<th>S/n</th>
<th>Constructs/Items</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SMEs Performance and Environmental Factors</td>
<td>0.756</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Computed with SPSS 21

According to Ndiyo (2005), constructs/items are internally consistent with each other if their cronbach's alpha value is equal to or more than 0.70. This indicates the degree of internal consistency among the variables or scales used to measure the effect of environmental factors on the performance of SMEs in Abuja FCT.
### 4.2 Descriptive Statistics

#### Table 3: Environmental Factors and SMEs Performance

<table>
<thead>
<tr>
<th>Code</th>
<th>Statement</th>
<th>SA (5)</th>
<th>A (4)</th>
<th>SD (3)</th>
<th>D (2)</th>
<th>UD (1)</th>
<th>Total %</th>
<th>Mean</th>
<th>SD</th>
<th>t-stat</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perf</td>
<td>It could be said that your performance in terms of profitability and number of employees has been high in recent time</td>
<td>27 (28%)</td>
<td>35 (37%)</td>
<td>15 (16%)</td>
<td>15 (16%)</td>
<td>3 (3 %)</td>
<td>95 (100)</td>
<td>3.72</td>
<td>1.13</td>
<td>3.29</td>
<td>Accepted</td>
</tr>
<tr>
<td>EOWN</td>
<td>The level of education of business owner has positive — —</td>
<td>18 (19%)</td>
<td>40 (42%)</td>
<td>19 (20%)</td>
<td>10 (11%)</td>
<td>8 (8 %)</td>
<td>95 (100)</td>
<td>3.43</td>
<td>1.2</td>
<td>2.77</td>
<td>Accepted</td>
</tr>
<tr>
<td>MSIZE</td>
<td>The funds earmarked by your firm for advertisement, sales promotion and other marketing activities are sufficient and enhance your performance</td>
<td>28 (29%)</td>
<td>33 (35%)</td>
<td>20 (21%)</td>
<td>12 (13%)</td>
<td>2 (2 %)</td>
<td>95 (100)</td>
<td>3.77</td>
<td>1.0</td>
<td>8</td>
<td>Accepted</td>
</tr>
<tr>
<td>PTAX</td>
<td>The tax system as being operationalized in Nigeria has positive impact on your business performance</td>
<td>21 (22%)</td>
<td>40 (42%)</td>
<td>15 (16%)</td>
<td>15 (16%)</td>
<td>4 (4 %)</td>
<td>95 (100)</td>
<td>3.62</td>
<td>1.0</td>
<td>9</td>
<td>Accepted</td>
</tr>
<tr>
<td>BRUL</td>
<td>The business rules are complicated but they do not affect your performance</td>
<td>9 (9%)</td>
<td>16 (17%)</td>
<td>29 (31%)</td>
<td>36 (38%)</td>
<td>5 (5 %)</td>
<td>95 (100)</td>
<td>2.87</td>
<td>1.3</td>
<td>2.19</td>
<td>Rejected</td>
</tr>
<tr>
<td>PINF</td>
<td>Inflation or persistent rise in the price level has positive impact on performance</td>
<td>25 (26%)</td>
<td>28 (30%)</td>
<td>20 (21%)</td>
<td>15 (16%)</td>
<td>7 (7 %)</td>
<td>95 (100)</td>
<td>3.46</td>
<td>1.2</td>
<td>2.68</td>
<td>Accepted</td>
</tr>
<tr>
<td>APOW</td>
<td>The power supply is adequate and has improved your business performance</td>
<td>7 (7%)</td>
<td>12 (13%)</td>
<td>38 (40%)</td>
<td>35 (37%)</td>
<td>3 (3 %)</td>
<td>95 (100)</td>
<td>2.84</td>
<td>1.2</td>
<td>2.23</td>
<td>Rejected</td>
</tr>
<tr>
<td>LTEC</td>
<td>The level of technology in use in your firm is adequate and has improved your performance</td>
<td>25 (26%)</td>
<td>30 (19%)</td>
<td>18 (32%)</td>
<td>19 (20%)</td>
<td>3 (3 %)</td>
<td>95 (100)</td>
<td>3.58</td>
<td>1.0</td>
<td>4</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: Field Survey 2019
Table 3 shows the response rate on the effect of environmental factors on the performance of SMEs in Abuja metropolis. As it can be seen, the result indicates that performance of SMEs in terms of profitability and number of employees has been on the increase in recent time given a mean and t-statistics value of (M=3.72; t-stat=3.29). Furthermore, the respondents also agreed that the level of education of business owner has positive impact on their SME’s performance as this is supported with a mean and t-statistics value of (M=3.43; t-stat=2.77). Also, the respondents agreed that the funds earmarked by the firm for advertisement, sales promotion and other marketing activities are sufficient and enhance their performance, as supported with a mean and t-statistic value of (M=3.77; t-stat=3.40).

In addition, the respondents also agreed that the tax system as being operationalized in Nigeria has positive impact on business performance, this is further supported by a mean and t-statistic value of (M=3.62; t-stat =3.32). The business rules are complicated but they do not affect SMEs performance, as evident by the mean and t-statistic value of (M=3.38; t-stat=2.89). More so, the respondents are of the view Inflation or persistent rise in the price level has positive impact on performance. This is so true going by the mean and t-statistic value of (M=3.46; t-stat=2.68). The respondents rejected that the power supply is adequate and has improved their business performance as can see by the mean and t-statistics of 2.84 and 2.23 respectively. Lastly the respondents also agreed that the level of technology in use in SMEs is adequate and has improved their performance as evident by a mean and t-statistic value of (M=3.58; t-stat =3.44).

### 4.3 Regression Analysis (Inferential Statistics)

#### Table 4: Regression Result, Dependent Variable (SMEs Perf)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Co-efficient</th>
<th>Standard Error</th>
<th>t-Statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>.717</td>
<td>.118</td>
<td>6.093</td>
<td>.000</td>
</tr>
<tr>
<td>EOWN</td>
<td>.361</td>
<td>.124</td>
<td>2.92</td>
<td>.004</td>
</tr>
<tr>
<td>MSIZE</td>
<td>.52</td>
<td>.162</td>
<td>.316</td>
<td>.753</td>
</tr>
<tr>
<td>PTAX</td>
<td>.174</td>
<td>.128</td>
<td>1.357</td>
<td>.178</td>
</tr>
<tr>
<td>BRUL</td>
<td>-.174</td>
<td>.157</td>
<td>-1.111</td>
<td>.270</td>
</tr>
<tr>
<td>PINF</td>
<td>.178</td>
<td>.171</td>
<td>1.262</td>
<td>.210</td>
</tr>
<tr>
<td>APOW</td>
<td>-.107</td>
<td>.108</td>
<td>-.992</td>
<td>.024</td>
</tr>
<tr>
<td>LTEC</td>
<td>.944</td>
<td>.127</td>
<td>3.873</td>
<td>.000</td>
</tr>
</tbody>
</table>

R²: 0.917
Adj. R²: 0.910
F-statistic: 3.410
Prob. (F-stat.) : 0.000

Source: Authors computation (SPSS 21)
The effect of internal and external environmental factors on the performance of SMEs in Abuja Metropolis was investigated using regression analysis. The regression result reveals that educational level of business owner or manager (EOWN) exacts a positive effect on the performance of SMEs. Implying that a unit increasing in EOWN will invariably leads to a unit increase on the SMEs performance by 0.361 units. This impact is not only positive but statistically significant at 1% as observed by the p-value. The result further shows that spending on advertisement, sales promotion and other marketing activities (MSIZE) has a positive impact on the performance of SMEs signifying that a unit increase in MSIZE on the average lead to a corresponding unit increase on the SMEs performance by 0.52 units. Though, this impact is positive but statistically insignificant at 5% level.

In addition, the coefficient of PTAX \((\beta = 0.173)\) shows that the tax system as being operationalized in Nigeria has positive impact on the performance of SMEs in Abuja metropolis. However, the impact is positive but not statistically significant at level. Complication of business rules (BRUL) is exacting negative impact on the performance of SMEs in Abuja Metropolis. Implying that a unit increase in stringent rules invariably lead to decrease in the performance of SMEs by 0.174 units.

PINF is found to exact positive influence of the performance of SMEs on the average by 0.17. Although the influence is not statistically significant at any level. On the other hand, the regression result indicates that inadequate Power Supply (APOW) \((\beta = -0.107)\) has a negative impact on the performance of SMEs. This negative impact is statistically significant at 5% level. Lastly, LTEC, proxy as use of technology in business by SMEs has a coefficient \((\beta = 0.944)\) implying a positive impact on the performance of SMEs and is statistically significant at 1% as evident by the p-value.

The result further reveals that R-Square 0.92 indicating the proportion of variation in SMEs performance due to the interactions of the independent variables while about still 0.91 is the proportion of variance in SMEs performance that is accounted for both the internal and external environmental factors after taking care of degree of freedom (df). The F-statistic value of 3.410 gives us enough evidence that the parameter estimates of the regressed model are jointly statistically significant there by validating the R-squared and Adjusted R-squared, this is further affirmed by the very low probability value of f-statistic (i.e. 0.000). Thus, the estimated model is fit for both policy formulation and forecasting.

4.4 Discussion of Findings

This study was carried out with the aim of achieving two (2) specific research objectives. The paper categorized environmental factors influencing the performance of SMEs into two major types i.e. the internal factors and the external environmental factors. The internal factors are those variables negating or improving
the performance of SMEs which falls within the constraint of the firm. This means that, the internal factors are both the strength and weaknesses of the business going by the SWOT parameters. These are factors that if the firm properly managed and controlled would invariably lead to enhanced performance. For this study internal environmental factors include educational level of business owner or manager (EOWN), skills and size of funds for marketing and promotion (MSIZE), and level of technology in use (LTEC). On the other hand, the external environmental factors are those variables falling outside the purview of the firm. SMEs have seemingly little or no influence over them. The external environmental factors are; perception of tax system (PTAX), perception of level of complication of business rules (BRUL), rate of inflation (PINF) and access to adequate power supply (APOW). Generally, findings from the survey reveals as follows;

On the educational level of business owner or manager as an internal environmental factor affecting the performance of SMEs in Abuja Metropolis, findings emanating from the paper revealed that the level of education of SMEs owners or managers exact positive and significant impact on the performance of SMEs. The implication of this, is that the more the firm have good knowledge about the nuances of business environment as well as acquiring qualified and experienced manager the better the performance will be. Good knowledge and experienced manager(s) will trigger the formulation of strategies that will enable the firm have a competitive advantage within the subsector they are operating. This finding is in consistent with the work of Kamuga et al. (2014) who submitted that access to finance and availability of management experience are the key socio-economic factors affecting the performance of businesses in Limuru Town Market in Kenya. Also, Mba and Cletus (2014) concluded that lack of managerial skills is among the major challenges confronting SMEs in Port-Harcourt city.

The paper further examined the extent to which spending of funds for marketing and other promotional activities (MSIZE) affects the performance of SMEs in Abuja Metropolis. The paper reveals that MSIZE has a positive impact on the performance of SMEs. The implication is that, as SMEs are creating more awareness about the existence of their product(s) and services through advertisement and other promotional sales, it consequently translate to improving the performance. This is evident going by theoretical postulations of kotler (1995). This finding reaffirmed the findings of Gbolagade, Adesola, Oyewale (2013) who showed that product, promotion, place, price, packaging, and after sales service were significant joint predictors of business performance in terms of profitability, market share, return on investment, and expansion in Ibadan.

Furthermore, the paper evaluates the extent to which level of technology use by SMEs owners or managers enhances the performance of SMEs in Abuja.
Metropolis. The result indicates that LTEC has a positive impact on the performance of SMEs in the study area. The implication of this outcome signifies that the more SMEs and other corporate firms apply technology in conducting their businesses the more its performance will be. This outcome corroborates with Bouazza et al. (2015) who conclude that technological capabilities benefit SMEs in several ways: they enhance SME efficiency, reduce costs, and broaden market share, both locally and globally.

The paper goes further to evaluate extent to which operationalization of tax system in Nigeria (PTAX) as an external factor influences the performance of SMEs in Abuja metropolis. Finding emanating from the paper reveal that the current tax system exacts a positive impact on the performance of SMEs in Abuja metropolis. This can be true as many SMEs are giving a moratorium of about 5 years from the initial start of business before they are keyed in into the tax net of FIRS. Also tax incentives improve the performance of SMEs as money intended to be paid for tax are invariably put back into the business for growth and expansion. This outcome is in tandem with other extant empirical studies.

5.0 Conclusion and Recommendations

The world over, small businesses in-terms of SMEs accounts for about 60% to 80% of employment generation in the economy. This implies that the SMEs sector constitutes the largest employer of labour in many economies of the world and particularly in Africa and Nigeria to be specific. Therefore, understanding the factors negating or improving the performance of this very important sector becomes desirable and germane. This study examines the effect of environmental factors on the performance of SMEs in Abuja metropolis. The environmental factors were subdivided into two i.e internal and external factors. The paper concludes that the level of education of SMEs owners or managers, spending on marketing and other promotional activities, the level of technology in use, current tax regime and operationalization, and inflation were found to exact positive impact of the performance of SMEs. This implies that some external and all the internal environmental factors examined have positive impact on SMEs performance. However, only educational level of SMEs owners and level of technology in use were found to be statistically significant. On the other hand, inadequate power supply and complicated business rules have negative implications on the performance of SMEs in Abuja metropolis but only inadequate power supply is statistically significant. In view of the findings and conclusion of this paper, the following recommendations are suggested:

i. The owners and or managers of SMEs should strive to acquire necessary and good understanding of the business environment. They should strive to ensure they hired competent and quality employees for effective running and managing of their
businesses. There should be training and retraining programs to enhance their capacity and that of their employees.

ii. SMEs should continue to spend more and optimally on advertisement and other promotional and marketing activities necessary to create more awareness about the products and services they offer to the market.

iii. SMEs should embrace the utilization of technology necessary for improved performance, and should embrace continued research and development as part of their operations.

iv. Government should continue to provide more tax incentives to SMEs sector in order to trigger more employment within the economy.

v. No business can survive without adequate power supply. It is therefore recommended that government should improve on the provision of infrastructural facilities especially power supply to enable SMEs operate with least cost possible in order to improve their profitability and survival.
REFERENCES


