EFFECTS OF ECONOMIC ENVIRONMENT UNDER COVID-19) ON THE PERFORMANCE OF SMEs IN NIGERIA’S FEDERAL CAPITAL TERRITORY, ABUJA

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ABSTRACT

The study examined the effects of economic environment under Covid-19) on the performance of SMEs having observed that businesses including SMEs are struggling to adapt to the new normal imposed by the novel disease. Thus, the study hinged on the dynamic capability theory examined the effects of economic environment under Covid-19) on the performance of sachet water production businesses in the Federal Capital Territory, Abuja. The study employed the convenience and simple random technique to select and administer copies of questionnaire on 180 respondents. With a response rate of 77.22%, the collated data were analyzed using descriptive and inferential statistical techniques including simple percentage (%); the Mean; Standard Deviation (SD), the ANOVA and Multiple Regression techniques via the SPSS. Overall, the results indicated that economic environment under Covid-19) significantly affected the production outputs and the sales volumes of SMEs in the FCT. Most specifically, the results indicated that the different inflation had the most effects on the volumes of outputs and sales by the selected businesses while the decline in personal savings had the least. Consequently, the study recommended that SMEs should continually adapt and adjust to the changes in the external environments in order to survive, compete, grow and expand.

Keywords: Covid-19, Economic, Output, Sales, Volume

1.0 INTRODUCTION

1.1 Background to the study

It is common knowledge that nothing on the surface of the earth exists and operates in a vacuum or in an empty space including business organizations. They exist and operate within dynamic environmental factors that are controllable and uncontrollable. The controllable factors of the environment present the business with strengths and weaknesses while the uncontrollable factors come with opportunities and/or threats.
In recent times, the level of changes in some of these external environmental factors such as technological, economics, socio-cultural, political, natural, etc. have been so swift, sudden, and unpredictable thus making the establishment and the management of different businesses especially the small and medium enterprises (SMEs) in developing economies like Nigeria extremely tasking.

One of the very recent changes that took the globe by surprise was the discovery of the new coronavirus disease (Covid-19) that was reported to have broken out from Wuhan in Hubei region of the Chinese Republic on December 31, 2019. This discovery as well as the associated changes in the socio-cultural environment made different governments and authorities take some decisions and actions in the different external environment factors such as politics and economics based on the advices of relevant experts in order to curtail the spread of the novel disease or pandemic and to also stabilize the turbulent situation that was threatening the existence of mankind and its activities including sustenance of businesses.

As at the time of the first report by the World Health Organization (WHO) on January 21, 2020, over one hundred persons from over a 100 country across the globe were already infected (Albulescu, 2020). Although the rate of transmission of this new coronavirus disease (Covid-19) cannot be compared to the Spanish Flu pandemic of 1919 that affected hundreds of millions of persons nor can the fatality rate be compared to that of the Severe Acute Respiratory Syndrome (SARS) that had a rate of 11% as against the current 4% (Albulsecu, 2020). The major difference is that the various governments across the globe took measures such as imposing lockdowns to restrict people’s movements and physical interactions, while the infected are isolated or quarantined in order to control the spread.

The declared lockdowns and restrictions on movements and physical interactions as well as the closure of borders to nonessential traffic and global supply chains during the peak of the pandemic significantly affected social, academic and economics lives of persons, homes, markets, communities, organizations and countries of the world as well as the different sectors of countries’ economies. Small and medium enterprises like the producers of sachet water business in Nigeria’s Federal Capital Territory (FCT) were forced to adjust and adapt to the new order or normal to continue to exist as going concerns so that can carry on their activities and perform in different ways including sustaining quantities of outputs and acceptable sales volume. Different government monetary and fiscal policies were designed and are being implemented along with the global and the country’s economy passing through different conditions and situations.

KPMG (2020) revealed that the Federal Government of Nigerian developed some related monetary and fiscal policies such as reduced the interest rate on intervention loans from 9% to 5% with a one year extension of moratorium on principal repayments; strengthened the loan to deposit ratio policy by stepping up enforcement of directive to extend more credit to the different categories of businesses including the small and medium scale enterprises (SMEs); created ₦50 billion credit facility for affected SMEs and households; created ₦1 trillion in loans to boost local manufacturing and production across critical sectors; and many more to enable these categories of businesses survive the turbulent local and national economic conditions.
1.2 Statement of the Problems

The discovery of the novel coronavirus disease threw the globe and the entities therein into difficult and turbulent times especially as a result of the different governments and authorities efforts to contain the spread. Economies across the globe including that of Nigeria were slipping in and out of recessions as different policies including monetary and fiscal being designed and implemented to help different variables, especially SMEs such as the producers of sachet water in Nigeria’s Federal Capital Territory (FCT) continue as going concerns by sustaining the production and sales volume levels continued to struggle. Inflation, unemployment, fall in purchasing powers have continued to increase.

Producers of sachet water in the FCT along with many other businesses in the category are struggling to stay afloat because of the negative consequences of the pandemic on the global and local economies. Prices of inputs have continued to raise as inflation seem to have defied major solutions and policies; unemployment and inflation have continued to affect the purchasing powers of the inhabitants while access to the different Covid-19 related loans and grants by these SMEs has remained extremely difficult as politicians and civil servants have used cronies, family members, friends and associates to divert these funds or assistance. Costs of production and operations have continued to increase, thus making it very difficult for most of these businesses to survive these difficult times.

1.3 Research questions

From the statement of the following research questions were drawn:

i. To what extent has the economic environment under Covid-19 affected the production outputs of sachet water businesses in Nigeria’s FCT?
ii. To what extent has the economic environment under Covid-19 affected the sales volume of sachet water businesses in Nigeria’s FCT?

1.4 Research objectives

The major objective of this study was to examine the effects of the economic environment under Covid-19 on the performances of SMEs in Nigeria’s Federal Capital Territory (FCT). The specific objectives included to:

i. Evaluate the extent to which the economic environment under Covid-19 had affected the production outputs of sachet water businesses in Nigeria’s FCT.
ii. Assess the extent to which the economic environment under Covid-19 had affected the sales volume of sachet water businesses in Nigeria’s FCT.

1.5 Research hypotheses

HO1: The economic environment under Covid-19 had not significantly affected the production outputs of sachet water businesses in Nigeria’s FCT.

HO2: The economic environment under Covid-19 had not significantly affected the sale volume of sachet water businesses in Nigeria’s FCT.
1.6 Scope of the study

This study on effects of economic environment under Covid-19 on the performances of SMEs in the Federal Capital Territory (FCT), Abuja concentrated on some purposively selected indices of the two major variables including the inflation, recession, unemployment and decline in saving as sub variables for economic environment under Covid-19 and production outputs as well as sales volumes as sub variables for SMEs performances from the year 2020 till date.

The study focused on producers of sachet water in the six area councils of the FCT with net assets not more than ₦60million and annual turnover of not more than ₦120million as prescribed by CAMA, 2020. These particular set of SMEs were adopted because they seemed more organized and structured compared to others in the sector.

2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Conceptual Framework

2.1.1 Concept of Economic Environment

For better understanding, it is imperative to conceptualize some major concepts of the study beginning with the concept of environmental factors. Maitrayee (2020) cited Professor Keith Davis as defining environmental factors as the aggregate of all circumstances, events, situations, and influences that border surround and affect that organization. Davis added that this environment is broad and ever dynamic as these separate indices or elements include the economic variables and the organizations including SMEs within interact.

Chand (2020) also captured that Arthur Weimer defined business environments as the climate or set of circumstances, economic, institutional, social or political that businesses’ activities are conducted in. Bature and Ojobi (2019) described environmental factors also known as business environments as all the internal and external elements, variables or factors that affect or influence the functioning, activities or performances of the business including SMEs, like sachet water producers in Nigeria’s Federal Capital Territory, (FCT).

Bature et al (2019) further added that the external components of a business’s external environmental factors are made up of several elements including the economic environment. This environment can be divided into some indices including the existing economic condition; the existing economic system; the economic policies; the global economy and; the stage of society’s economic development. Thus, study purposively focused on examining the separate and the collective impacts of some selected aspects of the economic environment including economic condition, monetary policies, fiscal policies and global economy under Covid-19 on each of the selected SMEs’ quantity of output produced and sales volume as performance indices of such small scale business enterprises as the producers of sachet water in Nigeria’s Federal Capital Territory (FCT) since the year 2020 till date.

2.1.2 Concept of Coronavirus Disease Pandemic (Covid-19)

The World Health Organization (WHO Eastern Mediterranean, 2020) submitted that coronavirus is generally a huge family of viruses known to cause respiratory illnesses ranging
from the common cold to severe diseases such as the Middle East Respiratory Syndrome (MERS) and the Severe Acute Respiratory Syndrome (SARS). It is the blanket name for a group of respiratory diseases, thus the need to label this recent virus as the new coronavirus because it has never been discovered in any human before now.

WHO Eastern Mediterranean (2020) presented the novel coronavirus as a new strain of coronavirus that has not been previously identified in humans. Its origin or source is still shrouded in controversies, but one sure thing is where it broke out from. Huang, Wang, Li, Ren, Zhao, and Hu, (2020) and the WHO (2020) disclosed that the coronavirus outbreak was first identified in Wuhan, at the Hubei region of China in December 2019.

Sauer (2020) described it as a severe virus infection with symptoms such as shortness of breath, fever, cough, muscle aches, diarrhea, sore throat, unexplained loss of taste or smell, and headache caused by the new coronavirus (Covid-19) and can lead to death within short time. WHO (2020) defined the concept as an infectious disease caused by a newly discovered coronavirus where infected persons are likely to experience mild or moderate respiratory related illness, but may recover without special treatment. It further added that persons, especially the elderly with underlying medical conditions like diabetes, cancer, cardiovascular disease, and chronic respiratory disease, are more likely to develop serious illness. This virus is reported to be transmitted through saliva droplets or discharge from the nose of infected person when they cough or sneeze.

The United States Centre for Disease Control (CDC, 2020) further explained that the coronavirus disease popularly referred to as Covid-19 can be transmitted amongst people during close contacts usually through saliva droplets produced by sneezing, coughing and talking. These droplets that can hardly travel long distances often fall onto surfaces or the ground and people may become infected by touching a contaminated surface and then touching their faces, especially the nose, mouth, eyes and the ears. The virus is most contagious during the first three days after the onset of symptoms, although spread is possible before symptoms appear, and from people who do not show symptoms.

2.1.3 Concept of SMES’ Performance

Bature et al (2019) pointed out that different sizes of investments and businesses are springing up in different economies of the world in order to improve the quality of lives of the stakeholders and improve the different economies across the globe. Most of these businesses are micro, small, and medium in sizes.

Ojobi, Ahmed and Ndam (2020) revealed that the nomenclature, definitions and descriptions of these sizes of businesses differ with individuals, societies, countries and regions of the world. For instance, in Nigeria and Europe it is referred to as the Small and Medium Enterprises (SMEs) while in South Africa, it is called the Small, Medium and Micro Enterprises (SMMEs); and in the United States of America (USA), it is called the Small and Medium-sized Businesses (SMBs). Oyetunde (2020) submitted that even a casual observer would note that, this category of businesses commonly referred to as the SMEs make up the larger percentage of businesses in Nigeria.
The Companies and Allied Matters Decree (CAMA) of 1990, section 376(2) defined small businesses as industry whose annual turnover is not more than ₦2 million and whose net asset value (net worth) is not more than ₦1 million. But in recent times, the 21st century, the reviewed Act, CAMA (2020) defined small businesses as those businesses with annual turnover of not more than ₦120 million or such amount fixed by the Corporate Affairs Commission (CAC) from time to time and net assets value of not more than ₦60 million or such amount also fixed by the CAC from time to time. These businesses have no foreigner as members/owners and if the company has a share capital the directors should hold at least 51% of it.

Suffice to point out that the concept of SMEs’ performance is treated as organizational performance. Thus, some related definitions were cited and they include Ojobi, et al (2020) defined organizational (SMEs) performance as the outcome or result of the business’ activity in relation to its expected target while Haroon and Malik (2018) defined SMEs performance as the appraisal of the output of the organization against its vision, goals, and the standards of overall development of organization. Chung and Lo (2017) defined the concept as the process of scrutinizing and measuring the SME’s outcome against its objectives and goals. That involves a comparison of real results with desired results.

Al-Hmouze (2016) defined organizational or SME performance as the evaluation of the organization’s progress processes, services and outcomes compared to its stated goals and objectives in order to achieve sustainability by continuous development. Sefiani and Bown (2013) defined it as the strategic outcomes that SMEs use to realize their goals, success or not. A seemingly obsolete but still useful definition by the pair of Georgopoulos and Tannenbaum (1957) described it as the extent to which organizations including those in the sachet water production business fulfill their objectives.

From the definitions so far, it can be gathered that for performance to be easily measured, there must be standards for measurements especially by the way objectives, visions and missions. Thus, the performances of adopted sachet water businesses in the FCT were simply measured in this study using quantities of production outputs and sales volume. Focus is on the units or quantities and not the monetary values.

2.2 The Dynamic Capabilities (DC) Theory (The Theoretical Base)

Bleady, Ali and Ibrahim, (2018) observed that the theory of dynamic capabilities (DC) has been an important contributor to strategic business management and studies over the last two decades. The theory emerged as an extension to and a reaction against the inability of the resource-based view (RBV) to clearly interpret the development and redevelopment of resources and capabilities to address rapidly changing environments.

Teece, Pisano and Shuen, (1997) believed that the theory may be considered as a major source of competitive advantage. It goes beyond the idea that sustainable competitive advantage is solely hinged on the organization’s acquisition and/or possession of valuable, rare, and sophisticated resources. Dynamic capabilities are simply changing abilities of the businesses managers/owners along with the trend and are responsible for enabling organizations like sachet water production businesses in Nigeria’s Federal Capital Territory (FCT) integrate,
allocate, marshal and reconfigure their capabilities and resources to adapt to the ever changing environmental factors.

Dynamic capabilities are processes that enable the business or organization reconfigure its strategy and resources to achieve sustainable competitive advantages and superior performance in rapidly changing environments. Teece (2017) observed that organizations like the sachet water production businesses in Nigeria’s Federal Capital Territory (FCT) with strongly dynamic capabilities are entrepreneurial in nature, thus they do not only adapt to changing business environment, and they also shape it through learning and collaboration to improve performance. Thus, the theory was adopted as base for the study.

2.3 Empirical review of related studies

Ozigi and Umar (2021) in a related study adopted a quantitative research technique using data collection method through the administration of structured questionnaire and found that Covid-19 pandemic’s effect included: loss of competent staff resulting from reduction in staff salary, low revenue or income generation, lack of patronage, and lack of sincerity on the part of government to reduce the prevalence of the pandemic... Harel (2021) looked at the impact of Covid-19 on the revenues of small businesses operating in industrial sectors and found that despite Covid-19’s far-reaching impacting on all areas of life, the revenues of most SMEs in industrial sector were not adversely affected by the pandemic, and most of them did not change or adjust their business activities or the extent to which they employed open innovation tools and engage in innovation promotion processes.

Gabriel (2020) focused on examining the impact of Covid-19 and the response strategies employed by businesses. The study adopted the cross-sectional survey method on a population of 15 top echelon members of the focused organisations. The findings indicated that Covid-19 negatively affected business operations in most of these organisations, resulting in loss of substantial revenue to the businesses.

Kraus, Claüß, Breier, Gast, Zardini, and Tiberius, (2020) carried out a related, but exploratory study on initial empirical evidence on how family firms in five European countries coped with the coronavirus crisis in order to reach conclusions on family firm crisis management. The study design was based on 27 semi-structured interviews with key informants of family firms of all sizes and it discovered that the coronavirus disease crisis represented a new type and quality of challenge for business organizations and three different strategies were adoptable during the pandemic. Additionally, findings showed how different sizes of businesses in different sectors adapt their business models to the changing environmental conditions within a short period of time especially, tentative digitalization.

Peter (2020) conducted a related study by examining the effects of external environmental factors on organizational productivity with a population of 1,875 employees and a sample size of 330. The study found that the external environmental factors via the four adopted indices had significant effects on the productivity of the selected servicing firms. Consequently, it recommended that oil servicing firms should be proactive in dealing with the trends and variations in the external environmental factors in order to improve productive and remain competitive.
Similarly, in a related study by Ezenekwe, (2020) in Anambra State, Nigeria on the effects of environmental factor on manufacturing firm’s productivity. The results indicated that the economic, technological and the political environmental factors had significant effects on the productivity of the selected manufacturing firms in Anambra State. Thus, the study concluded that environmental factors had significant and positive effects on firm’s productivity and it recommended that firms should diligently assess the economic forces at all times to keep improving productivity.

Ojobi et al (2020) did a study on implication of socio-cultural environment on the performance of selected SMES in Kano State, Nigeria. The study administered copies of questionnaire on randomly selected 25 SME owners/managers each from 4 purposively selected sectors. The result indicated that the socio-cultural environment had positive and significant implication on the performance of SMEs. Consequently, the study recommended that as part of government’s efforts in encouraging the growth and development of SMEs, owners/managers should be formally or informally trained on how to scan the environment and that the implementations of knowledge acquired should be taken very seriously by these owners/managers.

2.4 The study gaps

Upon the review of related empirical studies including those by Ozigi et al (2021); Harel (2021); Gabriel (2020); Kraus, et al (2020); Ezenekwe, (2020); Kraus, et al (2020); etc. it was discovered that rarely any previous study focused on examining the separate and the collective impacts of some selected aspects of the economic environment including economic condition, monetary policies, fiscal policies and global economy under Covid-19 on each of the selected SMEs’ quantity of output produced and sales volume as performance indices of such small scale business enterprises as the producers of sachet water in Nigeria’s Federal Capital Territory (FCT) since the year 2020 till date.

3.0 METHODOLOGY

This study adopted a combination of research designs including the descriptive, the survey, and the case study. Due to the non-availability of reliable data on the population of sachet water production businesses in Nigeria’s Federal Capital Territory (FCT) the study opted for a sample 180 sachet water production businesses evenly spread across the six Area councils

The study employed the purposive, convenience and random techniques to select and administer copies of well-structured questionnaire on 30 owners, managers of representatives of selected sachet water business in each of the six area councils. The collated data were then analyzed using descriptive and inferential statistical techniques including simple percentage (%); the Mean; Standard Deviation (SD) and version 22 of the Statistical Package for Social and Management Sciences (SPSS). Particularly, the ANOVA and Multiple Regression techniques via the SPSS were employed.

Furthermore, the multiple regression models in this study were specified as:

\[ P_{RO} = \alpha + \beta_1 (INF) + \beta_2 (REC) + \beta_3 (UNP) + \beta_4 (SAV) + \epsilon \]  \[ SLV = \alpha + \beta_1 (INF) + \beta_2 (REC) + \beta_3 (UNP) + \beta_4 (SAV) + \epsilon \]
Where PRO represented the selected SMEs Volume (quantity in units) of Output Produced and SLV represented the selected SMEs Volume (quantity in units) of Sales.

α was the intercept/slope (constant) while β1, β2, β3 and β4 were the regression coefficients or slopes that indicated the contribution of the each adopted measurement indices of the independent variable including Inflation (INF), Recession (REC), Unemployment (UNP), and Decline in Saving (SAV) while εI is the stochastic error term.

4.0 RESULTS AND ANALYSIS

4.1 The response rate and bio statistics of the respondents

Table 4.1.1: Demographic characteristics of respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Respondents</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Qualifications:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sec. Sch. Certificates &amp; below</td>
<td>13</td>
<td>9.35</td>
<td></td>
</tr>
<tr>
<td>HND/First Degree</td>
<td>73</td>
<td>52.51</td>
<td></td>
</tr>
<tr>
<td>PGD &amp; Equivalents</td>
<td>36</td>
<td>25.90</td>
<td></td>
</tr>
<tr>
<td>MSc &amp; Equivalents.</td>
<td>17</td>
<td>12.23</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Related Business Experience:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Years and Below</td>
<td>23</td>
<td>16.55</td>
<td></td>
</tr>
<tr>
<td>6-10 Years</td>
<td>57</td>
<td>41.01</td>
<td></td>
</tr>
<tr>
<td>11-15 Years</td>
<td>31</td>
<td>22.30</td>
<td></td>
</tr>
<tr>
<td>Above 15 Years</td>
<td>28</td>
<td>20.14</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, (2023)

Table 4.1.1 disclosed the demographic characteristics of the study’s respondents. The indicated a response rate of 139 out of 180 representing 77.22%. The breakdown showed that about 90% of the respondents have a minimum of first degree certificates or Higher National Diploma (HND) and their equivalents while about 83% have a minimum of six years related business experiences.

4.2 Tests of hypotheses

Test of Hypothesis One (HO1)

HO1: The economic environment under Covid-19 had not significantly affected the production outputs of sachet water businesses in Nigeria’s FCT.

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.649*</td>
<td>.421</td>
<td>.433</td>
<td>.44510</td>
<td>2.266</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), INF, REC, UNP, SAV
b. Dependent Variable: PRO

The model summary table revealed the extent of effects of all the adopted indices of the independent variable (Economic Environment under Covid-19) including Inflation (INF),
Recession (REC), Unemployment (UNP), and Decline in Saving (SAV) on the volume or quantity of outputs produced by the selected sachet water businesses in the FCT from the year 2020 till date.

With an R-Squared (R2) value of 0.421, the table revealed that these adopted indices of the independent variable were collectively responsible for 42.1% of the variations in the volume or quantity of outputs produced by the selected sachet water businesses in the FCT during the period under review while the other variables not captured in this study were responsible for the outstanding 57.9 (0.579). Furthermore, the Durbin-Watson value of 2.266 indicated a positive autocorrelation because it is closed to 2.00

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.498</td>
<td>4</td>
<td>.125</td>
<td>.629</td>
<td>.643</td>
</tr>
<tr>
<td>Residual</td>
<td>25.161</td>
<td>134</td>
<td>.188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25.659</td>
<td>138</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: PRO
b. Predictors: (Constant), INF, REC, UNP, SAV

From the table, the F-Stat value of 0.629 (at a level of significance of 0.643) is within the threshold of 10% (0.1) signifying statistical significance. That meant that there were significant relationships amongst the variables of the study thus, it can be concluded that the economic environmental factors under Covid-19 significantly affected the volume or units of outputs produced by the selected SMEs during the periods covered by the study.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.178</td>
<td>.260</td>
<td>8.369</td>
<td>.000</td>
</tr>
<tr>
<td>INF</td>
<td>.005</td>
<td>.045</td>
<td>.010</td>
<td>.109</td>
</tr>
<tr>
<td>REC</td>
<td>.027</td>
<td>.041</td>
<td>.063</td>
<td>.668</td>
</tr>
<tr>
<td>UNP</td>
<td>.019</td>
<td>.035</td>
<td>.132</td>
<td>1.385</td>
</tr>
<tr>
<td>SAV</td>
<td>.049</td>
<td>.040</td>
<td>.042</td>
<td>.476</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PRO

\[ P_{RO} = \alpha + \beta_1 (INF) + \beta_2 (REC) + \beta_3 (UNP) + \beta_4 (SAV) + \varepsilon I \] 

The coefficient table indicated the extent of effects of each adopted index of the independent variable (Economic Environmental factors under Covid-19) on the volume or quantity of outputs produced by the selected sachet water businesses in the FCT during the period under review or study. The function, \( P_{RO} = \alpha +.005INF + .027REC + .019UNP + .049SAV +\varepsilon I \) revealed that for every unit variation in the volume or quantity of outputs produced (PRO) during the period of this study, there was an increase of 0.005 (0.5%) in Inflation (INF); an
increase of 0.027 (2.7%) in Recession (REC); an increase of 0.019 (1.9%) in Unemployment (UNP); and an increase of 0.049 (4.9%) in decline in Saving (SAV).

The function indicated a direct relationship between each of the adopted indices of the independent variable and the volume or units of outputs in the selected SMEs during the periods covered by the study. Furthermore, the table and function also disclosed that inflation as a component of the economic environment under covid-19 had the most effects on the units of outputs while decline in saving had the least effects.

### Residuals Statistics

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted Value</td>
<td>1.7206</td>
<td>1.9705</td>
<td>1.8409</td>
<td>.06166</td>
<td>139</td>
</tr>
<tr>
<td>Residual</td>
<td>-1.90430</td>
<td>.27944</td>
<td>.00000</td>
<td>.43826</td>
<td>139</td>
</tr>
<tr>
<td>Std. Predicted Value</td>
<td>-1.952</td>
<td>2.102</td>
<td>.000</td>
<td>1.000</td>
<td>139</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-4.278</td>
<td>.628</td>
<td>.000</td>
<td>.985</td>
<td>139</td>
</tr>
</tbody>
</table>

- a. Dependent Variable: PRO

The residual statistics table displayed a mean value of 1.8409 that is below the threshold of 3.00, consequently, the study rejected the null hypothesis one (HO1) that the economic environment under Covid-19 had not significantly affected the production outputs of sachet water businesses in Nigeria’s FCT.

### Test of Hypothesis Two (HO2)

**HO2:** The economic environment under Covid-19 had not significantly affected the sales volume of sachet water businesses in Nigeria’s FCT.

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.807a</td>
<td>.651</td>
<td>.664</td>
<td>.3332</td>
<td>1.838</td>
</tr>
</tbody>
</table>

- a. Predictors: (Constant), INF, REC, UNP, SAV
- b. Dependent Variable: SLV

The model summary table revealed the extent of effects of all the adopted indices of the independent variable (Economic Environment under Covid-19) including the Inflation (INF), Recession (REC), Unemployment (UNP), and Decline in Saving (SAV) on the sales volume of the selected sachet water businesses in the FCT from the year 2020 till date.

With an R-Squared (R2) value of 0.807, the table revealed that these adopted indices of the independent variable were collectively responsible for 80.7% of the variations in the sales volume by the selected sachet water businesses in the FCT during the period under review while the other variables not captured in this study were responsible for the outstanding 19.3% (0.193). Furthermore, the Durbin-Watson value of 1.838 indicated a positive autocorrelation because it is closed to 2.00
From the ANOVA table, the F-Stat value of 0.240 (at a level of significance of 0.495) is within the threshold of 10% (0.1) signifying statistical significance. That meant that there were significant relationships amongst the variables of the study thus, it can be concluded that the economic environmental factors under Covid-19 significantly affected the sales volume of the selected SMEs during the periods covered by the study.

The coefficient table indicated the extent of effects of each adopted index of the independent variable (Economic Environmental factors under Covid-19) on the sales volume of the selected sachet water businesses in the FCT during the period under review or study. The function, \( SLV = \alpha + .007INF + .032REC + .014UNP + .031SAV \) revealed that for every 1 unit variation in the sales volume of the selected SMEs during the period of this study, there was an increase of 0.007 (0.7%) in Inflation (INF); an increase of 0.032 (3.2%) in Recession (REC); an increase of 0.014 (1.4%) in Unemployment (UNP); and an increase of 0.031 (3.1%) in the decline in Saving (SAV).

The function indicated a direct relationship between each of the adopted indices of the independent variable and the volume or units of sales in the selected SMEs during the periods covered by the study. Furthermore, the table and function also disclosed that Inflation as a component of the economic environment under covid-19 had the most effects on the units of sales while decline in saving had the least effects.
The residual statistics table displayed a mean value of 1.75 that is below the threshold of 3.00, consequently, the study rejected the null hypothesis two (HO2) that the economic environment under Covid-19 had not significantly affected the sales volume of the selected sachet water businesses in Nigeria’s FCT.

**Major findings**

The study that observed that most businesses including SMEs are struggling due the discovery of covid-19 that resulted in some related actions and inactions of authorities examined the effects of such economic environmental components as rise in inflation, unemployment, recession and decline in savings on such performance indices of SMEs as quantity of outputs and sales using selected sachet water businesses in Nigeria’s Federal Capital Territory (FCT). The study had a response rate of 77.22% with about 90% of the respondents having a minimum of first degree certificates or Higher National Diploma (HND) and their equivalents while about 83% had a minimum of six years related business experiences.

With respect to hypothesis one (HO1), the results revealed that the different components of the economic environment under covid-19 significantly affected the quantity or units of outputs produced by these selected SMEs in Nigeria’s Federal Capital Territory (FCT). Furthermore, the computed figures also indicated that the inflation had the most effects on the quantity or units of outputs produced while the decline in personal savings had the least effects. The figures also showed that the adopted economic environmental factors under covid-19 were responsible for about 42.1% of changes in the businesses’ quantity of outputs produced during the periods covered by the study while the outstanding were by other indices not captured in this study.

With respect to hypothesis one (HO2), the results revealed that the different components of the economic environment under covid-19 also significantly affected the sales volume of these selected SMEs in Nigeria’s Federal Capital Territory (FCT). Furthermore, the computed figures also indicated that the inflation had the most effects on the sales volume of these businesses while the decline in personal savings had the least effects. The figures also showed that the adopted economic environmental factors under covid-19 were responsible for about 80.7% of changes in the businesses’ sales volume during the periods covered by the study while the outstanding were by other indices not captured in this study.

By and large, the results revealed that economic environmental factors significantly affected the performances of SMEs in Nigeria’s FCT. Most specifically, it was discovered to have significantly affected the volumes’ of the businesses’ outputs and sales.
5.0 CONCLUSION AND RECOMMENDATIONS

Overall, the results revealed that economic environmental factors significantly affected the performances of SMEs in Nigeria’s FCT. Most specifically, it was discovered to have significantly affected the volumes’ of the businesses’ outputs and sales. This finding is consistent with the findings of most of reviewed studies likes of Ozigi et al (2021), Gabriel (2020), etc., but inconsistent with the finding by Harel (2021). Consequently, the study recommended that organizations especially SMEs must continually adapt and adjust to the changes in the external environments in order to survive, compete, grow and expand. The study also recommended for more studies to be conducted in other SMEs industries in the FCT like fashion designers, furniture or wood work, etc.

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